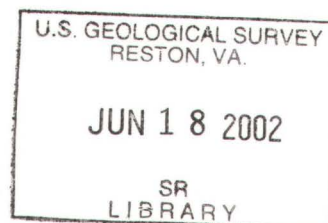


Water Resources Data New Jersey Water Year 2001

Volume 3. Water-Quality Data

Water-Data Report NJ-01-3



CALENDAR FOR WATER YEAR 2001

2000

| OCTOBER | | | | | | | NOVEMBER | | | | | | | DECEMBER | | | | | | |
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2001

| JANUARY | | | | | | | FEBRUARY | | | | | | | MARCH | | | | | | |
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United States Department of the Interior

U.S. GEOLOGICAL SURVEY
Water Resources Division
Mountain View Office Park
810 Bear Tavern Road, Suite 206
West Trenton, New Jersey 08628

I am pleased to announce the release of our Annual report "Water Resources Data for New Jersey, Water Year 2001". This report was prepared by the U.S. Geological Survey, in cooperation with the State of New Jersey as well as many local and federal governmental agencies.

This report is again being published in three volumes:

Volume 1.--Surface-water streamflow data.

Volume 2.--Ground-water level data.

Volume 3.--Water-quality data.

This volume contains surface and ground water-quality data from the cooperative U.S. Geological Survey / New Jersey Department of Environmental Protection Ambient Stream Monitoring Network (ASMN) and the Ambient Ground Water Quality Network (AGWQN), and the Long Island-New Jersey Coastal Plain and the Delaware River Basin National Water Quality Assessments (NAWQA).

The Ambient Stream Monitoring Network Reconnaissance Study consisted of 3-6 day surveys of temperature, dissolved oxygen, percent of dissolved oxygen saturation, pH, and specific conductance from 24 stations in the ASMN. Continuous 1-2 month surveys of temperature were conducted at 17 sites in the Delaware River Basin NAWQA study unit.

Water year 2001 is the third year in the first 5-year cycle of the AGWQN. Thirty wells were sampled in the Raritan, Upper Delaware, and Atlantic Coastal Regions.

The New Jersey District of the U.S. Geological Survey has made a home page available on the world wide web. Real-time data for more than 30 stream-gaging stations around the State, peak-flow files for many gaging stations, ground-water level data, water-quality data, monthly hydrologic conditions and links to other sites of interest may be accessed. This information is available at:

<http://nj.usgs.gov>

Copies of this report in paper or microfiche are for sale through the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Data can also be provided by file transfer (ftp), or on floppy disk. When ordering, refer to U.S. Geological Survey Water-Data Report NJ-01-1 (for Volume 1), NJ-01-2 (for Volume 2), or NJ-01-3 (for Volume 3). For further information on this report, or to change or remove your address from our mailing list, please contact me at the above address, telephone (609) 771-3980, or send e-mail to wbauers@usgs.gov.

Sincerely,

William R. Bauersfeld, Chief
Hydrologic Data Assessment Program

Water Resources Data New Jersey Water Year 2001

Volume 3. Water-Quality Data

By M.J. DeLuca, H.L. Hoppe, H.A. Doyle, B.J. Gray.

Water-Data Report NJ-01-3



UNITED STATES DEPARTMENT OF THE INTERIOR

GALE A. NORTON, *Secretary*

GEOLOGICAL SURVEY

Charles G. Groat, *Director*

For information on the water program in New Jersey write to

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PREFACE

This volume of the annual hydrologic data report of New Jersey is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of water quality provide 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 New Jersey are contained in 3 volumes:

Volume 1. Surface-Water Data
Volume 2. Ground-Water Data
Volume 3. Water-Quality 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. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to U.S. Geological Survey policy and established guidelines. The following individuals contributed significantly to the completion of the report.

Jacob Gibs

Robert D. Schopp

Word processing of the report was done by H.L. Hoppe and H.A. Doyle. W.H. Ellis, G.L. Simpson, and D.K. Sun drafted the illustrations.

The data were collected, computed, and processed by the following personnel:

| | | | | | |
|-----------------|-----------------|--------------|--------------|-------------|------------------|
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| M.D. Bilger | V. Corcino, Jr. | R.E. Hickman | E.L. Melvin | E.A. Pustay | P.E. Stackelberg |
| R.A. Brightbill | J.F. Dudek | G.K. Holzer | K.R. Murray | T.J. Reed | G.C. Steckroat |
| J.D. Byrnes | S.M. Edwards | J.V. Irwin | T.D. Oden | R.G. Reiser | |
| G.A. Brown | J.M. Fischer | W.D. Jones | K. Orlick | K. Romanok | |

Some data were collected by the following N.J. Department of Environmental Protection personnel:

| | | | |
|--------------|-------------|------------|-------------|
| A.A. Altieri | R.F. Fenton | C. Kunz | J.R. Specht |
| P. Burt | J. Janda | R. Maruska | |

This report was prepared in cooperation with the State of New Jersey and with other agencies under the general supervision of William R. Bauersfeld, Chief of the Hydrologic Data Assessment Program; under the general supervision of David A. Stedfast, Associate District Chief; Eric Evenson, District Chief, New Jersey; and Catherine L. Hill, Regional Hydrologist, Northeastern Region.

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13. ABSTRACT (Maximum 200 words)

Water-resources data for the 2001 water year for New Jersey are presented in three volumes, and consists of records of stage, discharge, and quality of streams; stage and contents of lakes and reservoirs; and levels and quality of ground water. Volume 3 contains a summary of surface- and ground-water hydrologic conditions for the 2001 water year, a listing of current water-resources projects in New Jersey, a bibliography of water-related reports, articles, and facts sheets for New Jersey completed by the Geological Survey in recent years, water-quality records of chemical analyses from 128 continuing-record surface-water stations, 29 miscellaneous surface-water sites, 53 ground-water sites, and records of daily statistics of temperature and other physical measurements from 44 continuous-recording stations. Locations of water-quality stations are shown in figures 22-24. Locations of miscellaneous water-quality sites are shown in figures 59-64. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating federal, state, and local agencies in New Jersey.

14. SUBJECT TERMS

New Jersey, hydrologic conditions, hydrologic data, surface-water analysis, ground-water analysis, streambed-material analysis, suspended-sediment concentration, continuing-record station, continuous-recording station, miscellaneous sampling site.

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Note.--Data for miscellaneous sites for surface-water quality are published in separate sections of the data report.
See references at the end of this list for page numbers for these sections.

[Letter after station name designates type of data: (c) general chemical, (m) microbiological, (s) suspended sediment, (t) continuous physical measurements, (w) whole-water-recoverable metals, (v) volatile organic compounds, (p) pesticide, (b) biota, (h) bed material, (WMA #) NJDEP watershed management area.]

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| West Branch Rahway River at Northfield Avenue, at West Orange (cmswvp) | 01393960 | 176 |
| Rahway River near Springfield (cms) | 01394500 | 179 |
| Rahway River at Rahway (cms) | 01395000 | 182 |
| South Branch Rahway River at Colonia (cmswvp) | 01396030 | 185 |
| (WMA 8 - NORTH AND SOUTH BRANCHES OF THE RARITAN RIVER, LAMINGTON RIVER) | | |
| RARITAN RIVER BASIN | | |
| South Branch Raritan River: | | |
| Spruce Run at Newport (cmswvp) | 01396550 | 189 |
| Mulhockaway Creek at Van Syckel (cms) | 01396660 | 193 |

**WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH
RECORDS ARE PUBLISHED IN THIS VOLUME--Continued**

| | | |
|--|------------|-----|
| Capoolong Creek at Lansdowne (cmswvp) | 01396900 | 195 |
| Third Neshanic River at Copper Hill (cmswvp) | 01397950 | 198 |
| Neshanic River at Reaville (cms) | 01398000 | 201 |
| South Branch Raritan River at South Branch (cms) | 01398102 | 203 |
| North Branch Raritan River: | | |
| Lamington River at Burnt Mills (cms) | 01399780 | 206 |
| North Branch Raritan River near Raritan (cms) | 01400000 | 209 |
| (WMA 10 - MILLSTONE RIVER, STONY BROOK) | | |
| Raritan River: | | |
| Millstone River at Baird Road, near Perrineville (cmswvph) | 01400530 | 211 |
| Millstone River near Grovers Mill (cms) | 01400640 | 215 |
| Heathcote Brook at Kingston (cms) | 01401400 | 217 |
| Beden Brook: | | |
| Rock Brook at Zion (cmswvp) | 01401560 | 219 |
| Millstone River at Blackwells Mills (cms) | 01402000 | 222 |
| West Branch Middle Brook at Chimney Rock Road, at Martinsville (cmswvp) | 01403171 | 225 |
| (WMA 9 - RARITAN RIVER MAINSTEM, MATCHAPONIX BROOK, SOUTH RIVER) | | |
| Raritan River at Queens Bridge, at Bound Brook (cmsvp) | 01403300 | 228 |
| Bound Brook at Route 28, at Middlesex (cms) | 01403385 | 232 |
| Bound Brook at Middlesex (cmsvp) | 01403900 | 235 |
| South River: | | |
| Matchaponix Brook: | | |
| Manalapan Brook at Federal Road, near Manalapan (cmswvph) | 01405340 | 239 |
| (WMA -12 - RARITAN BAY & TRIBUTARIES) | | |
| <u>WHALE POND BROOK BASIN</u> | | |
| Whale Pond Brook at Larchwood Avenue, at Oakhurst (cmswvph) | 01407617 | 243 |
| <u>SHARK RIVER BASIN</u> | | |
| Jumping Brook near Neptune City (cms) | 01407760 | 246 |
| <u>HANNABRAND BROOK BASIN</u> | | |
| Hannabrand Brook at Old Mill Road, near Spring Lake Heights (cmswvph) | 01407806 | 248 |
| <u>MANASQUAN RIVER BASIN</u> | | |
| Manasquan River at Squankum (cms) | 01408000 | 252 |
| Mingamahone Brook near Earle (cms) | 01408009 | 254 |
| (WMA 13 - ATLANTIC OCEAN & TRIBUTARIES - MANASQUAN RIVER, METEDECONK RIVER, TOMS RIVER, BARNEGAT BAY, FORKED RIVER) | | |
| <u>METEDECONK RIVER BASIN</u> | | |
| North Branch Metedeconk River at Lakewood (cms) | 01408100 | 256 |
| <u>TOMS RIVER BASIN</u> | | |
| Toms River at Whitesville (cmswvph) | 01408300 | 258 |
| Toms River near Toms River (cms) | 01408500 | 262 |
| Jakes Branch at Dover Road, near Double Trouble (cmswvp) | 01408702 | 264 |
| <u>CEDAR CREEK BASIN</u> | | |
| Cedar Creek at Cedar Crest (cms) | 01408830 | 267 |
| (WMA 14 - ATLANTIC OCEAN & TRIBUTARIES - TUCKERTON CREEK, LITTLE EGG HARBOR) | | |
| <u>MULLICA RIVER BASIN</u> | | |
| Mullica River near Atco (cs) | 01409375 | 269 |
| Mullica River at outlet of Atsion Lake, at Atsion (cms) | 01409387 | 270 |
| Mullica River at Constable Bridge, near Batsto (cmswvph) | 0140940050 | 272 |
| Hays Mill Creek at Atco (cs) | 01409401 | 275 |
| Hays Mill Creek near Chesilhurst (cs) | 0140940200 | 276 |
| Sleeper Branch near Atsion (cs) | 0140940370 | 277 |
| Clark Branch near Atsion (cs) | 0140940480 | 278 |
| Nescochague Creek: | | |
| Pump Branch near Waterford Works (cs) | 01409408 | 279 |
| Blue Anchor Brook At Elm (cms) | 0140940950 | 280 |
| Albertson Branch near Elm (cs) | 0140940970 | 282 |
| Hammonton Creek at Wescoatville (cs) | 01409416 | 283 |
| Skit Branch near Hampton Gate (cmswvp) | 01409435 | 286 |
| Batsto River at Batsto (cms) | 01409500 | 289 |
| Wading River: | | |
| West Branch Wading River at Maxwell (cms) | 01409815 | 291 |
| Bass River: | | |
| East Branch Bass River near New Gretna (cms) | 01410150 | 293 |

WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

(WMA 15 - ATLANTIC OCEAN & TRIBUTARIES - GREAT EGG HARBOR RIVER)

GREAT EGG HARBOR RIVER BASIN

Great Egg Harbor River:

| | | |
|--|----------|-----|
| Hospitality Branch at Blue Bell Road, near Cecil (cm)..... | 01411035 | 295 |
| Great Egg Harbor River at Weymouth (cs) | 01411110 | 297 |
| Babcock Creek near Mays Landing (cs)..... | 01411196 | 298 |

TUCKAHOE RIVER BASIN

| | | |
|--|----------|-----|
| Tuckahoe River near Estell Manor (cswvp) | 01411290 | 299 |
| Tuckahoe River at Head of River (cswvp) | 01411300 | 302 |

(WMA 16 - DELAWARE BAY (PART OF ZONE 6) & TRIBUTARIES)

FISHING CREEK BASIN

| | | |
|--|----------|-----|
| Fishing Creek at Rio Grande (cs) | 01411400 | 305 |
|--|----------|-----|

DENNIS CREEK BASIN

Dennis Creek:

| | | |
|--|----------|-----|
| Dennis Creek Tributary 2 at Dennyville (cswvp) | 01411428 | 308 |
|--|----------|-----|

WEST CREEK BASIN

| | | |
|---|----------|-----|
| West Creek near Leesburg (cmswvph)..... | 01411444 | 311 |
|---|----------|-----|

(WMA 17 - DELAWARE BAY (PART OF ZONE 6) & TRIBUTARIES)

MAURICE RIVER BASIN

| | | |
|---|----------|-----|
| Still Run at Little Mill Road, near Clayton (cmswvph) | 01411452 | 315 |
| Scotland Run: | | |
| Indian Branch near Malaga (cms) | 01411466 | 319 |
| Maurice River at Norma (cms) | 01411500 | 321 |
| Buckshutem Creek: | | |
| Gravelly Run at Laurel Lake (cmswvp)..... | 01411955 | 323 |

COHANSEY RIVER BASIN

| | | |
|---|----------|-----|
| Cohansey River at Seely (cms) | 01412800 | 326 |
| Barrett Run at Bridgeton (cmswvph)..... | 01413013 | 328 |

(WMA 1 - UPPER DELAWARE (ZONE 1C, ZONE 1D, AND THE UPPER PART OF ZONE 1E) & TRIBUTARIES)

DELAWARE RIVER BASIN

| | | |
|--|----------|-----|
| Delaware River at Port Jervis, NY (cstvp) [site not within WMA 1]..... | 01434000 | 332 |
| Neversink River near Claryville, NY (csp) [site not within WMA 1]..... | 01435000 | 337 |
| Delaware River at Montague (cms) | 01438500 | 339 |
| Flat Brook near Flatbrookville (cmstp) | 01440000 | 341 |
| Dunnfield Creek at Dunnfield (cmswvp) | 01442760 | 346 |
| Delaware River at Portland, PA (cms) | 01443000 | 349 |
| Paulins Kill at Warbasse Junction Road, near Lafayette (cmswvph)..... | 01443250 | 351 |
| Paulins Kill at Blairstown (cms)..... | 01443500 | 355 |
| Pequest River: | | |
| Bear Brook at Dark Moon Road, near Johnsonburg (cms) | 01445160 | 357 |
| Honey Run near Hope (cmswvph) | 01445900 | 359 |
| Pequest River at Belvidere (cms) | 01446400 | 363 |
| Jordan Creek near Schnecksville, PA (cstvp) [site not within WMA 1]..... | 01451800 | 365 |
| Lehigh River at Glendon, PA (cstvp) [site not within WMA 1]..... | 01454700 | 370 |
| Musconetcong River at Riegelsville (cms)..... | 01457400 | 374 |

(WMA 11 - UPPER DELAWARE & TRIBUTARIES - LOCKATONG, ALEXAUKEN CREEK, ASSUNPINK CREEK)

| | | |
|--|----------|-----|
| Delaware River at Riegelsville (cms) | 01457500 | 377 |
| Nishisakawick Creek near Frenchtown (cms)..... | 01458570 | 379 |
| Delaware River at Lumberville, PA (cms) | 01461000 | 381 |
| Wickecheoke Creek near Sergeantsville (cmswvp)..... | 01461282 | 383 |
| Delaware River at Trenton (cmswvpt)..... | 01463500 | 386 |
| Assunpink Creek: | | |
| Miry Run at Route 533, at Mercerville (cms) | 01463850 | 405 |
| Assunpink Creek at Peace Street, at Trenton (cmswvp) | 01464020 | 408 |

(WMA 20 - LOWER DELAWARE (UPPER PART OF ZONE 2) & TRIBUTARIES)

Crosswicks Creek:

| | | |
|--|----------|-----|
| North Run at Cookstown (cmswvph)..... | 01464380 | 411 |
| Crosswicks Creek at Groveville Road, at Groveville (cmswvph) | 01464504 | 415 |
| Doctors Creek at Allentown (cms) | 01464515 | 419 |
| Blacks Creek at Chesterfield (cms) | 01464527 | 421 |
| Little Neshaminy Creek at Valley Road, near Neshaminy, PA (cswvp)..... | 01464907 | 424 |

**WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH
RECORDS ARE PUBLISHED IN THIS VOLUME--Continued**

(WMA 19 - LOWER DELAWARE (LOWER PART OF ZONE 2 AND UPPER PART OF ZONE 3) & TRIBUTARIES)

| | | |
|--|----------|-----|
| Rancocas Creek: | | |
| South Branch Rancocas Creek: | | |
| Southwest Branch Rancocas Creek: | | |
| Little Creek at Chairville (cms) | 01465893 | 429 |
| North Branch Rancocas Creek: | | |
| North Branch Mt. Misery Brook: | | |
| Mount Misery Brook at Upton (cmswvph) | 01466100 | 431 |
| Greenwood Branch: | | |
| McDonalds Branch in Lebanon State Forest (cmswvph) | 01466500 | 435 |
| Greenwood Branch at New Lisbon (cms) | 01466900 | 439 |
| North Branch Rancocas Creek at Iron Works Park, at Mount Holly (cms) | 01467005 | 441 |
| Cooper River at Haddonfield (cmstvp) | 01467150 | 443 |
| North Branch Cooper River at Kresson (cmswvp) | 01467155 | 450 |

(WMA 18 - LOWER DELAWARE (LOWER PART OF ZONE 3, ZONE 4, ZONE 5, AND PART OF ZONE 6) & TRIBUTARIES)

| | | |
|--|-----------------|------------|
| Big Timber Creek: | | |
| North Branch Big Timber Creek at Glendora (cms) | 01467359 | 453 |
| Schuylkill River: | | |
| <i>Tulpehocken Creek near Bernville, PA (csvp) [site not within WMA 18]</i> | <i>01470779</i> | <i>456</i> |
| <i>French Creek near Phoenixville, PA (cstvpbh) [site not within WMA 18]</i> | <i>01472157</i> | <i>460</i> |
| <i>Schuylkill River at Philadelphia, PA (cstvp) [site not within WMA 18]</i> | <i>01474500</i> | <i>466</i> |
| Mantua Creek: | | |
| Edwards Run at Jefferson (cmswvph) | 01475090 | 472 |
| Raccoon Creek near Swedesboro (cmstvp) | 01477120 | 476 |
| Salem River at Woodstown (cms) | 01482500 | 483 |
| Major Run at Sharptown (cmswvp) | 01482530 | 486 |

DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS

The following stations have been discontinued as continuous water-quality stations. Daily records of temperature, specific conductance, pH, dissolved oxygen or sediment were collected and published for the period of record shown for each station.

| Station name | Station number | Drainage area (mi ²) | Type of record | Period of record (water years) |
|---|----------------|----------------------------------|-----------------------|--------------------------------|
| Passaic River at Millington, NJ | 01379000 | | Temp. | 1997-98 |
| Passaic River near Chatham, NJ | 01379500 | 100 | Sed. | 1964-68 |
| | | | Temp. | 1967-68 |
| Rockaway River at Longwood Valley, NJ | 01379680 | | Temp. | 1997-98 |
| Green Pond Brook at Picatinny Arsenal, NJ | 01379773 | 7.65 | Temp., S.C., pH, D.O. | 1984-86 |
| Green Pond Brook at Wharton, NJ | 01379790* | 12.6 | Temp., S.C., pH, D.O. | 1984-85 |
| Passaic River at Two Bridges, NJ | 01382000 | 361 | Temp., S.C., pH, D.O. | 1963-74 |
| | | | | 1969-74 |
| Wanaque River at Wanaque, NJ | 01387000 | 90.4 | Temp. | 1964-80 |
| Ramapo River near Mahwah, NJ | 01387500 | 118 | Sed. | 1964-65 |
| Pompton River near Two Bridges, NJ | 01389000 | 372 | Temp., S.C., pH, D.O. | 1969-74 |
| Passaic River at Little Falls, NJ | 01389500 | 762 | Sed. | 1964-65 |
| | | | Temp., S.C. | 1981-86 |
| Saddle River at Ridgewood, NJ | 01390500 | | Temp. | 1997-98 |
| Rahway River at Washington Park at Springfield, NJ | 01394200 | | Temp. | 1997-98 |
| South Branch Raritan River near High Bridge, NJ | 01396500 | 65.3 | Temp. | 1961-79 |
| | | | S.C. | 1969-79 |
| Mulhockaway Creek at Van Syckel, NJ | 01396660 | | Temp. | 1997-98 |
| Spruce Run at Clinton, NJ | 01396800 | 41.3 | Temp. | 1969, 1971-80 |
| South Branch Raritan River at Stanton, NJ | 01397000 | 147 | Temp., S.C. | 1969-79 |
| | | | Sed. | 1960-63 |
| Neshanic River at Reaville, NJ | 01398000 | | Temp. | 1997-98 |
| South Branch Rockaway Creek at Whitehouse, NJ | 01399690 | 13.2 | Temp., S.C. | 1977-78 |
| | | | Sed. | 1977 |
| Rockaway Creek at Whitehouse, NJ | 01399700 | 37.1 | Temp., S.C. | 1977-78 |
| Raritan River near Manville, NJ | 01400510 | 497 | Temp., S.C., pH, D.O. | 1968-74 |
| Baldwins Creek at Baldwin Lake, near Pennington, NJ | 01400932 | 2.52 | Temp. | 1963-66 |
| | | | Sed. | 1963-69 |
| Stony Brook at Princeton, NJ | 01401000 | 44.5 | Temp. | 1957-70, 1997-98 |
| | | | Sed. | 1960-70 |
| Beden Brook near Rocky Hill, NJ | 01401600 | | Temp. | 1997-98 |
| Millstone River near Manville, NJ | 01402900 | 287 | Temp., S.C., pH, D.O. | 1968-74 |
| Raritan River at Queens Bridge | 01403300 | | Temp. | 1997-98 |
| Bound Brook at Middlesex, NJ | 01403900 | | Temp., S.C. | 1996-98 |
| Raritan River near South Bound Brook, NJ | 01404100 | 862 | Temp., S.C., pH, D.O. | 1969-77 |
| Manasquan River at Squankum, NJ | 01408000 | 44 | Temp., S.C., pH, D.O. | 1969-74 |
| Toms River near Toms River, NJ | 01408500 | 123 | Temp., S.C. | 1964-66, 1975-81 |
| | | | | 1975-81 |
| Oyster Creek near Brookville, NJ | 01409095 | 7.43 | Temp., D.O. | 1975-76 |
| | | | S.C., pH | 1975-77 |
| West Branch Wading River near Jenkins, NJ | 01409810 | 84.1 | Temp., S.C. | 1978-81 |
| Great Egg Harbor River at Sicklerville, NJ | 01410784 | | Temp., S.C. | 1996-98 |
| Great Egg Harbor River trib. at Sicklerville, NJ | 01410787 | 1.64 | Sed. | 1974-78 |
| Fourmile Branch at New Brooklyn, NJ | 01410810 | 7.74 | Sed. | 1974-78 |
| Great Egg Harbor River at Folsom, NJ | 01411000 | 57.1 | Temp. | 1961-75, 1977-80 |
| | | | S.C. | 1969-75, 1977-80 |
| | | | Sed. | 1966-70, 1979 |
| Delaware Bay at Ship John Shoal Lighthouse, NJ | 01412350 | --- | Temp. | 1970-86 |
| Maurice River at Norma, NJ | 01411500 | 112.0 | Temp. | 1967-68, 1980-87, 1993-94 |
| | | | S.C. | 1980-87, 1993-94 |
| | | | pH | 1993-94 |
| | | | Sed. | 1965-68 |

* Unpublished records are available in the files of the District office.

WATER RESOURCES DATA - NEW JERSEY, 2001

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DISCONTINUED CONTINUOUS WATER-QUALITY STATIONS--Continued

| Station name | Station number | Drainage area (mi ²) | Type of record | Period of record (water years) |
|--|----------------|----------------------------------|--------------------|--------------------------------|
| Delaware River near Delaware Water Gap, Pa. | 01440200 | 3850 | Sed. | 1964-65, 1972 |
| Delaware River at Dunnfield, NJ | 01442750 | 4150 | Temp. | 1967-76 |
| | | | Sed. | 1966-76 |
| Delaware and Raritan Canal Feeder at Raven Rock, NJ | 01460300 | | Temp., S.C., Turb. | 1998-99 |
| Delaware and Raritan Canal Feeder at Lower Ferry Road at Trenton, NJ | 01460400 | | Temp., S.C., Turb. | 1998-99 |
| Delaware and Raritan Canal Feeder at Port Mercer, NJ | 01460440 | | Temp., S.C., Turb. | 1998-99 |
| Delaware and Raritan Canal Feeder at Griggstown, NJ | 01460530 | | Temp., S.C., Turb. | 1998-99 |
| Delaware and Raritan Canal Feeder at Ten Mile Lock near Manville, NJ | 01460565 | | Temp., S.C., Turb. | 1998-99 |
| Delaware and Raritan Canal Feeder at New Brunswick, NJ | 01460600 | | Temp., S.C., Turb. | 1998-99 |
| Delaware River at Trenton, NJ | 01463500 | 6780 | Sed. | 1949-82 |
| Delaware River at Marine Terminal, at Trenton, NJ | 01464040 | 6870 | Temp., S.C. | 1973-76 |
| Crosswicks Creek near Extonville, NJ | 01464500 | 81.5 | Temp. | 1967-70 |
| | | | Sed. | 1965-70 |
| McDonalds Branch in Lebanon State Forest, NJ | 01466500 | 2.35 | Temp. | 1960-92 |
| | | | S.C. | 1968-92 |
| | | | pH, D.O. | 1984-92 |
| Rancocas Creek at Willingboro, NJ | 01467016 | 315 | Temp., S.C., D.O. | 1969-74 |
| | | | pH | 1970-72 |
| | | | pH | 1970-74 |
| Cooper River at Haddonfield, NJ | 01467150 | 17.0 | Temp., Sed. | 1968-69 |
| Raccoon Creek near Swedesboro, NJ | 01477120 | 26.9 | Temp. | 1966-73 |
| | | | Sed. | 1966-69 |

Type of record: Temp. (temperature), S.C. (specific conductance), pH (pH), D.O. (dissolved oxygen), Sed. (sediment).



01398000 Neshanic River at Reaville
Agricultural Land Use Indicator Station
Ambient Stream Monitoring Network
(File photograph, U.S. Geological Survey, West Trenton, New Jersey)

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey (USGS), in cooperation with Federal, State, and local agencies, collects a large amount of data pertaining to the water resources of New Jersey each water year. These data, accumulated over many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the USGS, the data are published annually in this report series, titled "Water Resources Data-New Jersey."

This report series includes records of stage, discharge, and water quality in streams; stage, contents, and water quality in lakes and reservoirs; and water levels and water quality in ground-water wells. This volume contains water quality records, containing various chemical analyses, at 128 surface-water and 53 ground-water stations. Locations of these stations are shown in figures 22-24, and 62. Additional water-quality data were collected at various sites that are not part of the systematic data collection program. Miscellaneous data were collected at 29 surface-water sites and 53 ground-water sites. Locations of these sites are shown in figures 59-64. The data in this report represent that part of the National Water Information System (NWIS) data collected by the USGS and cooperating Federal, State, and local agencies in New Jersey.

This series of annual reports for New Jersey 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. For water years 1975 through 1989, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels. Beginning with the 1977 water year, these data were published in two volumes based on drainage basins. Beginning with the 1990 water year, the format was changed to include all surface-water discharge and surface-water quality records in Volume 1 and all ground-water level and ground-water quality records in Volume 2.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for New Jersey were published in 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, Part 1B." For water years 1961 through 1970, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for water years 1941 through 1970 were published annually under the title "Quality of Surface Waters of the United States," and water levels for water years 1935 through 1974 were published under the title "Ground-Water Levels in the United States." The above-mentioned Water-Supply Papers can be consulted in the libraries of the principal cities of the United States and can be purchased from U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, CO 80225-0286, (303) 202-4610.

Publications similar to this report are produced annually by the USGS for all States. These 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 NJ-01-3." For archiving and general distribution purposes, the reports for water years 1971 through 1974 also are identified as water-data reports. Water-data reports are available for purchase in paper copy or in microfiche from the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports can be obtained from the District Chief, USGS, New Jersey District, at the address given on the back of the title page of this report or by telephone ((609) 771-3900).

COOPERATION

The U.S. Geological Survey and agencies of the State of New Jersey have had joint-funding agreements for the collection of water-resource records since 1921. Organizations that assisted in collecting the data in this report through joint-funding agreements with the USGS are--

New Jersey Department of Environmental Protection,
Bradley M. Campbell, Commissioner

North Jersey District Water Supply Commission,
Michael Barnes, General Manager

Passaic Valley Water Commission, Joseph A. Bella,
Executive Director

Pinelands Commission, Annette M. Barbaccia,
Executive Director

Delaware River Basin Commission, Carol R. Collier,
Executive Director

The New Jersey Department of Environmental
Protection aided in collecting records.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water Quality

Yearly Trend of Precipitation, Stream Discharge, and Physical Water-Quality Characteristics Monitored at Several Index Stations

New Jersey received 39.12 inches of precipitation during water year 2001 (October 2000 to September 2001); precipitation was calculated from a spatially weighted average at several dozen stations throughout the State. This is a 5.68-inch (13 percent) deficit when compared to the long-term (1895-2000) mean-yearly value of 44.80 inches (Statewide Monthly Precipitation 1895-2001, Climate Data, N.J. State Climatologist, Rutgers University; accessed at <http://climate.rutgers.edu/stateclim/data/index.html>). Monthly mean values for March and June were above long-term (1895-2000) mean-monthly values; October, January, February, April, May, and July to September were below long-term means, whereas November and December were near normal (fig. 1). Streamflow was above average during March and June at the High Bridge and Folsom index stations and during December, April, and June at the Trenton index station (fig. 2). Below-average streamflow was recorded during November, January, May, and July to September at all three index stations.

One effect of the yearlong precipitation deficit can be seen in the plot of monthly mean values of specific conductance (SC) at the continuous-monitoring station on the Delaware River at Trenton (fig. 3). All monthly mean values of SC for the 2001 water year were above long-term (1968-2000) mean-monthly values. The values for May and July exceeded the highest monthly mean values for the period of record; values for February, March, and August were within 3 $\mu\text{S}/\text{cm}$ (microsiemens per centimeter at 25 degrees Celsius) of period-of-record maximum values. Near-average monthly mean SC values recorded during April and June correspond to above average streamflow during these months. SC is generally inversely related to stream discharge and is often used as an indicator of dissolved solids concentration.

The spatially weighted average ambient temperature for New Jersey for the 2001 water year was 52.5° F (11.4° C); the long-term (1895-2000) mean-yearly temperature was 52.1° F (11.2° C) (Statewide Monthly Mean Temperatures 1895-2001, Climate Data, N.J. State Climatologist, Rutgers University; accessed at <http://climate.rutgers.edu/stateclim/data/index.html>). Most water temperatures measured throughout the year at stations in the Ambient Stream Monitoring Network (described later in this section) were within previously measured maximums and minimums. Monthly mean water temperature values for water year 2001 measured at Delaware River at Trenton, New Jersey, closely matched long-term (1895-2000) mean-monthly values and did not exceed period-of-record minimums or maximums (fig. 4).

Dissolved oxygen (DO) concentration generally exhibits an inverse relation to water temperature.

As water temperature decreases, oxygen concentration increases; as water temperature increases, oxygen concentration decreases. DO, therefore, varies seasonally; yearly maximums occur in winter, and yearly minimums occur in summer. As expected, the highest monthly median of the daily maximum DO concentrations, 15.4 mg/L (milligrams per liter), occurred in February when the mean water temperature was 2.7 C (fig. 5). The lowest monthly median of the daily-minimum DO concentrations, 7.4 mg/L, and the highest monthly mean water temperature, 26.9 C, occurred in August. No monthly medians of daily maximum or minimum values for water year 2001 exceeded previously established highest or lowest monthly median values for the period of record.

Ambient Stream Monitoring Network

The United States Geological Survey (USGS) in cooperation with the New Jersey Department of Environmental Protection (NJDEP), operates the cooperative Ambient Stream Monitoring Network (ASMN), which is designed to determine statewide water-quality status and trends, measure water-quality near the downstream end of each NJDEP Watershed Management Area (WMA), define background water quality in each of the four physiographic provinces of New Jersey, and measure nonpoint source contributions from major land-use areas and atmospheric deposition. The ASMN consists of 112 stations located throughout the 20 WMAs. Five stations are located on the Delaware River main stem—the border between New Jersey and Pennsylvania—and are excluded from the following descriptive statistics of the ASMN data. The remaining 107 stations are segregated into 5 distinct types that together are used to define the surface-water quality in the State. Six background stations are located on reaches of streams that remain relatively unaffected by human activity in order to develop a baseline water-quality database. Twenty-three Watershed-Integrator (WI) stations are located at the farthest downstream point, not affected by tide, in one of the large drainage basins in each WMA, except areas 9 and 16. The WI stations provide information on the sum of point and nonpoint source contributions to surface water quality within each WMA. Land Use Indicator (LUI) stations are used to monitor the effects of the dominant land use in each WMA and provide data on nonpoint source loading of contaminants to streams. Of the 43 LUI stations, 15 are designated undeveloped, 9 agriculture, 13 urban, and 6 mixed. Forty statewide-status (SS) stations, two in each WMA, are chosen randomly to obtain a statistical basis that can be used to estimate values of water-quality indicators statewide. In water year 2001, five of the SS stations were co-located at existing WI or LUI stations; data from both station types were included in the statistics of both station types. Water-column samples were collected at each station to assess water-quality constituents that can be used as environmental indicators statewide. In addition to the regularly scheduled samples a Watershed Reconnaissance study is devised annually according to specific project needs. The purpose of the Watershed Reconnaissance study in water year 2001 was to assess 3 to 6 day diurnal physical measurements and constituent concentrations at a subset of the network sites. This is

discussed further in Ambient Stream Monitoring Network Reconnaissance Study.

Distribution of Selected Constituents in Filtered and Unfiltered Surface Water from Stations in the ASMN

Measurements were made of physical characteristics of, and analyses were conducted to determine concentrations of total and filtered nutrients, filtered common ions, filtered organic carbon, and biochemical oxygen demand (BOD) in, water samples from 112 stations in the ASMN. Samples were collected at each station four times a year during the periods November to December, February to March, May to June, and August to September. The analyzing laboratory used two different methods and reporting conventions for establishing the minimum concentration above which a quantitative measurement could be made. These reporting conventions were minimum reporting level (MRL) and laboratory reporting level (LRL). LRL was computed as twice the long-term method detection level (LT-MDL). Values reported by the analyzing laboratory as less than the MRL or LRL were included in each distribution but were reported as a value equal to one-half the MRL or LT-MDL. Estimated values, which were determined to be greater than the LT-MDL but less than the LRL, also were included, and they are marked with an "E" in the water-quality tables. Refer to "Laboratory Measurements" in the "Introduction" for additional information on reporting limits and estimated concentrations.

The highest median water temperature and lowest median percent of dissolved oxygen saturation during the growing season (April-October) occurred at urban LUI stations (fig. 6). Streams affected by wastewater and road salt runoff are likely to have high levels of total dissolved solids (TDS); samples from urban LUI, WI, and agriculture LUI stations had the highest median concentrations of TDS—252, 174, and 152 mg/L, respectively. In contrast, samples from undeveloped LUI and background stations had the lowest median concentrations, 49 and 73 mg/L, respectively. Samples from SS stations had the most outliers greater than 400 mg/L of TDS. The two highest values, 1,700 and 4,190 mg/L, were from samples collected the day after a snowfall and the subsequent application of road salt. The lowest median concentration of BOD, 0.5 mg/L, was present in samples from background stations and is lower than the minimum reporting level of 1.0 mg/L.

Runoff containing chemical fertilizer or animal waste, and discharge of municipal sewage, are likely contributors of nutrients to streams. The highest median concentrations of ammonia, as nitrogen, were present in samples from urban and agriculture LUI stations, 0.095 and 0.060 mg/L, respectively. The highest median concentrations of nitrite plus nitrate, as nitrogen, were present in samples from agriculture LUI and WI stations, 1.50 and 1.25 mg/L, respectively. The highest median concentrations of ammonia plus organic nitrogen were present in sample from urban and agriculture LUI stations, 0.52 and 0.42 mg/L, respectively. The highest median concentrations of phosphorous were present in samples from urban LUI

and WI stations, 0.070 and 0.066 mg/L, respectively. Samples from background and undeveloped LUI stations contained the lowest median concentrations of the four nutrient species.

The median concentration of filtered organic carbon in samples from network stations of all types for water years 1998-2000 is 3.7 mg/L. Median values measured in samples during water year 2001 ranged from 2.0 at background stations to 4.8 mg/L at undeveloped LUI stations. Some undeveloped LUI stations were located on streams that drained low-relief cedar wetlands in the Coastal Plain physiographic province where the water has sufficient residence time to extract organic carbon compounds from decaying plant material. Predictably, samples from undeveloped LUI stations had the largest range of filtered organic carbon concentrations, 1.4 to 19.0 mg/L, and the highest median concentration, 4.8 mg/L.

Distribution, Detection Frequency, and Concentration of Selected Whole-Water Recoverable Trace Elements, Volatile Organic Compounds, and Filtered Pesticides in Samples from 46 Stations in the ASMN

Concentrations of trace elements, volatile organic compounds (VOCs), and pesticides in samples from background stations were determined to develop a baseline with which to compare the water quality at other stations and at SS stations to provide a general overview of water quality statewide and of the aerial distribution of these compounds. Samples for analysis of trace elements, VOCs, and pesticides were collected during the period when the constituents were most likely to be detected, during August and September, February and March, and May and June, respectively. For ease of discussion, only those constituents detected in one or more samples are shown in the figures or tables. A detected constituent was one whose value is reported to be greater than or equal to the laboratory MRL or LRL. Data on selected whole-water-recoverable trace elements with a high percentage of detection in samples (greater than 75 percent) are summarized in box plots; data on constituents with a lower percentage of detection in samples are summarized in scatter plots. Values reported by the analyzing laboratory as less than the MRL or LRL were included in the box plots but were reported as a value equal to one-half the MRL or LT-MDL; they were excluded from the scatter plots. Estimated values were included in both types of plots.

Abundant minor elements, iron and manganese, and less abundant trace elements that might affect human health, and plant nutrition and toxicity (Hem, 1985), were detected less often and in smaller concentrations in samples from background stations than in samples from SS stations (figs. 7 and 8). Arsenic, chromium, mercury, and silver were not detected in any sample from background stations; lead, nickel, and selenium were detected once each. Median concentrations of minor elements and detection frequencies of trace elements were greatest in samples from SS stations.

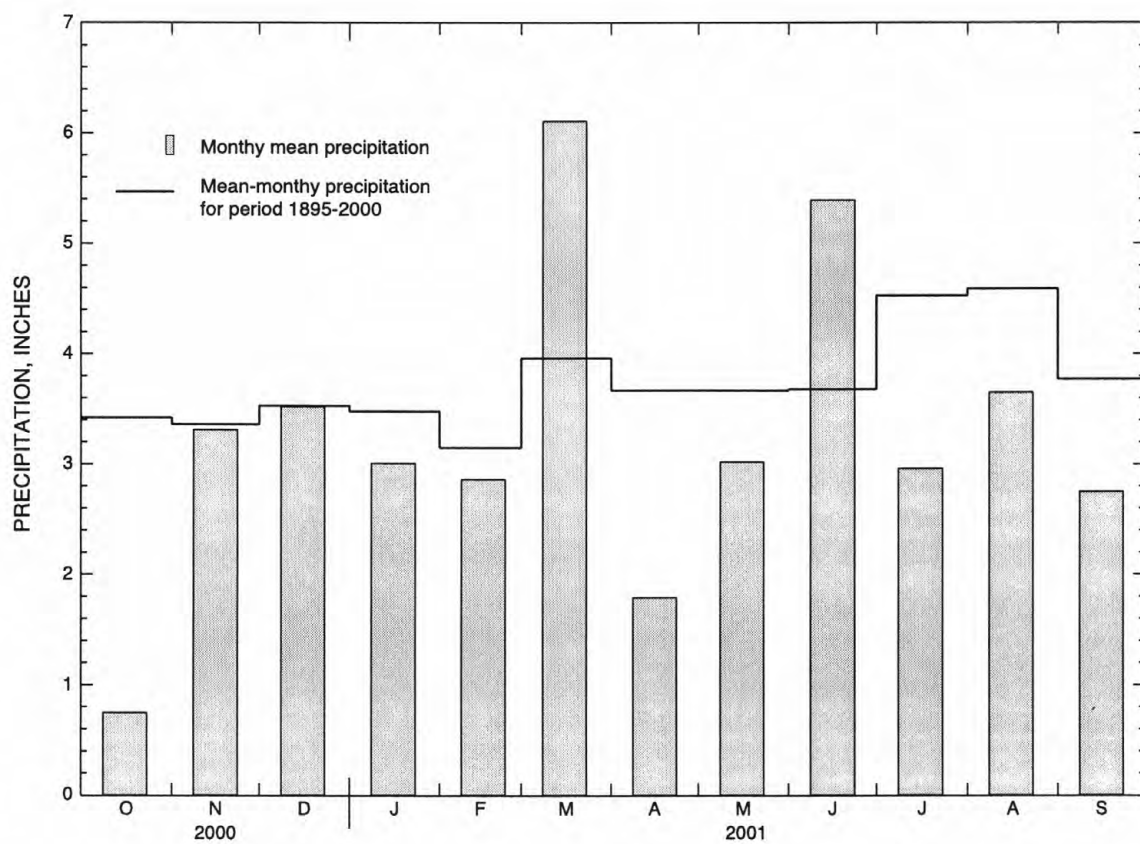
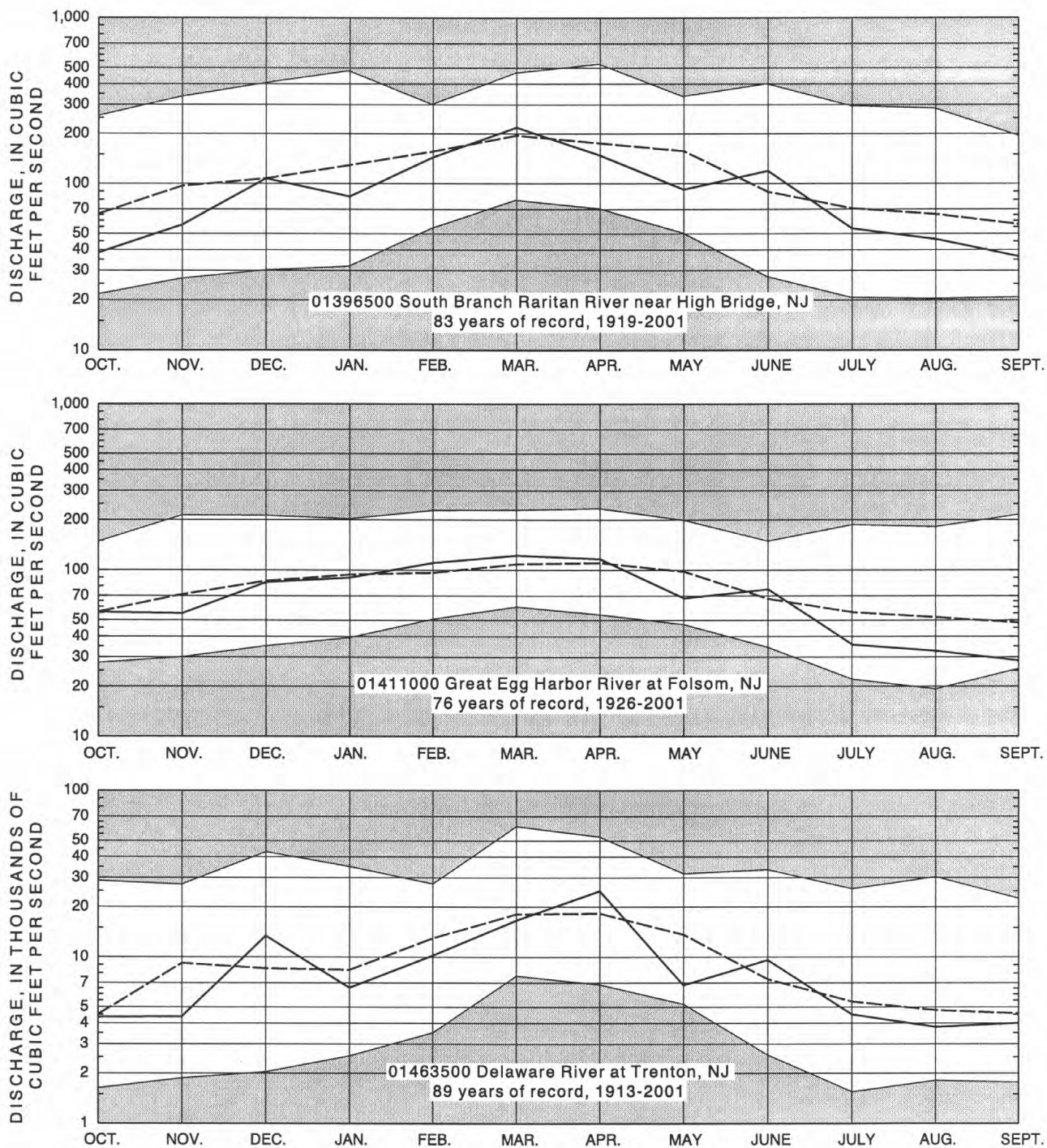
WATER RESOURCES DATA - NEW JERSEY, 2001

Figure 1. Monthly mean precipitation for water year 2001 and mean-monthly precipitation for 1895-2000. [Mean-monthly and monthly mean precipitation are spatially weighted averages of several dozen stations throughout the State]



EXPLANATION

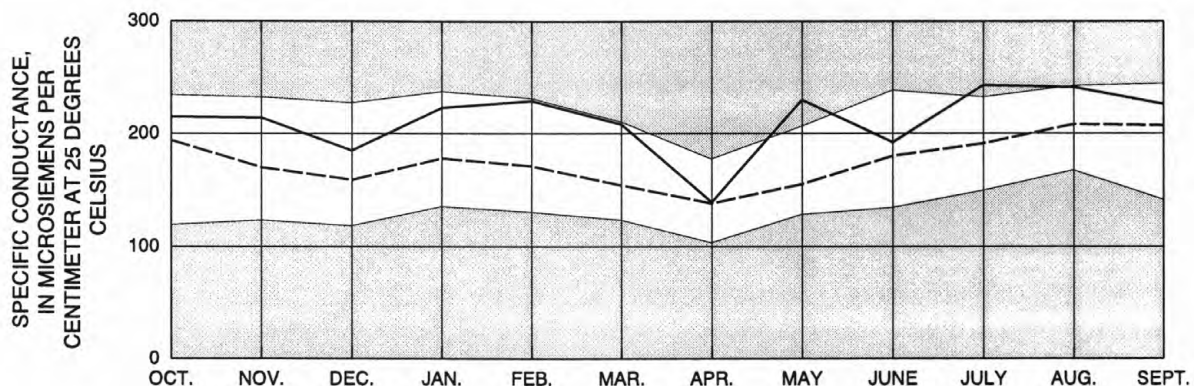
UNSHADED AREA--Indicates range between highest and lowest mean discharge recorded for the month, prior to 2000 water year

BROKEN LINE--Indicates normal discharge (median of the monthly means) for the standard reference period, 1961-90

SOLID LINE--Indicates observed monthly mean discharge for the 2000 water year

Figure 2. Monthly mean discharge at index gaging stations, water year 2001.

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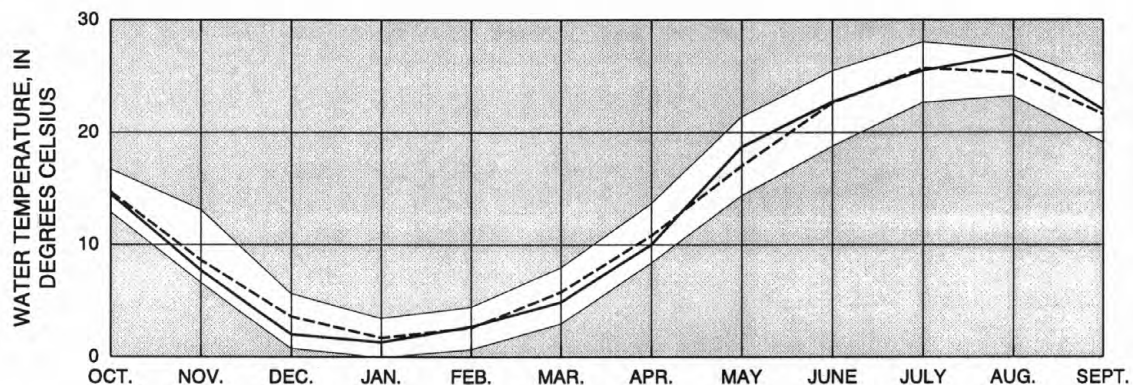
EXPLANATION

UNSHADED AREA--Indicates the range between the highest monthly mean values and the lowest monthly mean values, water years 1968-2000.

SOLID LINE--Indicates the monthly mean values for water year 2001.

BROKEN LINE--Indicates the mean monthly values for water years 1968-2000.

Figure 3. Monthly mean specific conductance at Delaware River at Trenton, New Jersey, water year 2001.



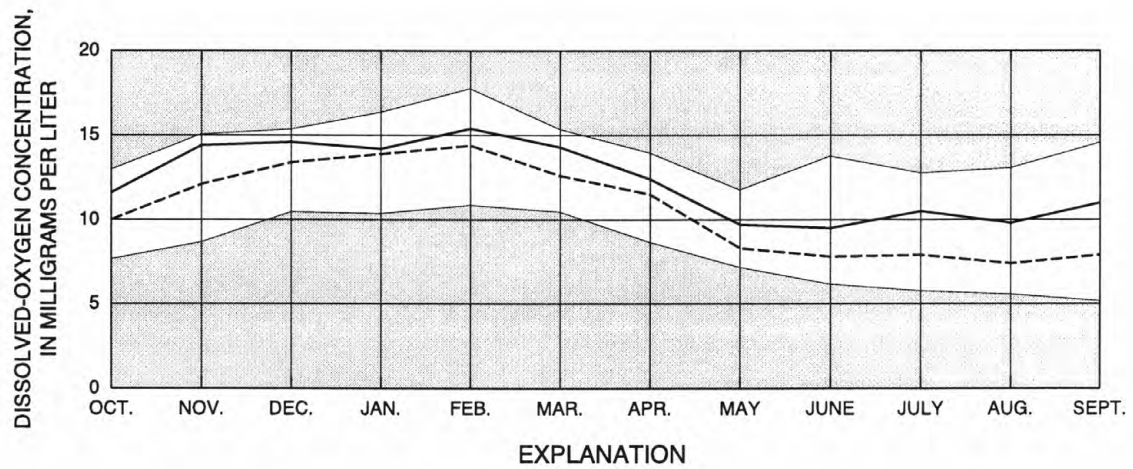
EXPLANATION

UNSHADED AREA--Indicates the range between the highest monthly mean values and the lowest monthly mean values, water years 1968-2000.

SOLID LINE--Indicates the monthly mean values for water year 2001.

BROKEN LINE--Indicates the mean monthly values for water years 1968-2000.

Figure 4. Monthly mean water temperature at Delaware River at Trenton, New Jersey, water year 2001.



UNSHADED AREA--Indicates the range between the highest monthly median of daily maximum values and the lowest monthly median of daily minimum values, water years 1968-2000.

SOLID LINE--Indicates the monthly median of daily maximum values for water year 2001.

BROKEN LINE--Indicates the monthly median of daily minimum values for water year 2001.

Figure 5. Monthly medians of daily maximum and minimum dissolved-oxygen concentrations at Delaware River at Trenton, New Jersey, water year 2001.

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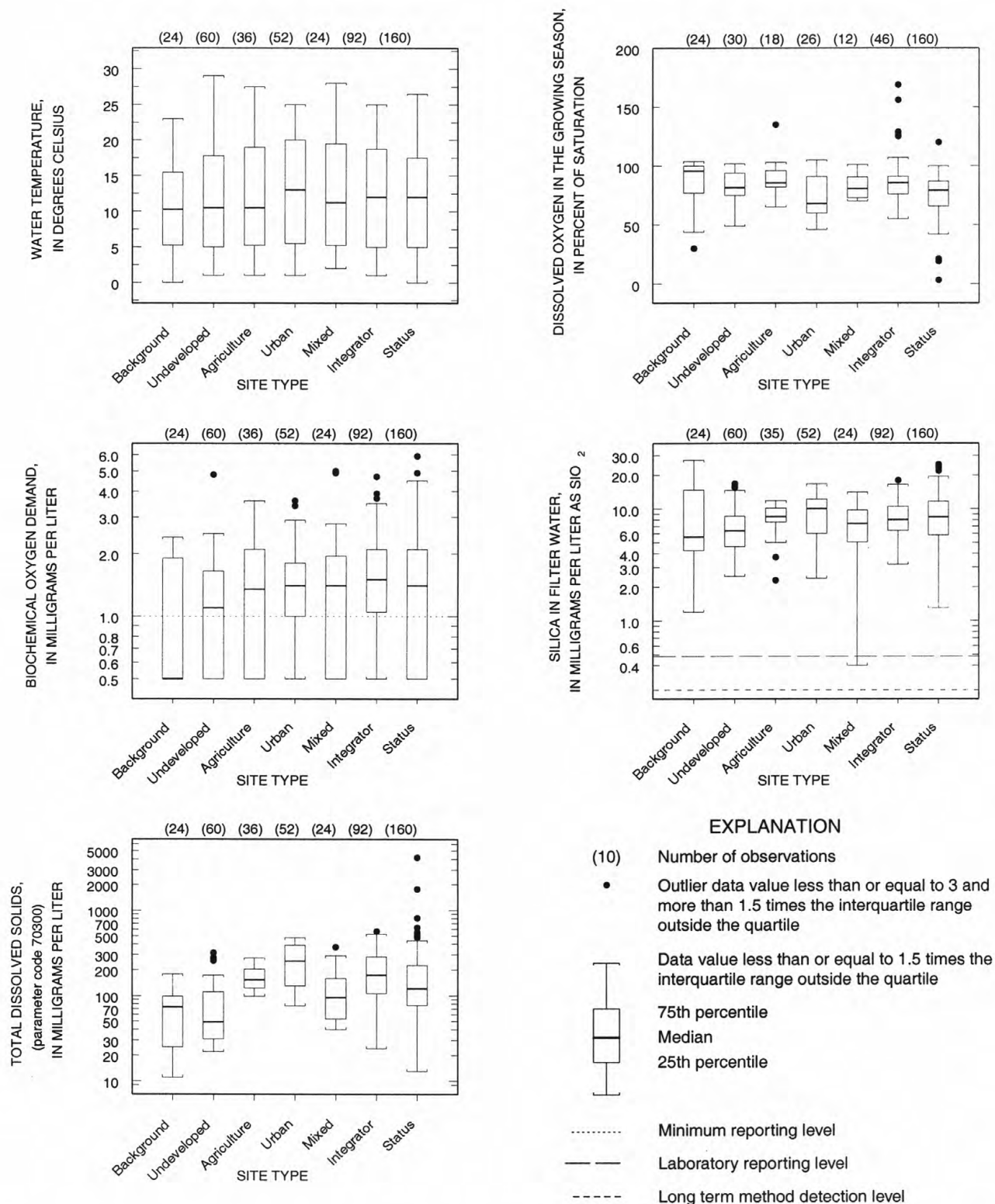


Figure 6. Distribution of physical characteristics of, and constituent concentrations in, samples from 112 stations in the Ambient Stream Monitoring Network, water year 2001. ["Less-than" values reported as equal to one-half the minimum reporting level or long-term method detection level; excludes data from Delaware River main stem sites 01438500, 01443000, 01457500, 01461000, and 01463500]

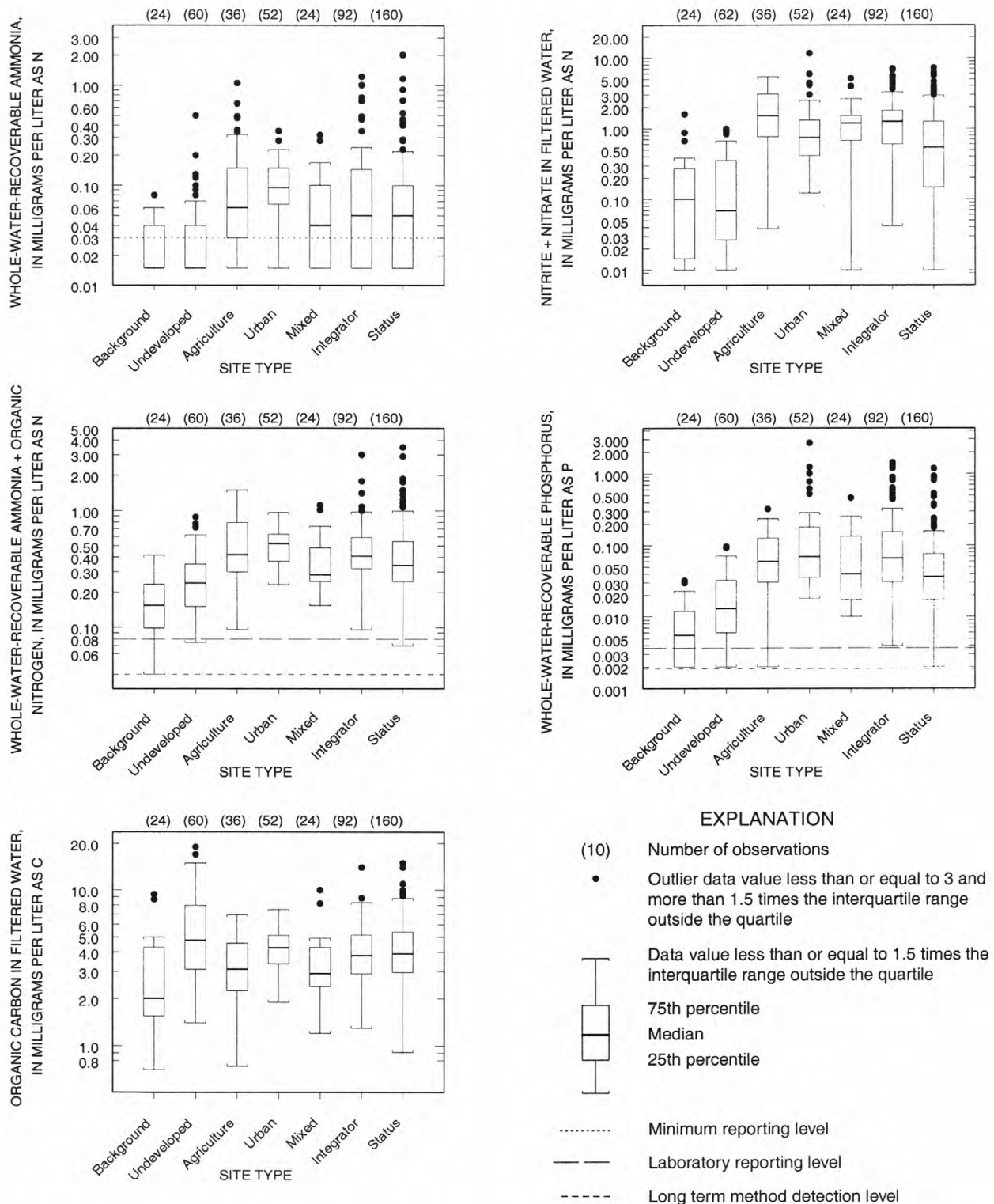


Figure 6. Distribution of physical characteristics of, and constituent concentrations in, samples from 112 stations in the Ambient Stream Monitoring Network, water year 2001--continued. ["Less-than" values reported as equal to one-half the minimum reporting level or long-term method detection level; excludes data from Delaware River main stem sites 01438500, 01443000, 01457500, 01461000, and 01463500]

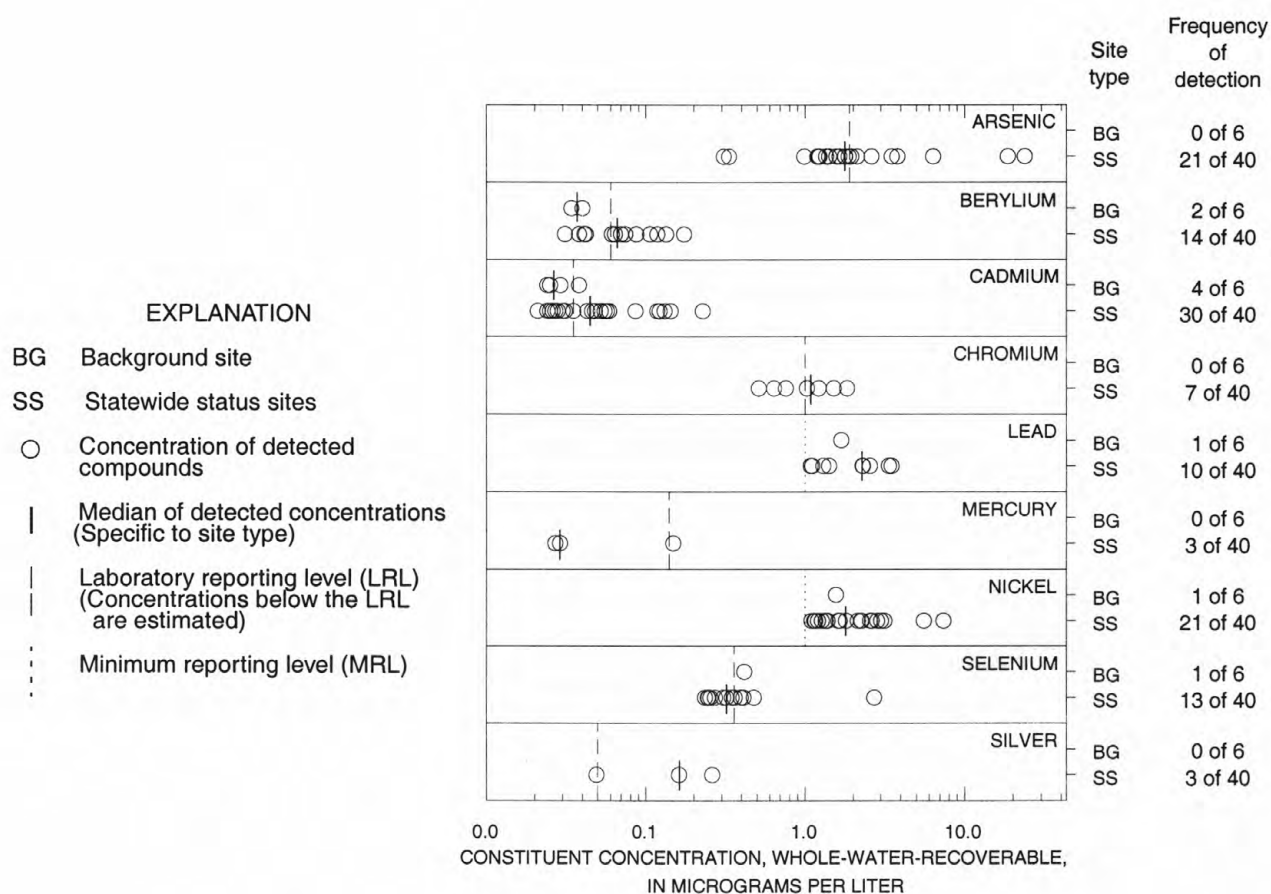


Figure 7. Concentration and detection frequency of whole-water-recoverable trace elements detected in samples from 46 stations in the Ambient Stream Monitoring Network, water year 2001. [Constituents whose values were reported by the laboratory as less than the MRL or LRL are considered to be not detected]

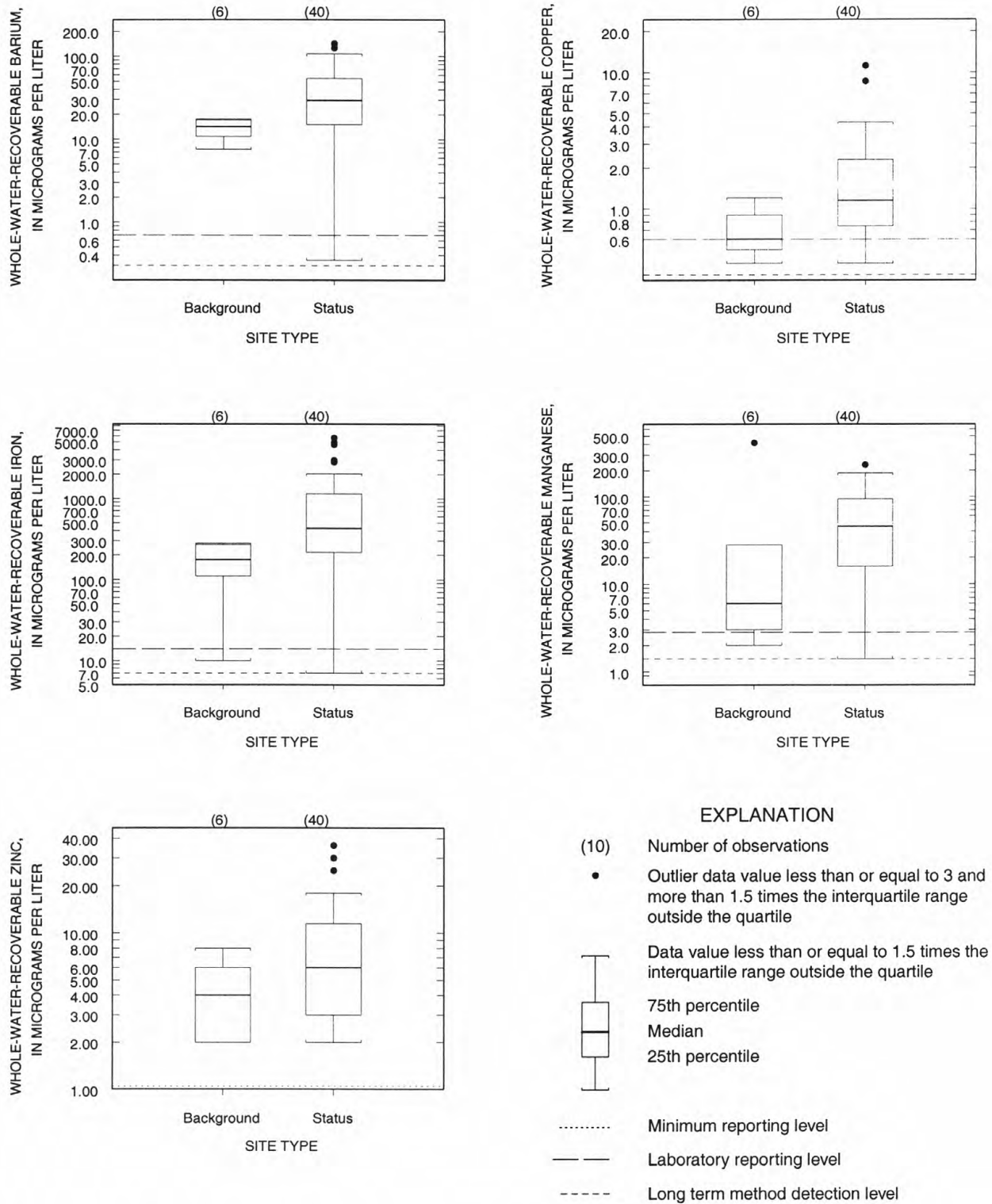
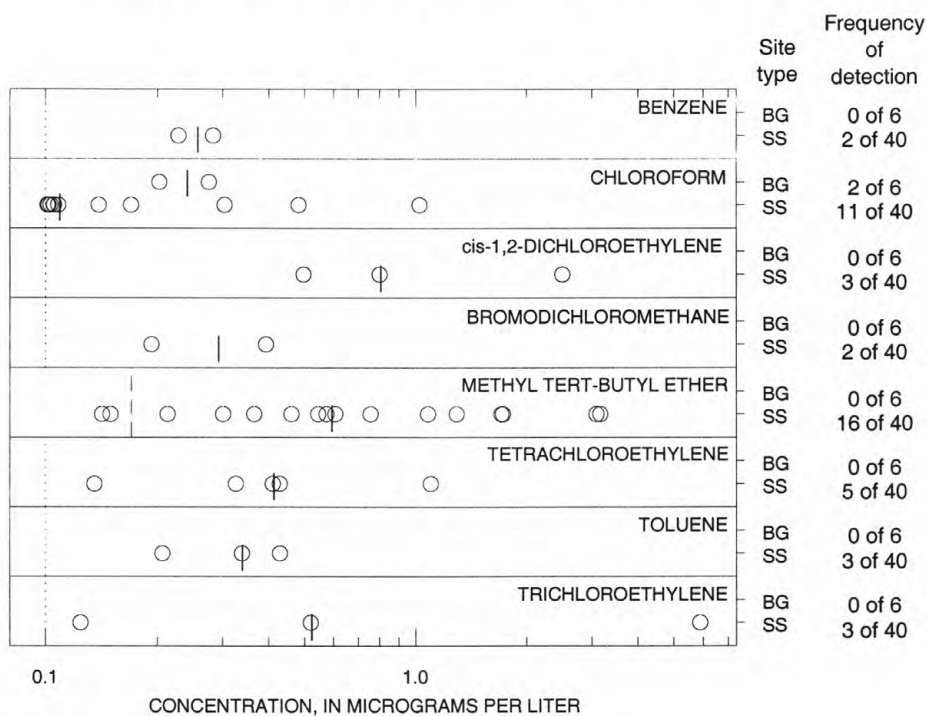


Figure 8. Distribution of selected whole-water-recoverable trace-element concentrations in samples from 46 stations in the Ambient Stream Monitoring Network, water year 2001. ["Less-than" values reported as equal to one-half the minimum reporting level or long-term method detection level]

WATER RESOURCES DATA - NEW JERSEY, 2001



EXPLANATION

- BG Background site
- SS Statewide status sites
- Concentration of detected compounds
- | Median of detected concentrations (Specific to site type)
- | Laboratory reporting level (LRL) (Concentrations below the LRL are estimated)
- ⋮ Minimum reporting level (MRL)

Figure 9. Concentration and detection frequency of volatile organic compounds detected in samples from 46 stations in the Ambient Stream Monitoring Network, water year 2001. [Constituents whose values were reported by the laboratory as less than the MRL or LRL are considered to be not detected]

Table 1. Concentration of volatile organic compounds detected only once in samples from 46 stations in the Ambient Stream Monitoring Network, water year 2001.
[SS, statewide status; E, estimated]

| CONSTITUENT | CONCENTRATION (micrograms per liter) | SITE TYPE |
|-----------------------|---|-----------|
| 1,1,1-TRICHLOROETHANE | 1.092 | SS |
| 1,2-DICHLOROETHANE | 0.6656 | SS |
| CHLOROBENZENE | 0.7946 | SS |
| META+PARA XYLENE | E.1851 | SS |
| VINYL CHLORIDE | 1.0300 | SS |

| EXPLANATION | |
|-------------|---|
| BG | Background site |
| SS | Statewide status sites |
| ○ | Concentration of detected compounds |
| | Median of detected concentrations (specific to site type) |
| | Laboratory reporting level (LRL) (concentrations below the LRL are estimated) |

Table 2. Detection frequency of selected pesticides in filtered samples from 46 stations in the Ambient Stream Monitoring Network, water year 2001. [All values are estimated due to poor recovery or poor precision]

| CONSTITUENT | STATEWIDE STATUS | BACKGROUND |
|-----------------|------------------|------------|
| CARBARYL | 20 of 40 | 0 of 6 |
| CARBOFURAN | 2 of 40 | 0 of 6 |
| DACTHAL (DCPA) | 2 of 40 | 0 of 6 |
| DEETHYLATRAZINE | 23 of 40 | 1 of 6 |
| METHYLAZINPHOS | 4 of 40 | 0 of 6 |
| TEBUTHIURON | 2 of 40 | 0 of 6 |
| TERBACIL | 4 of 40 | 0 of 6 |
| TRIFLURALIN | 8 of 40 | 0 of 6 |

Table 3. Concentration of pesticides detected only once in filtered samples from 46 stations in the Ambient Stream Monitoring Network, water year 2001. [SS, statewide status; E, estimated]

| CONSTITUENT | CONCENTRATION (micrograms per liter) | SITE TYPE |
|-------------|--------------------------------------|-----------|
| ALPHA-HCH | 0.0053 | SS |
| BENFLURALIN | E.0046 | SS |
| CYANAZINE | 0.7660 | SS |
| DIELDRIN | 0.0098 | SS |
| EPTC | 0.0098 | SS |
| LINDANE | E.0022 | SS |
| LINURON | 0.0717 | SS |

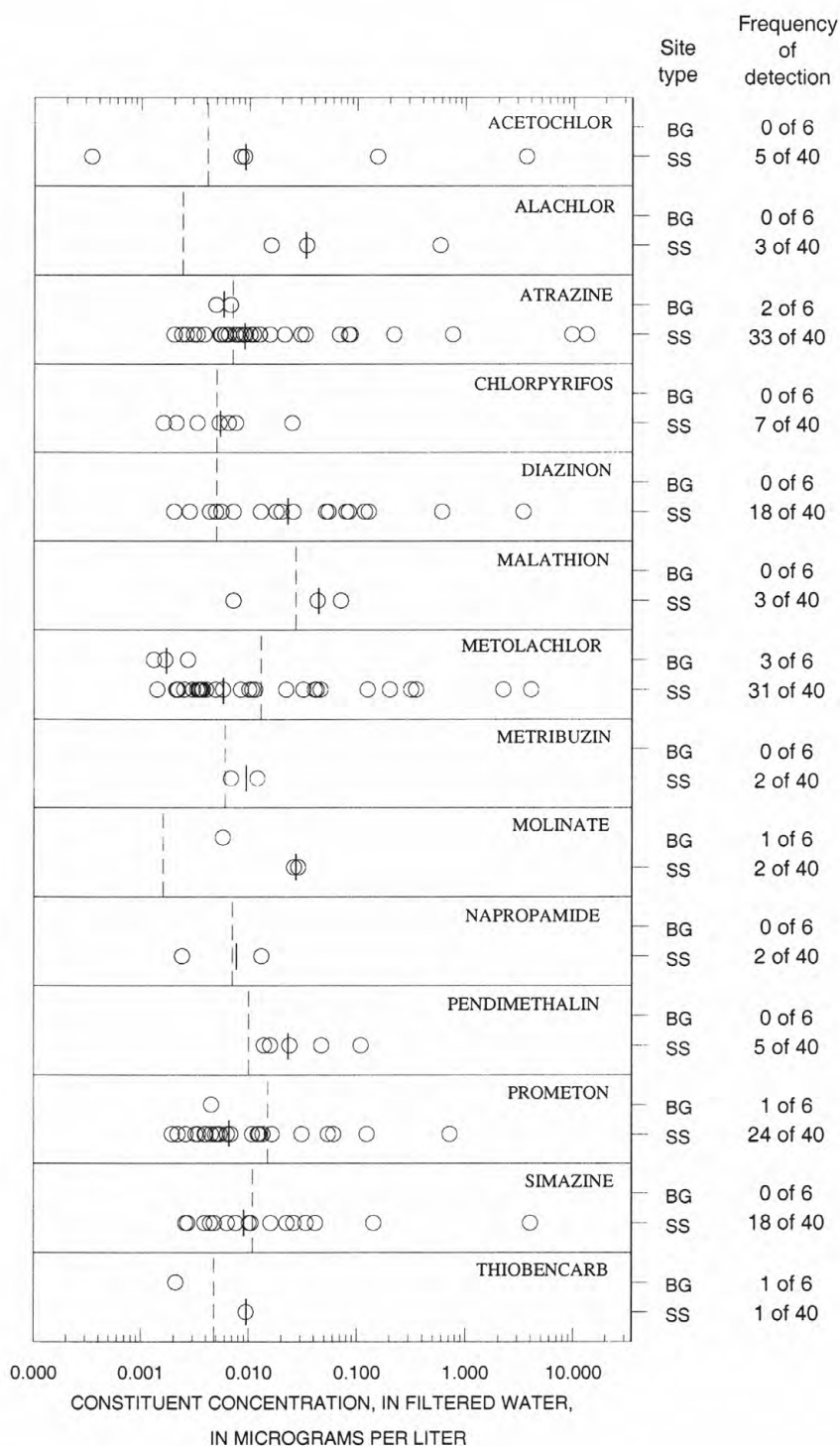


Figure 10. Concentration and detection frequency of pesticides detected in filtered samples from 46 stations in the Ambient Stream Monitoring Network, water year 2001. [Constituents whose values were reported by the laboratory as less than the MRL or LRL are considered to be not detected]

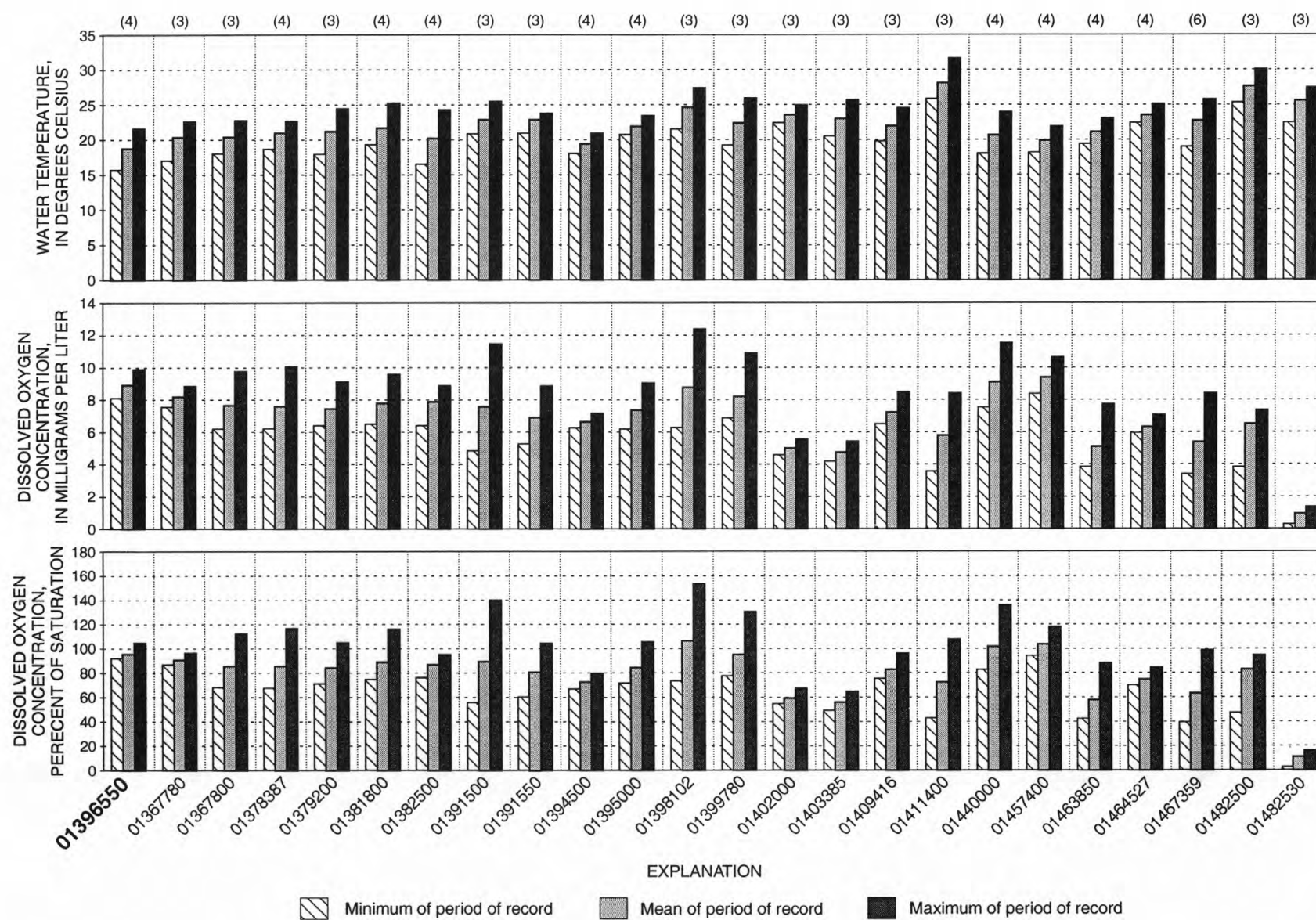


Figure 11. Field characteristics and concentrations of constituents in surface water at selected stations in the Ambient Stream Monitoring Network during June, July, August, or September, 2001.

[Station number in bold represents a background site; (3), 3 days in period of record]

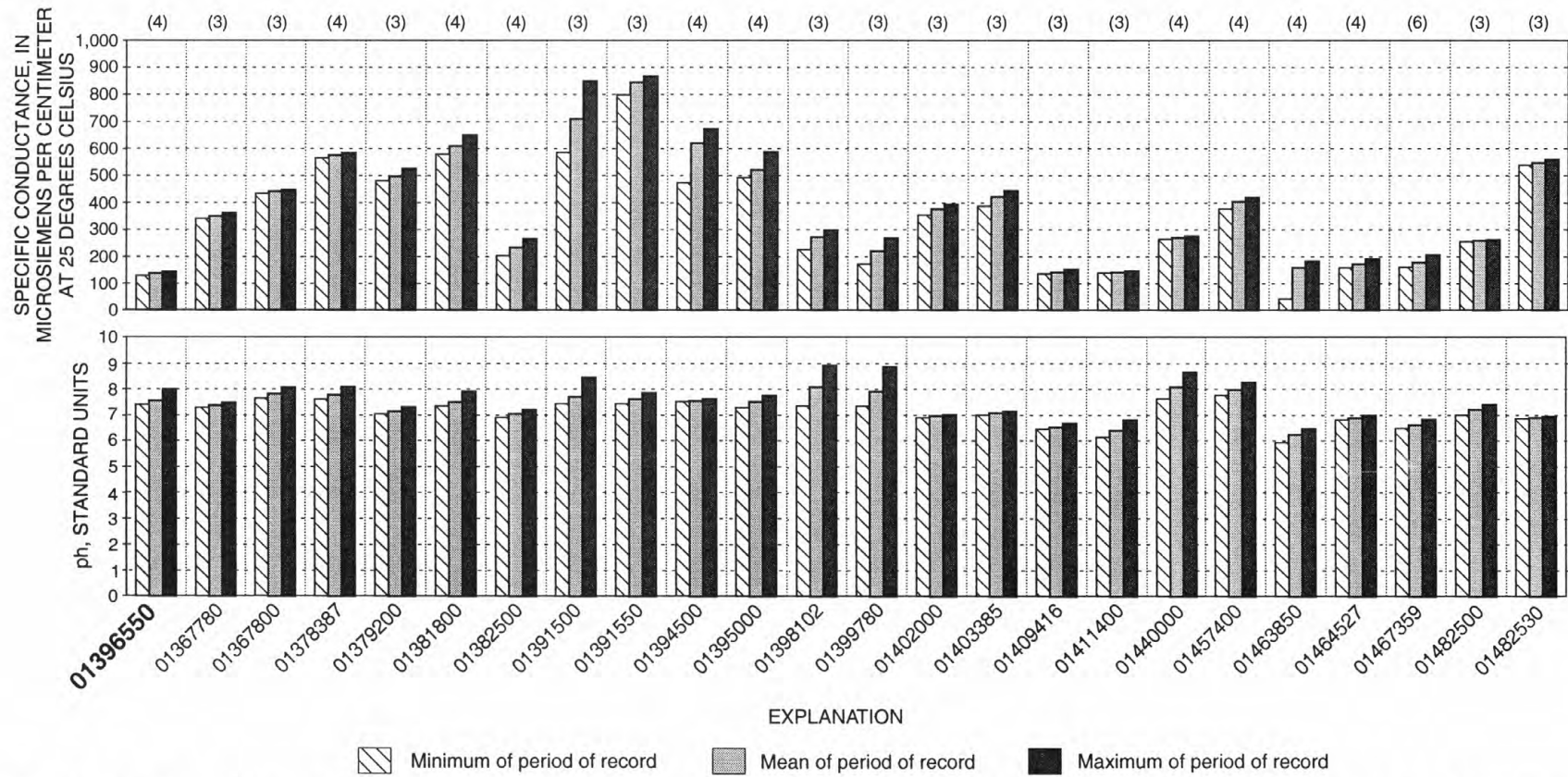


Figure 11. Field characteristics and concentrations of constituents in surface water at selected stations in the Ambient Stream Monitoring Network during June, July, August, or September, 2001--continued.
[Station number in bold represents a background site; (3), 3 days in period of record]

Samples from 6 background and 40 SS stations were analyzed for 34 VOCs. Only those detected in one or more samples are included in figure 9 and table 1. (See individual station records for tables listing all the compounds.) Five compounds were detected once, and eight were detected multiple times. The most frequently detected VOCs in 46 samples were Methyl tert-butyl ether (MTBE), in 35 percent of samples and chloroform, in 28 percent. Chloroform was the only compound detected in samples from background stations. Chloroform and Bromodichloromethane are by-products of the chlorination of drinking water. Benzene and Toluene are components of gasoline; MTBE is a gasoline additive.

Filtered samples from 6 background and 40 SS stations were analyzed for 47 pesticides by use of USGS National Water Quality Laboratory schedule 2001. Only compounds detected in one or more samples are included in figure 10 and tables 2 and 3. (Refer to "Laboratory Measurements" in the "Introduction" for the complete list of those pesticides and the LRL for each compound.) Estimated values, concentrations to the left of the LRL lines in figure 10, also are included. Twenty-nine pesticides were detected at one or more SS stations; six of these also were detected at background stations. Seven of the detected compounds are insecticides—Chlorpyrifos, Diazinon, Malathion, Carbaryl, Carbofuran, Dieldrin, and Lindane. The remaining compounds are herbicides. The most frequently detected pesticides in 46 samples were Atrazine, in 76 percent of samples; Metolachlor, in 74 percent; Prometon, in 54 percent; Deethylatrazine (a degradation product of Atrazine), in 52 percent; Carbaryl, in 43 percent; and Diazinon and Simazine, in 39 percent each. The six compounds detected at background stations are commonly used herbicides. The two most frequently detected at background stations were Metolachlor, in 50 percent of samples with a median concentration 0.002 µg/L (micrograms per liter) and Atrazine, in 33 percent with a median concentration of 0.006 µg/L. The median concentrations of Metolachlor and Atrazine in samples from SS stations were 0.006 and 0.009 µg/L, respectively.

Ambient Stream Monitoring Network Reconnaissance Study

For the reconnaissance study done in water year 2001, base-flow extremes of continuously monitored water temperature, dissolved oxygen concentration, percent of dissolved oxygen saturation, specific conductance, and pH were measured during periods of less than 1 week. The occurrence and magnitude of diurnal variations that could not be observed during normal station visits, which generally took place between the hours of 8 a.m. and 2 p.m., were documented. The continuous measurements were made by insitu multi-constituent sensors, or monitors, deployed from 3 to 6 days at 24 network stations during the summer months. Values were recorded hourly. Statistical summaries for the periods of record for all stations are shown in figure 11; graphs of hourly values are included in the individual station records.

Reconnaissance stations were selected on the

basis of previous occurrences of DO supersaturation (greater than 120 percent of saturation) or DO undersaturation (less than 60 percent of saturation). One background station was included as a control for comparison with other stations and to demonstrate constituent variations in pristine watersheds. Other station types represented are undeveloped LUI (two), agriculture LUI (four), urban LUI (five), WI (eight), and SS (four).

Mean values for percent-of-DO-saturation above 100 percent, for the periods of record, occurred at undeveloped LUI station 01440000 (Flat Brook at Flatbrookville) and WI stations 01398102 (South Branch Raritan River at South Branch) and 01457400 (Musconetcong River at Riegelsville). Additionally, maximum values for percent-of-DO-saturation above 120 percent, for the periods of record, occurred at WI stations 01391500 (Saddle River at Lodi) and 01399780 (Lamington River at Burnt Mills). Mean values for percent-of-DO-saturation below 60 percent, for the periods of record, occurred at urban-LUI stations 01403385 (Bound Brook at Middlesex) and 01463850 (Miry Run at Mercerville), WI station 01402000 (Millstone River at Blackwells Mill), and SS station 01482530 (Major Run at Sharptown). Additionally, minimum percent-of-DO-saturation below 60 percent, for the periods of record, occurred at undeveloped, urban, and agriculture LUI stations 01411400 (Fishing Creek at Rio Grande), 01467359 (North Branch Big Timber Creek at Glendora), and 01482500 (Salem River at Woodstown); WI station 01391500; and SS station 01391550 (Saddle River at Garfield).

SC and pH measurements at some stations exhibited diurnal variation. When respiring, plants and algae release carbon dioxide; it is quickly converted to bicarbonate, affecting SC and pH levels. Diurnal variation and high values of pH occurred at WI stations 01391500, 01398102, and 01399780; and undeveloped LUI station 01440000. Diurnal variation of SC occurred at WI stations 01391500 and 01398102. Non-diurnal, period-long fluctuations of SC caused by specific events or conditions like rainfall, poor mixing, or diminishing stream discharge occurred at WI stations 01395000 (Rahway River at Rahway) and 01399780 and urban LUI stations 01394500 (Rahway River at Springfield) and 01463850.

Ground Water Quality

The United States Geological Survey (USGS) in cooperation with the New Jersey Department of Environmental Protection (NJDEP), operates the Ambient Ground-Water-Quality Network (AGWQN), which is designed to monitor the quality of ground water at or near the water table throughout the State. Shallow ground water is generally the first and most significantly affected part of the ground-water system, and the quality of this water is directly related to human activities at the land surface. The AGWQN is a long-term monitoring network with goals to assess the status of ground-water quality by examining the concentrations of various constituents that can be used as environmental indicators, assess water-quality trends by examining data collected on a 5-year cycle, deter-

mine the effects of land use on shallow ground-water quality, identify threats from nonpoint sources of contamination, and identify emerging or new environmental issues of concern to the public.

The network will consist of 150 shallow ground-water wells distributed throughout New Jersey within three land-use types. Sixty wells are, or will be located, in agricultural areas, 60 in urban/suburban areas, and 30 in undeveloped areas within New Jersey's five watershed management regions (WMRs)—the Passaic, the Raritan, the Upper Delaware, the Lower Delaware, and the Atlantic Coastal. These five WMRs are further divided into 20 watershed-management areas (WMAs). Every year approximately 30 sites are sampled in one or several of the five WMRs. The cycle of sampling all 150 wells will be completed every 5 years. Water year 2001 was the third year of operation of the first 5-year cycle of the AGWQN.

Thirty shallow wells were sampled in water year 2001. Fifteen wells are located in the Upper Delaware WMR, in WMAs 1, 2, and 11 (fig. 12). Four are located in the Raritan WMR, in WMAs 9 and 10. Eleven are located in the Atlantic Coastal WMR, in WMAs 12-14. The wells have 2-inch polyvinyl-chloride casings, range in depth from 10 to 58 feet, and represent 3 land-use types, 8 water-chemistry types, and 13 hydrogeologic units (table 4). Samples from the wells were analyzed for physical characteristics, major ions, nutrients, trace elements, organic constituents, and gross alpha and beta radioactivity. The records of chemical constituents are in the section, "Water-Quality at Miscellaneous Ground-Water Sites."

Distribution, Detection Frequency, and Concentration of Selected Constituents in Filtered Samples from 30 Sites in the AGWQN

Measurements were made of physical characteristics of, and analyses were conducted to determine concentrations of filtered nutrients, common ions, trace elements, and organic carbon in, water samples from 30 wells in the AGWQN. Data on nutrients and trace elements with a high percentage of detection in samples (greater than 75 percent) are summarized in box plots; data on constituents with a lower percentage of detection in samples are summarized in scatter plots. Values reported by the analyzing laboratory as less than the MRL or LRL were included in the box plots but were reported as a value equal to one-half the MRL or LT-MDL; they were excluded from the scatter plots. Estimated values were included in both types of plots.

Similarity in ground-water chemistry among wells located in areas with agriculture, undeveloped, and urban land-use designations is suggested by the data summarized in figures 13 and 14. The median values of most constituents were present in similar concentrations in samples from wells in different areas, with some exceptions. The lowest median concentrations of nitrite plus nitrate and manganese, and the highest median concentration of filtered organic carbon were present in samples from wells in undeveloped areas. The highest median concentrations of aluminum and nickel were present in samples from urban areas.

As a result of agricultural practices, the highest median concentrations of hardness and nitrite plus nitrate were present in samples from agriculture areas. Orthophosphorus was detected in only 20 percent of the 30 samples (fig. 18); this frequency was the lowest for the nutrients that were analyzed for.

The effect of land use on the proportions of the major ions in water samples from the wells can be observed in the data presented in the trilinear or Piper diagrams (figs. 15 to 17). These diagrams and the "Water Type" column (column 5) in table 4 are grouped by land-use type and the major ion chemistry of the water from similar land-use areas is summarized.

Silver is not included in figure 19 because this trace element was not detected in any of the 30 samples. Mercury was detected in one sample (urban). Lead and zinc were detected in 70 percent of the samples; the same number of detections of lead and zinc occurred in samples from each land-use type.

Concentration and Detection Frequency of Selected Organic Constituents in Filtered Samples from 30 Sites in the AGWQN

Samples from 30 wells were analyzed for 34 VOCs. Only those detected in one or more samples are listed in table 5. (See individual station records for tables listing all the compounds.) Estimated values are included. The most frequently detected VOCs in samples from wells located in all land-use areas were Chloroform and Methyl tert-butyl ether (20 percent each). They were most often detected in samples from urban areas (5 of 12). Cis-1, 2-dichloroethene was detected twice. The remaining compounds in table 5 were detected once. The highest total number of VOC detections (15 detections in 12 samples) occurred in samples from wells in urban areas, followed by undeveloped (5 in 9), and agriculture (2 in 9).

Filtered samples from 30 wells were analyzed for 47 pesticides by use of USGS National Water Quality Laboratory schedule 2001. Only pesticides detected in one or more samples are included in figure 20 or tables 6 and 7. (Refer to "Laboratory Measurements" in the "Introduction" for the complete list of those pesticides and the LRL for each compound.) Estimated values, concentrations to the left of the LRL lines in figure 20, are included. Only 10 pesticide compounds were detected in samples from the 30 wells. The most frequently detected pesticides in samples from wells located in all land-use areas were the herbicides Metolachlor, in 27 percent of samples; Atrazine and Deethylatrazine, in 23 percent each; and Prometon, in 13 percent. Chlorpyrifos and Dieldrin were the only insecticides detected, only once each. Samples from wells in agriculture land-use areas had the highest total number of pesticide detections, 17 in 9 samples. Pesticides were detected 10 times in 12 samples from urban land-use areas, and 5 times in 9 samples from undeveloped areas.

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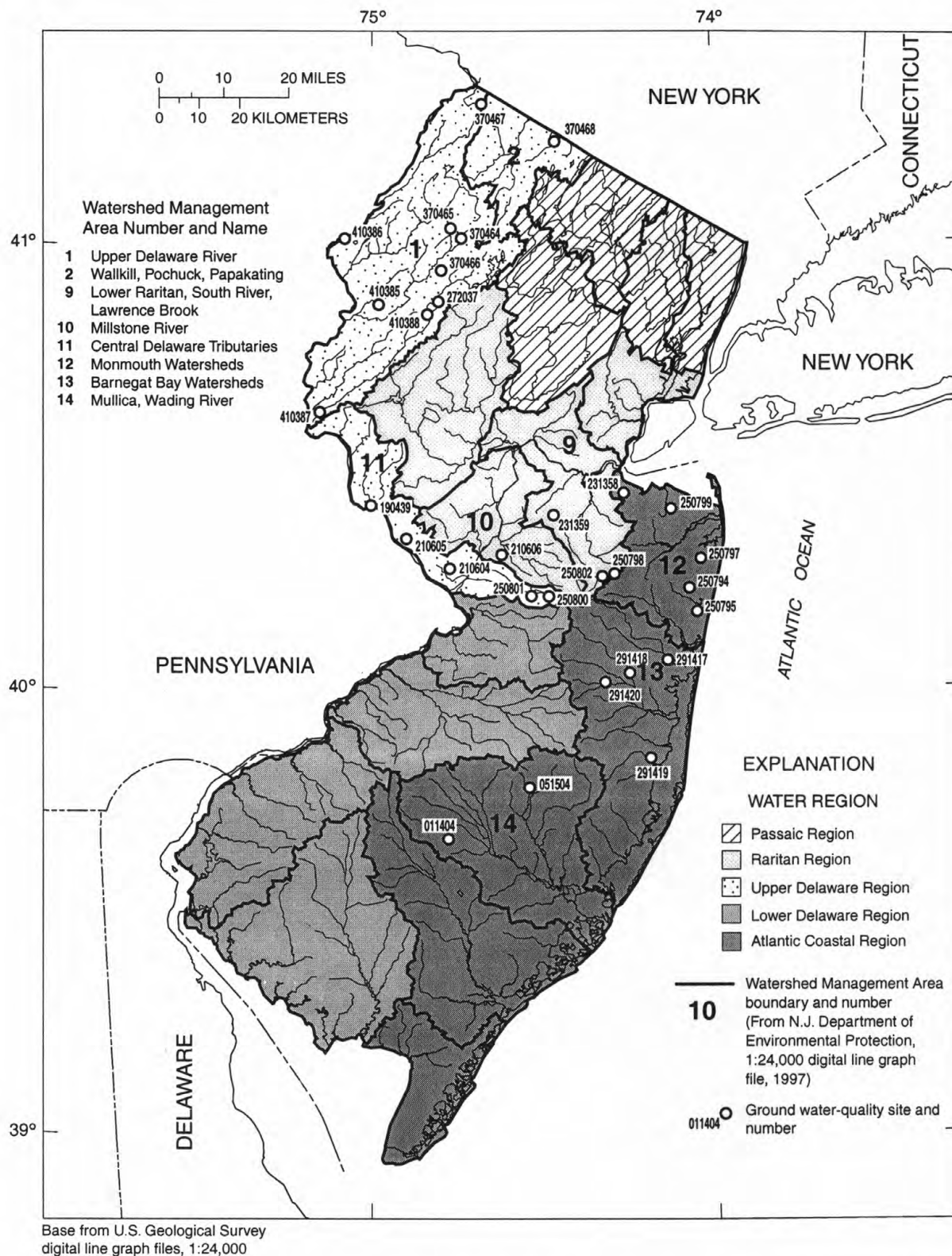


Figure 12. Location of sites in the Ambient Ground-Water-Quality Network, water year 2001.

Table 4. Hydrogeologic unit and land use at 30 wells sampled as part of U.S. Geological Survey-N.J. Department of Environmental Protection (cooperative) Ambient Ground-Water-Quality Network, water year 2001.

[WMA, Watershed Mangement Area; VOCs, volatile organic compounds; mg/L, milligrams per liter; NO₂+NO₃, nitrite plus nitrate; dis, dissolved; <, less than; ft bls, feet below land surface; 121 CKKD, Kirkwood-Cohansey aquifer system; 111HPPM, Undifferentiated sediments of Holocene, Pleistocene, Pliocene, or Miocene age; 111ALVM, Holocene Alluvium; 112SFDF, Stratified Drift; 125VNCN, Vincenton Formation; 211MRSL, Marshalltown Formation; 211MLRW, Mount Laurel Sand-Wenona Formation; 211RDBK, Red Bank Sand; 211EGLS, Englishtown Formation; 211MRPAU, Magothy-Rartian-Potomac Upper Aquifer System, Upper Aquifer; 227PSSC, Passaic Formation; 231SCKN, Stockton Formation; 350HGFL, High Falls Formation; ---, data not available]

| NJ-WRD well number | WMA number | Hydrogeologic unit aquifer code | Predominant land use ¹ | Water type (dominant cation-anion) | Dissolved oxygen (mg/L) | Nitrogen NO ₂ +NO ₃ dissolved (mg/L) | Number of pesticides detected ² | Number of VOCs detected ² | Number of trace elements detected ² | Well depth (ft bls) |
|--------------------|------------|---------------------------------|-----------------------------------|------------------------------------|-------------------------|--|--|--------------------------------------|--|---------------------|
| 370466 | 1 | 112SFDF | Agricultural | Calcium-bicarbonate | 5.2 | 10.5 | 3 | 1 | 4 | 13.8 |
| 410387 | 1 | 112SFDF | Agricultural | Calcium-bicarbonate | 4.5 | 3.86 | 3 | None | 9 | 12 |
| 370468 | 2 | 112SFDF | Agricultural | Calcium-bicarbonate | 1.1 | 1.85 | 2 | None | 9 | 13.5 |
| 370465 | 1 | 112SFDF | Agricultural | Calcium-bicarbonate | 5.1 | 3.67 | None | None | 6 | 31.5 |
| 210605 | 11 | 227PSSC | Agricultural | Calcium-bicarbonate | 3.8 | E3.02 | 4 | None | 8 | 13.5 |
| 250800 | 11 | 211MLRW | Agricultural | Magnesium-sulfate | 5.2 | 3.86 | 1 | None | 11 | 18.5 |
| 051504 | 14 | 121CKKD | Agricultural | Potassium-sulfate | 0.3 | E.04 | None | 1 | 9 | 10 |
| 250801 | 11 | 211EGLS | Agricultural | Calcium-sulfate | 9.0 | E3.78 | 3 | None | 7 | 26 |
| 250802 | 9 | 211RDBK | Agricultural | Sodium-chloride | 4.2 | 0.95 | None | None | 8 | 35.1 |
| 370467 | 1 | 350HGFL | Undeveloped | Magnesium-bicarbonate | 4.4 | E.04 | None | None | 8 | 50.0 |
| 370464 | 1 | 112SFDF | Undeveloped | Calcium-bicarbonate | 4.2 | 0.07 | None | None | 7 | 38 |
| 410386 | 1 | 112SFDF | Undeveloped | Calcium-bicarbonate | 3.9 | 0.23 | None | None | 8 | 36 |
| 410385 | 1 | 112SFDF | Undeveloped | Calcium-bicarbonate | 4.8 | E.03 | None | None | 4 | 37 |
| 272037 | 1 | 112SFDF | Undeveloped | Calcium-bicarbonate | 5.5 | 0.11 | 1 | None | 10 | 57.5 |
| 190439 | 11 | 111ALVM | Undeveloped | Calcium-bicarbonate | 5.3 | 1.98 | None | None | 9 | 39 |
| 011404 | 14 | 121CKKD | Undeveloped | Magnesium-sulfate | <0.2 | 8.69 | 1 | None | 12 | 14 |
| 231359 | 9 | 111HPPM | Undeveloped | Iron-bicarbonate | <0.2 | <.05 | None | None | 11 | 14.5 |
| 231358 | 12 | 211MRPAU | Undeveloped | Calcium-sulfate | 3.0 | 0.78 | None | 4 | 7 | 55 |
| 410388 | 1 | 112SFDF | Urban | Calcium-bicarbonate | 6.9 | 0.9 | 3 | 5 | 8 | 12 |
| 250797 | 12 | 125VNCN | Urban | Calcium-bicarbonate | 3.6 | 1.17 | None | 1 | 4 | 38.5 |
| 210604 | 11 | 231SCKN | Urban | Calcium-bicarbonate | 3.6 | E.03 | 1 | 1 | 8 | 19.5 |
| 250795 | 12 | 121CKKD | Urban | Sodium-chloride | 1.6 | 5.92 | None | 1 | 10 | 27.5 |
| 291417 | 13 | 121CKKD | Urban | Sodium-chloride | 3.6 | 3.14 | None | None | 11 | 18.5 |
| 291418 | 13 | 121CKKD | Urban | Sodium-chloride | 10.0 | 0.56 | 3 | 2 | 9 | 24 |
| 291419 | 13 | 121CKKD | Urban | Sodium-chloride | 1.4 | 2.75 | None | 1 | 9 | 20 |
| 210606 | 10 | 111HPPM | Urban | Sodium-chloride | 5.4 | 1.65 | 2 | None | 12 | 18 |
| 250798 | 9 | 211RDBK | Urban | Sodium-chloride | 0.6 | 4.41 | None | 2 | 11 | 22 |
| 250799 | 12 | 211MRSL | Urban | Calcium-sulfate | 1.6 | E.03 | 1 | 2 | 8 | 23.8 |
| 250794 | 12 | 121CKKD | Urban | Iron-sulfate | 1.4 | E.03 | None | None | 10 | 29.5 |
| 291420 | 13 | 121CKKD | Urban | --- | 4.7 | 3.27 | 2 | None | 4 | 25 |

¹Land use based on New Jersey geographic information system (New Jersey Department of Environmental Protection, 1996).

²Includes compounds with estimated concentrations, defined as positive detections of a compound, but measured as less than the laboratory's reporting levels.

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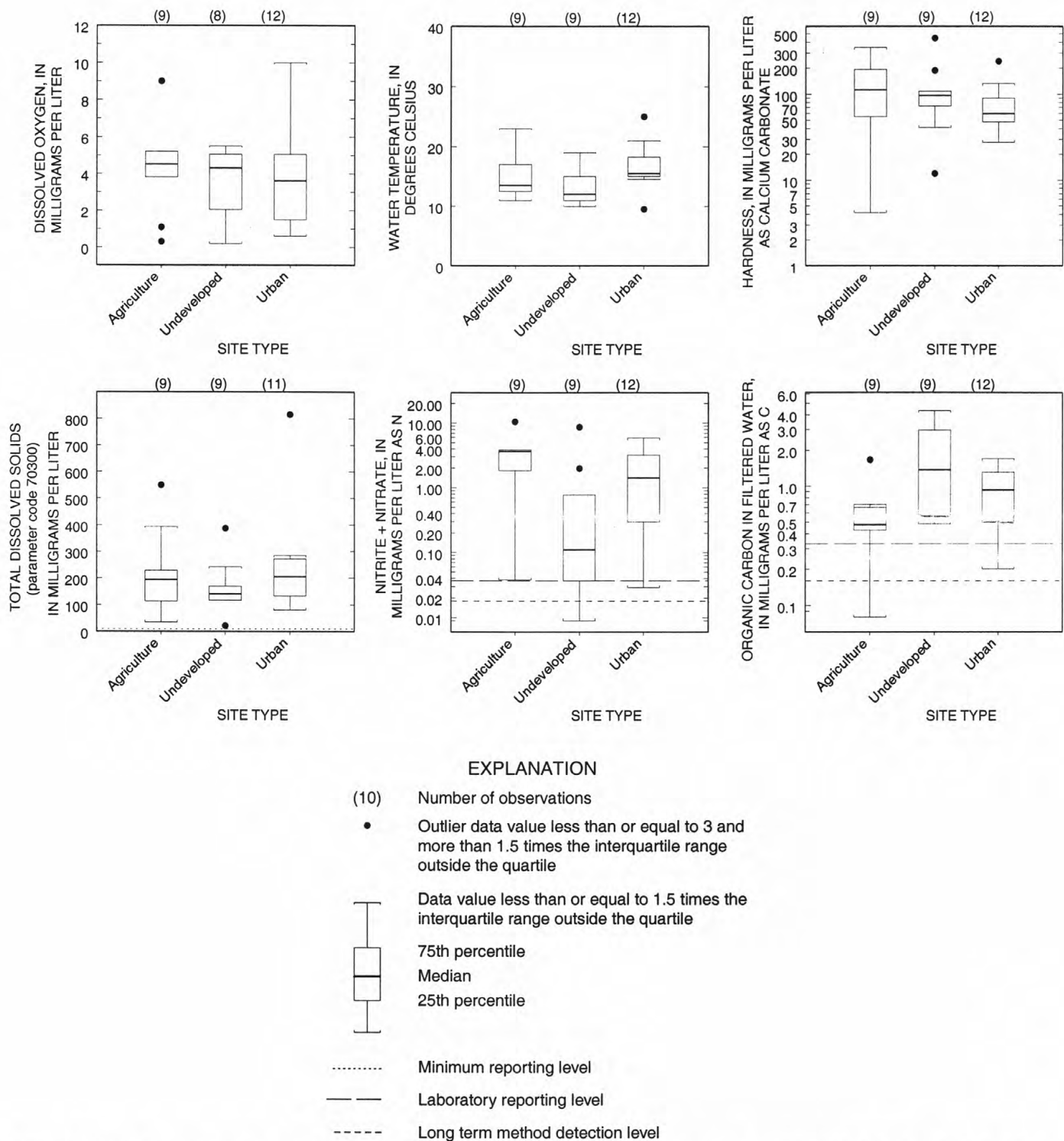


Figure 13. Distribution of physical characteristics of, and constituent concentrations in, samples from 30 sites in the Ambient Ground-Water-Quality Network, water year 2001. ["Less-than" values reported as equal to one-half the minimum reporting level or long-term method detection level]

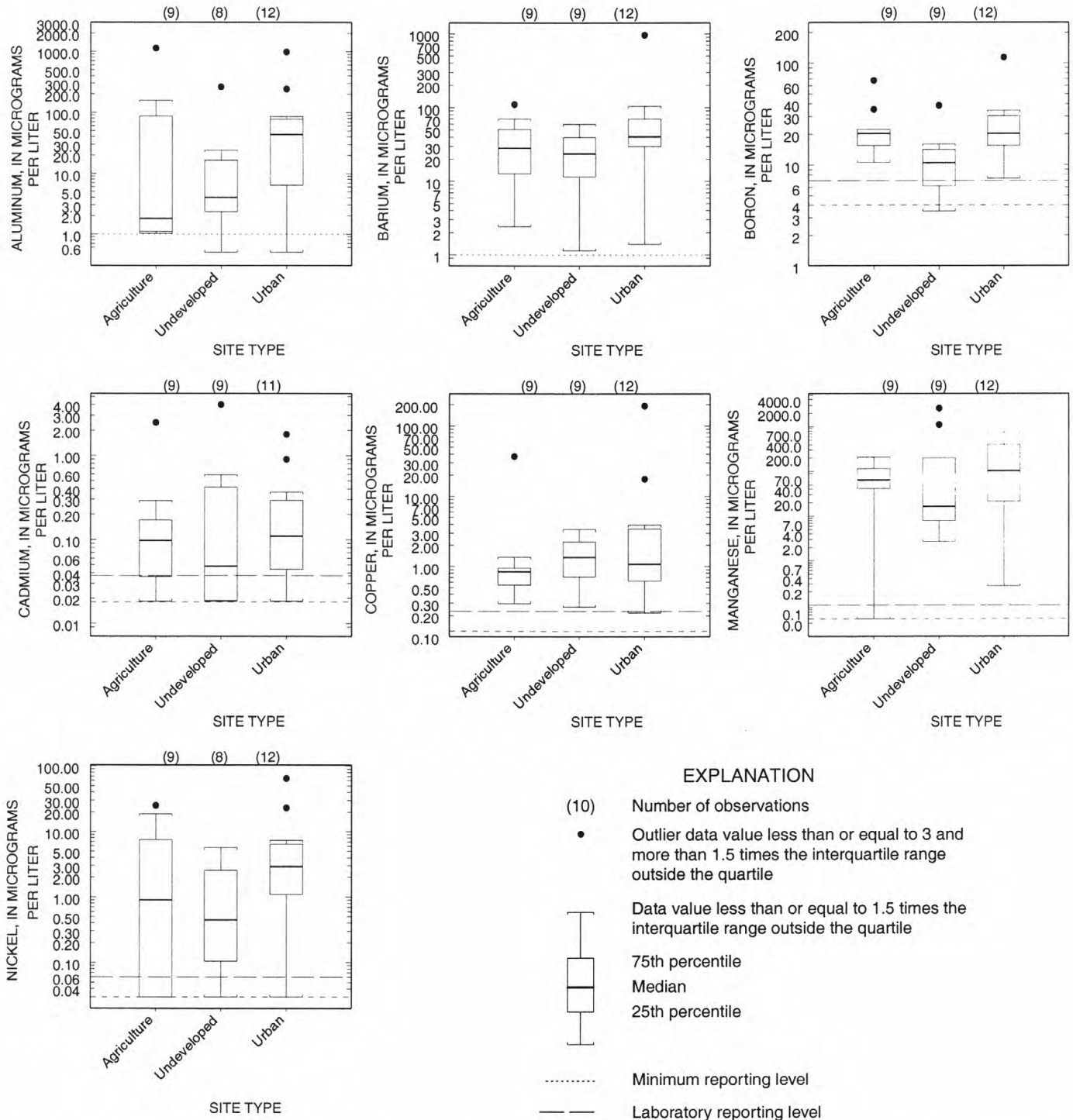


Figure 14. Distribution of selected trace-element concentrations in filtered samples from 30 sites in the Ambient Ground-Water-Quality Network, water year 2001. ["Less-than" values reported as equal to one-half the minimum reporting level or long-term method detection level]

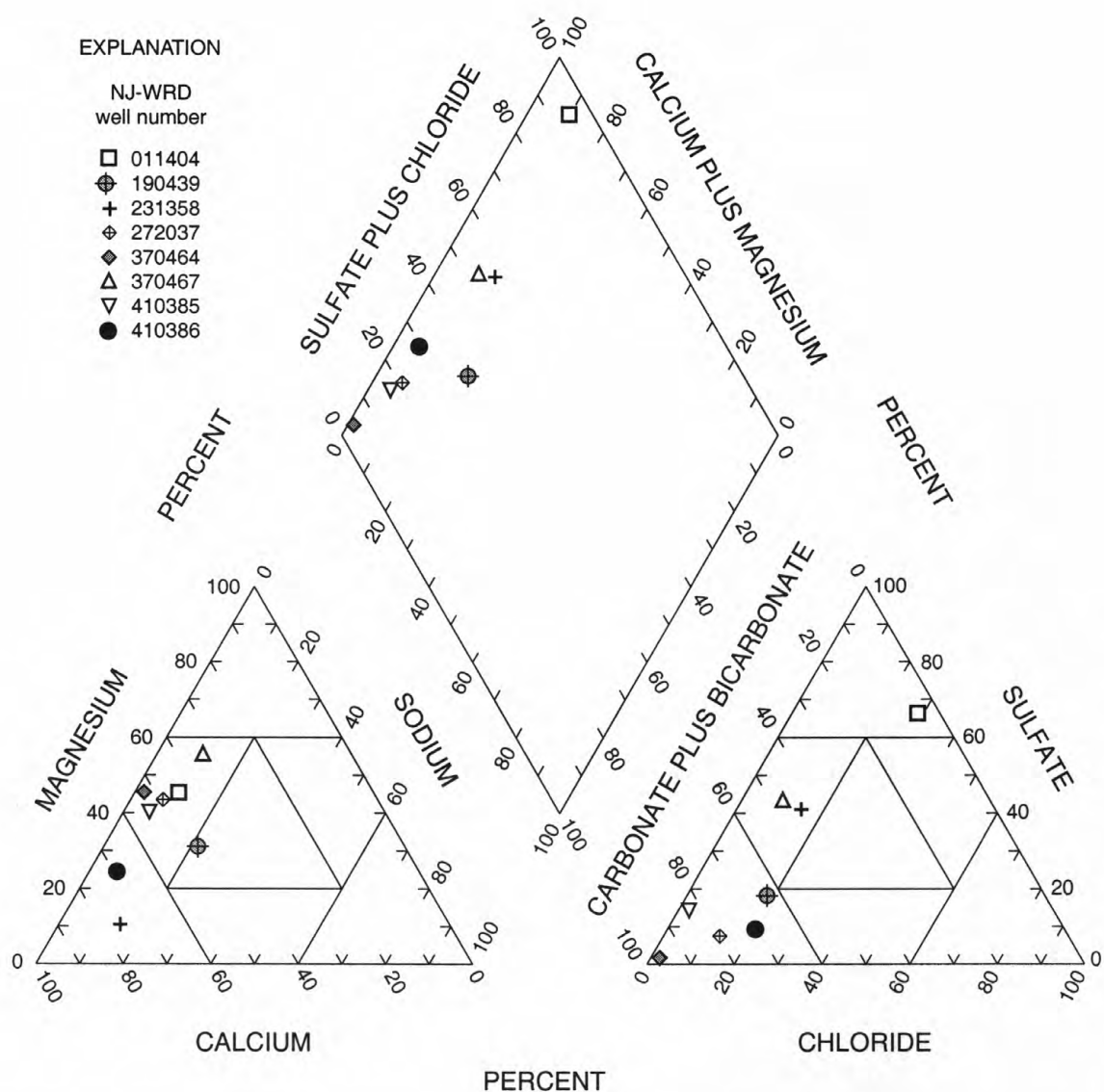


Figure 15. Trilinear diagram showing the distribution of major ions in filtered samples from eight sites in undeveloped land-use areas in the Ambient Ground-Water-Quality Network, water year 2001.

[Excludes site 231359 because data are not available]

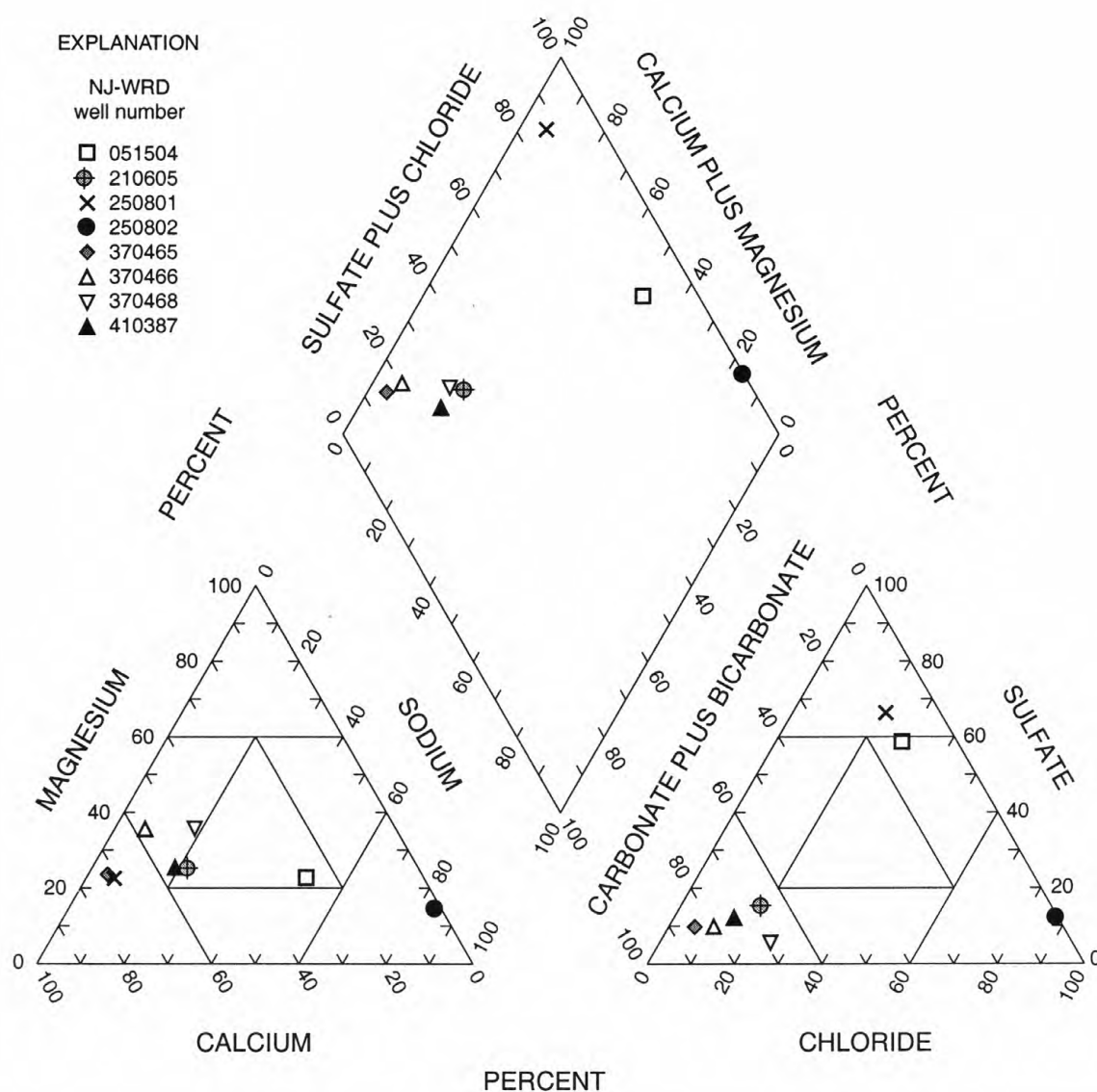


Figure 16. Trilinear diagram showing the distribution of major ions in filtered samples from eight sites in agricultural land-use areas in the Ambient Ground-Water-Quality Network, water year 2001.

[Excludes site 250800 because data are not available]

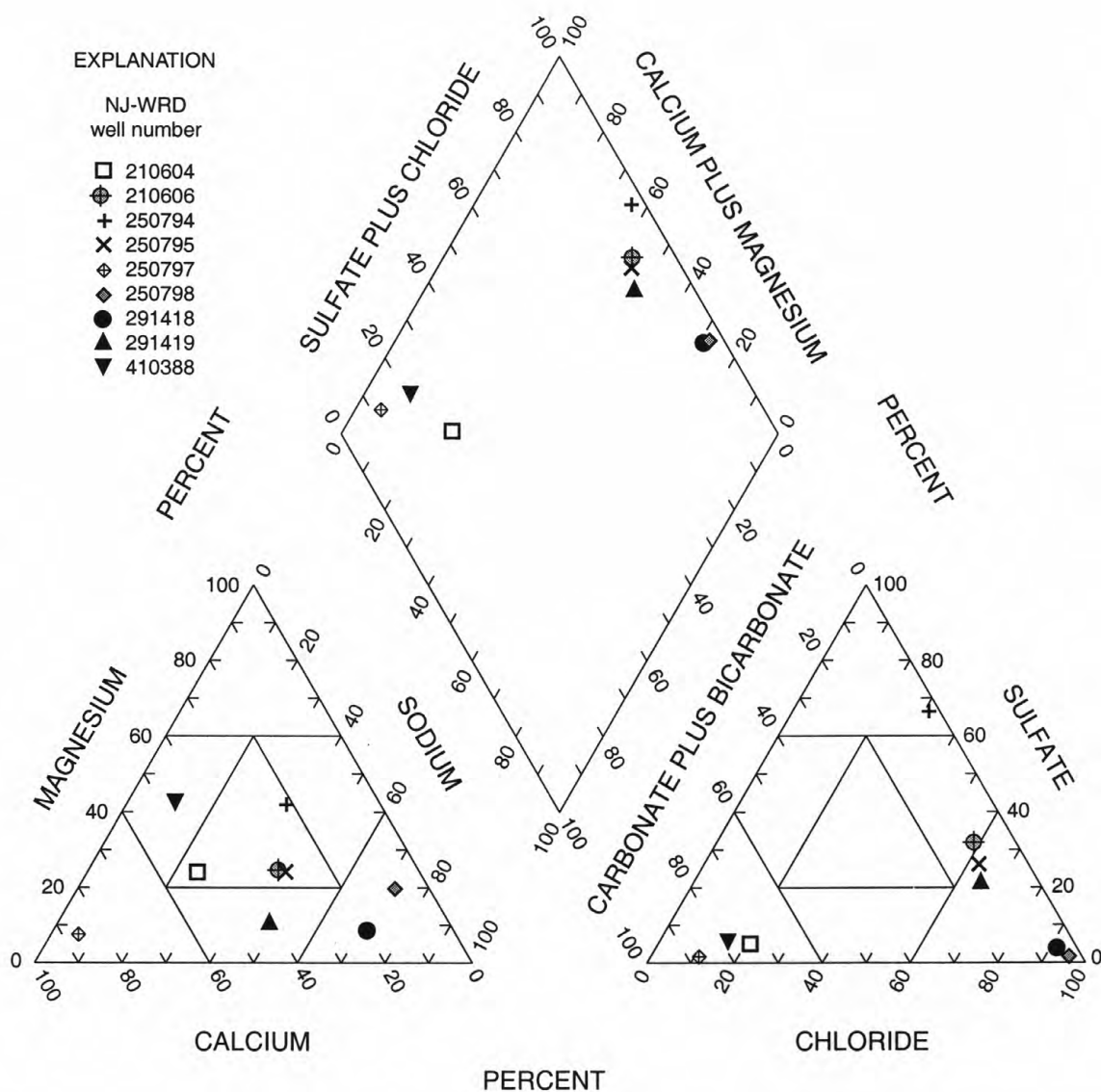


Figure 17. Trilinear diagram showing the distribution of major ions in filtered samples from nine sites in urban land-use areas in the Ambient Ground-Water-Quality Network, water year 2001.

[Excludes sites 250799, 291417, and 291420 because data are not available]

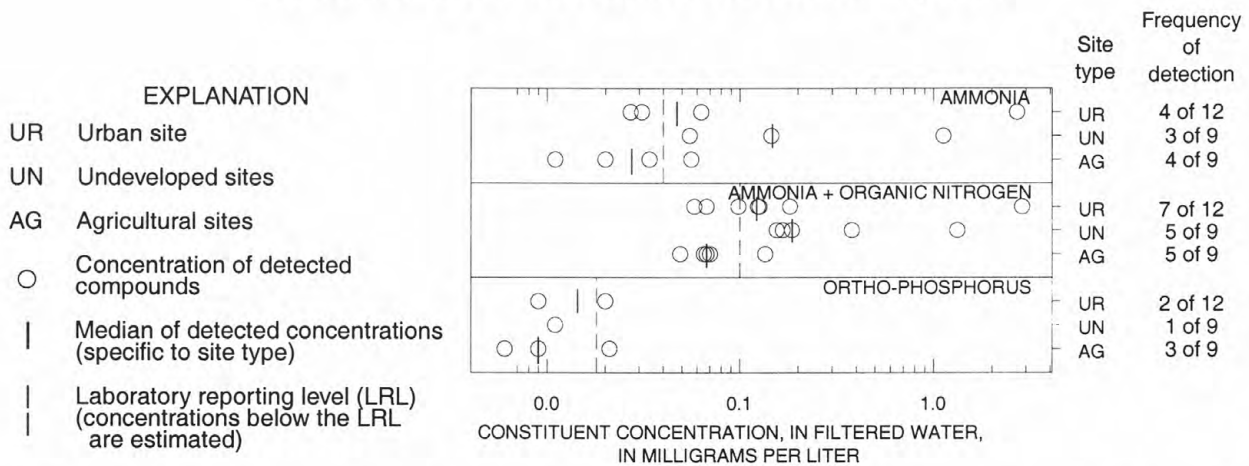


Figure 18. Concentration and detection frequency of nutrients detected in filtered samples from 30 sites in the Ambient Ground-Water-Quality Network, water year 2001. [Constituents whose values were reported by the laboratory as less than the MRL or LRL are considered to be not detected]

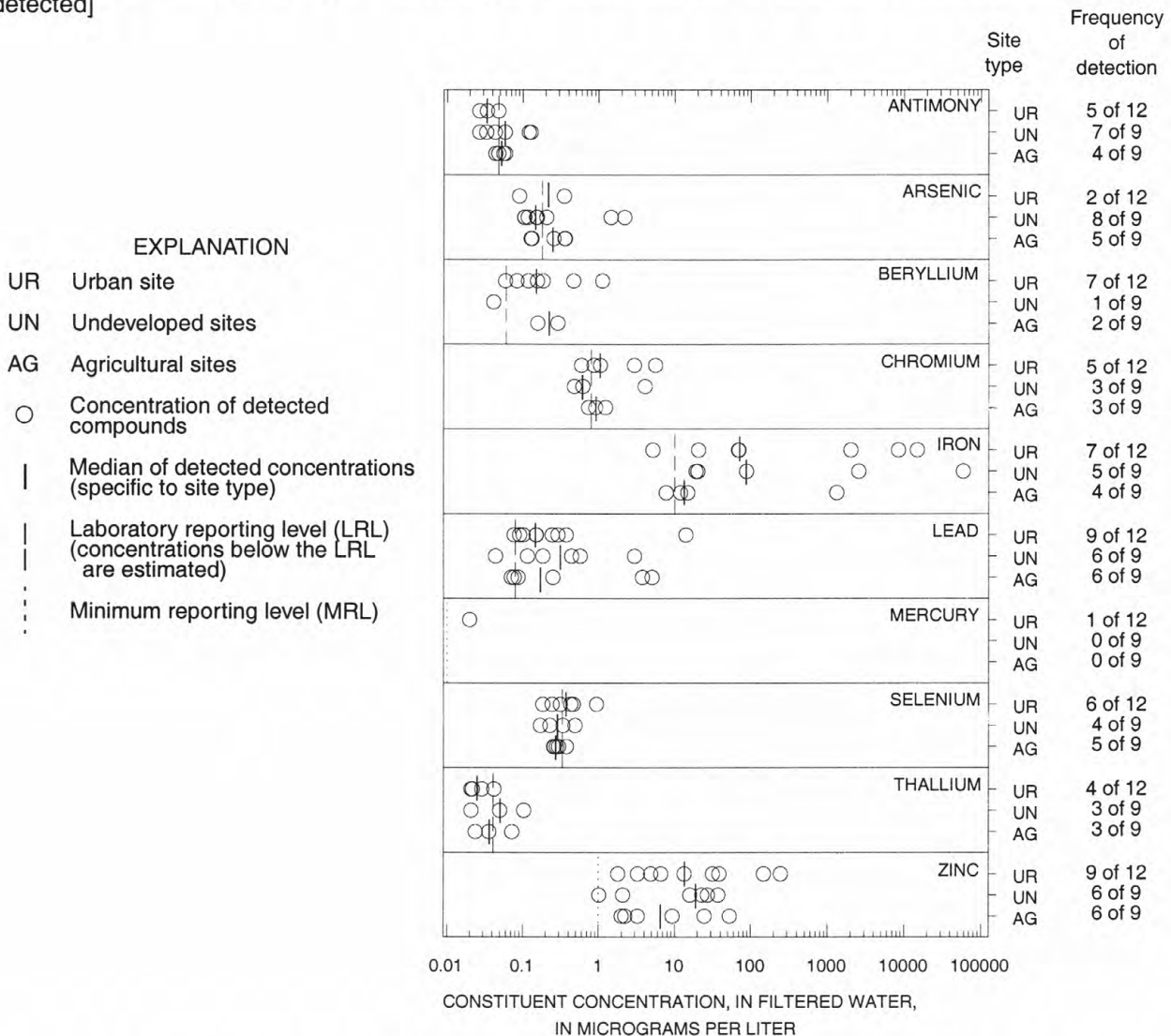


Figure 19. Concentration and detection frequency of trace elements detected in filtered-samples from 30 sites in the Ambient Ground-Water-Quality Network, water year 2001. [Constituents whose values were reported by the laboratory as less than the MRL or LRL are considered to be not detected]

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Table 5. Detection frequency of selected volatile organic compounds in samples from 30 sites in the Ambient Ground-Water-Quality Network, water year 2001.

[AG, agriculture; UR, urban; UN, undeveloped]

| CONSTITUENT | SITE TYPE | | |
|-------------------------|-----------|---------|--------|
| | AG | UR | UN |
| 1,1,1-TRICHLOROETHANE | 0 of 9 | 1 of 12 | 0 of 9 |
| CHLORODIBROMOMETHANE | 0 of 9 | 0 of 12 | 1 of 9 |
| CHLOROFORM | 0 of 9 | 5 of 12 | 1 of 9 |
| Cis-1,2-DICHLOROETHENE | 0 of 9 | 1 of 12 | 1 of 9 |
| BROMODICHLOROMETHANE | 0 of 9 | 0 of 12 | 1 of 9 |
| FREON-113 | 0 of 9 | 1 of 12 | 0 of 9 |
| METHYL TERT-BUTYL ETHER | 1 of 9 | 5 of 12 | 0 of 9 |
| METHYLENECHLORIDE | 0 of 9 | 0 of 12 | 1 of 9 |
| TETRACHLOROETHYLENE | 0 of 9 | 1 of 12 | 0 of 9 |
| TOLUENE | 1 of 9 | 0 of 12 | 0 of 9 |
| TRICHLOROETHYLENE | 0 of 9 | 1 of 12 | 0 of 9 |

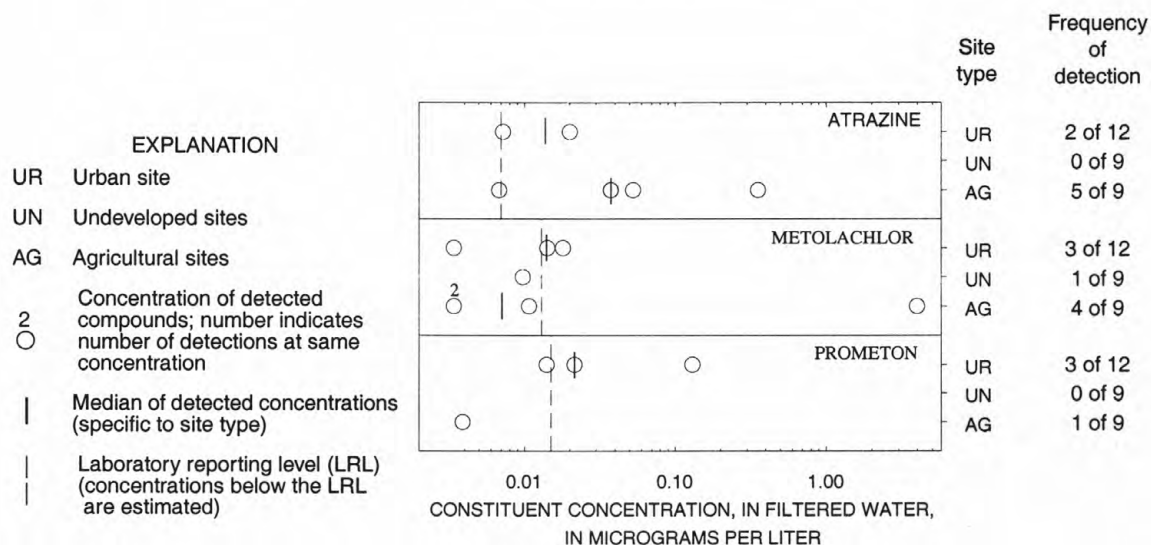


Figure 20. Concentration and detection frequency of pesticides detected in filtered samples from 30 sites in the Ambient Ground-Water-Quality Network, water year 2001. [Constituents whose values were reported by the laboratory as less than the MRL or LRL are considered to be not detected]

Table 6. Detection frequency of selected pesticides in filtered samples from 30 sites in the Ambient Ground-Water-Quality Network, water year 2001.
[All values are estimated due to poor recovery or poor precision; AG, agriculture; UR, urban; UN, undeveloped]

| CONSTITUENT | SITE TYPE | | |
|-----------------|-----------|--------|---------|
| | AG | UR | UN |
| DEETHYLATRAZINE | 5 of 9 | 0 of 9 | 2 of 12 |

Table 7. Concentration of pesticides detected only once in filtered samples from 30 sites in the Ambient Ground-Water-Quality Network, water year 2001.
[AG, agriculture; UR, urban; UN, undeveloped; E, estimated]

| CONSTITUENT | CONCENTRATION (micrograms per liter) | SITE TYPE |
|---------------|---|-----------|
| CHLORPHYRIFOS | E.002 | AG |
| CYANAZINE | 0.046 | UR |
| DIELDRIN | 0.491 | UR |
| NAPROPAMIDE | 0.007 | AG |
| TERBACIL | E.297 | UN |
| TRIFLURALIN | E.006 | UN |

SPECIAL NETWORKS AND PROGRAMS

The USGS/New Jersey Department of Environmental Protection (NJDEP) cooperative Ambient Stream Monitoring Network (ASMN) and Ambient Ground Water Quality Network (AGWQN) are designed to meet the expanding need for surface and ground-water-quality data in the State of New Jersey. The major objectives of the network are to (1) support the National Environmental Performance Partnership System agreement (a program set up to control long-term environmental planning) and the watershed-management process; (2) to work synergistically with the NJDEP Ambient Biomonitoring Network, and atmospheric, ground-water, and coastal water-quality networks; (3) determine statewide water-quality status and trends; (4) measure water-quality near the downstream end of each Watershed Management Area (WMA); (5) define background water quality in each of the four physiographic provinces of New Jersey; (6) measure nonpoint-source contributions from major landuse areas, atmospheric deposition, and ground-water; (7) facilitate response of state and local water-management officials to emerging or watershed-specific water-quality issues.

The surface-water network consists of 112 stations located in 20 WMA's. These stations are segregated into five distinct types that together are used to define the surface-water-quality in the State. Background stations are located on reaches of streams that have remained relatively unaffected by human activity, to develop a baseline water-quality data base. Data from these sites are used in the development of water-quality standards and initiatives. Watershed Integrator stations are located at the furthest downstream point possible in each WMA to provide information on the combined water-quality effects within each WMA. Land Use Indicator stations are used to monitor the effects of the dominant land use in each WMA and provide data on nonpoint-source loading of contaminants to streams. Statewide Status stations are chosen randomly each year within the 20 WMA's to obtain a statistical basis that can be used to estimate water-quality indicators statewide. Five sites are located on the Delaware Main Stem—the border between New Jersey and Pennsylvania. Watershed Reconnaissance stations are also selected annually on the basis of specific project needs, determined by a committee of USGS and NJDEP personnel.

The surface-water network is sampled in four periods throughout the water year: November 1 to December 31, February 1 to March 31, May 1 to June 30, and August 1 to September 30. Samples for analysis for nutrients, major ions, and biochemical oxygen demand are collected from the entire network each sampling period. Samples for the analysis of water-column volatile organic compounds during February and March, filtered organic pesticides during May and June, and whole-water-recoverable trace elements during August and September are collected at all Statewide Status and Background sites. Samples for the analyses of trace elements and polycyclic aromatic hydrocarbons in streambed sediments are also collected in August and September at 19 Statewide Status sites and 2 Back-

ground sites. Samples for the analyses of fecal coliform, *E. coli*, and enterococcus bacteria were collected synoptically in May, June, July, and August.

The Ambient Ground-Water-Quality Network (AGWQN) is designed to monitor the water quality of shallow wells. The quality of water from wells located at the water table is generally the first and most significantly affected part of the ground water system, and can be directly related to human activity at the land surface. The ground-water network will consist of 150 sites distributed throughout the State of New Jersey within three land-use types. Sixty wells are, or will be located, in agricultural areas, 60 in urban/suburban areas, and 30 in undeveloped areas. These areas are located throughout New Jersey's five Watershed Management Regions (WMR), which are further divided into 20 watershed-management areas (WMA) (fig. 11). The Passaic Region encompasses WMAs 3-6; the Lower Delaware Region, WMAs 17-20; the Raritan Region, WMAs 7-10; the Upper Delaware Region, WMAs 1, 2, and 11; and, the Atlantic Coastal Region, WMAs 12-16. Approximately 30 wells in one or several of the five WMR are sampled each year. Thus, the entire network is sampled over a 5-year cycle. Water year 2001 was the third year of operation of the first five-year cycle. Samples were collected from 30 wells in the Upper Delaware, Raritan, and Atlantic Coastal WMR's and were analyzed for physical characteristics, major ions, nutrients, trace elements, organic constituents, and radioactivity.

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the streamflow representative of undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at <http://water.usgs.gov/hbn/>.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations were operated in the Mississippi, Columbia, Colorado, and Rio Grande. From 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National

Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program can be found at <http://water.usgs.gov/nasqan/>.

The National Atmospheric Deposition Program/ National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at <http://bqs.usgs.gov/acidrain/>.

NOTE.--Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special inter-comparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

NAWQA study units are divided into three groups that are studied intensively on a rotational basis. Two NAWQA studies are currently run out of the New Jersey District of the USGS. The Long Island-New Jersey Coastal Plain (LINJ) study unit conducted intensive sampling from 1996 through 1998 and is currently in a low-intensity phase. The LINJ study unit is slated to resume intensive sampling starting in 2006. The Delaware River Basin (DELR) study unit conducted intensive sampling from 1999 through 2001, and is currently in a low-intensity phase. The DELR is scheduled to resume intensive sampling in 2009.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semi-annually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program is available through the world wide web at http://water.usgs.gov/nawqa/nawqa_home.html

Long Island-New Jersey Coastal Plain (LINJ) NAWQA fixed stations published in this report (fig.23) are: Raritan River at Queens Bridge, at Bound Brook, NJ (01403300) and Bound Brook at Middlesex, NJ (01403900). The location of ground-water sites that are sampled as part of the low-intensity-phase of the LINJ-NAWQA study are shown in figure 64. Ground-water data collected for the LINJ-NAWQA study are published in this report in the section titled "Water Quality at Miscellaneous Ground-Water Sites."

Delaware River Basin (DELR) NAWQA fixed stations published in this report (fig.24) are: Delaware River at Port Jervis, NY (01434000); Jordan Creek near Schnecksville, PA (01451800); Lehigh River at Glendon, PA (01454700); Delaware River at Trenton, NJ (01463500); Little Neshaminy Creek at Valley Rd. near Neshaminy, PA (01464907); Cooper River at Had-donfield, NJ (01467150); Tulpehocken Creek near Bernville, PA (01470779); French Creek near Phoenixville, PA (01472157); Schuylkill River at Philadelphia, PA (01474500); and Raccoon Creek near Swedesboro, NJ (01477120). The location of ground-water sites that are sampled as part of the DELR NAWQA study are shown in figure 63. Ground-water data collected for the DELR study are published in this record in the section titled "Water Quality at Miscellaneous Ground-Water Sites."

Water-quality data were collected at 23 additional surface-water synoptic sites in the Appalachian Plateau, Valley and Ridge and Coastal Plain Physiographic Provinces as part of the DELR NAWQA study. Data were collected as part of a synoptic survey of nutrients, pesticides, major ions, and dissolved organic carbon. Sampling was conducted from May 7 through May 16. The samplings were repeated from August 20 through August 29. The location of sites that were part

of the synoptic study are shown in figure 59. Synoptic survey data are published in this report in the section titled "Water Quality at Miscellaneous Surface-Water Sites." Continuous water temperature data was also collected at 17 of the synoptic sites. These sites are printed in italics below and shown in figure 60. Equinunk Creek at Equinunk, PA (01427203); *Callicoon Creek at Callicoon, NY (01427500)*; *Calkins Creek 1200 feet above mouth at Milanville, PA (01427702)*; West Branch Lackawaxen River near Aldenville, PA (01428750); *Middle Creek at Hawley, PA (01431250)*; Wallenpaupak Creek at East Sterling, PA (01431600); *Halfway Brook at Barryville, NY (01432180)*; Shohola Creek at Shohola, PA (01432512); Mongaup River at Mongaup, NY (01433510); *Neversink River near Claryville, NY (01435000)*; *Vandermark Creek at mouth at Milford, PA (01438302)*; *Sawkill Creek 2000 feet above mouth at Milford, PA (01438396)*; *Shimers Brook at Millville Road near Montague, NJ (01438399)*; *Raymondskill Creek below Swale Brook near Silver Spring, PA (01438712)*; *Dingmans Creek below Fulmer Falls near Dingmans Ferry, PA (01438890)*; *Toms Creek at Egypt Mills, PA (01439400)*; *Little Bushkill Creek at Bushkill, PA (01439680)*; *Flat Brook near Flatbrookville, NJ (01440000)*; *Brodhead Creek near Mountainhome, PA (01440304)*; *Marshall's Creek near Marshall's Creek, PA (01442550)*; *Lehigh River near Gouldsboro, PA (01447120)*; *Tobyhanna Creek at Warnertown, PA (01447530)*; and North Branch Rancocas Creek at Pemberton, NJ (01467000).

Fish-community surveys were conducted at 7 surface-water indicator sites as part of the DELR NAWQA study. Sampling was conducted from July 10 through July 21. Fish-community data are published in this report in the section titled "Water Quality at Miscellaneous Surface-Water Sites". These sites are (fig. 61): Flat Brook near Flatbrookville, NJ (01440000); Jordan Creek near Schnecksville, PA (01451800); Little Neshaminy Creek at Valley Road near Neshaminy, PA (01464907); Cooper River at Haddonfield, NJ (01467150); Tulpehocken Creek near Bernville, PA (014707790); French Creek near Phoenixville, PA (01472157); and Raccoon Creek near Swedesboro, NJ (01477120).

EXPLANATION OF THE RECORDS

The water-quality records published in this report are for the 2001 water year that began October 1, 2000, and ended September 30, 2001. A calendar of the water year is provided on the inside of the front cover. The records contain surface-water and ground-water-quality data. The locations of the stations where the data were collected are shown in figures 22-24, and 59-64. 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 in this report 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 location. Generally the "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells.

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 mainstream station are listed before that station. A station on a tributary that enters between two mainstream 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 the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation shows 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 01396500, which appears just to the left of the station name, includes the two-digit Part number "01" plus the 6-digit downstream-order number "396500". The Part number designates the major drainage basin; for example, Part "01" covers the North Atlantic slope basins. In some areas where all 8-digit numbers are used up, 10-digit station numbers are assigned between the 8-digit numbers.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude (fig. 21). 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. This site-identification number, once assigned, is a pure number and has no locational significance. 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.

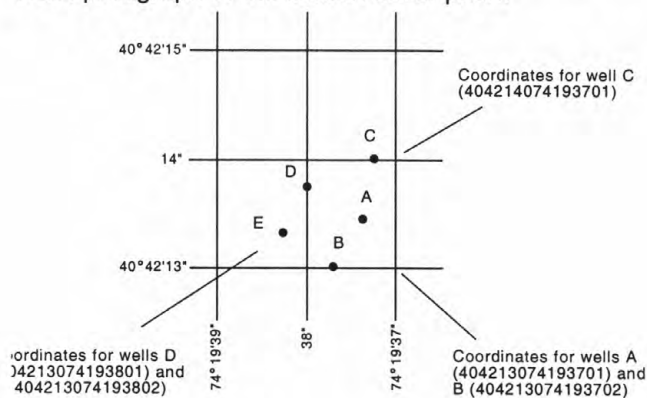


Figure 21.--System for numbering wells and miscellaneous sites (latitude and longitude)

Water Quality Records

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. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 22-24, and 59-61.

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 one 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 logged at short intervals by electronic data loggers. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently.

Arrangement of Records

Water-quality records from continuing-record and continuous-recording stations are listed in downstream order immediately after the "Introduction." Water-quality records from miscellaneous surface-water and ground-water sites are listed immediately after the continuing-

record stations.

On-site Measurements and Sample Collection

Water-quality data must represent the in-situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on-site when the samples are collected. In addition, specific procedures must be used in collecting, treating, and 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," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4; Book 9, Chap. A1-A9. These references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" section of this report. These methods are consistent with ASTM standards and generally follow ISO standards.

In streams, concentrations of various constituents may vary within the cross section depending on variables such as flow rate, the sources of the constituents, and mixing. Generally, constituents in solid phases are more variable in the cross section than are dissolved constituents. In many cases, samples must integrate several parts of the stream cross section to be representative, especially if loads will be calculated. One sample may be representative of the cross section when the distribution of constituents is homogeneous. All samples are obtained from multiple verticals.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. In some instances, apparent inconsistencies may exist in the data. For example, the orthophosphate-phosphorus concentration may exceed total phosphorus concentration. However, the difference in the inconsistent values normally is smaller than the precision of the analytical techniques. Inconsistencies between pH and carbonate and bicarbonate concentrations are commonly caused by intake or loss of carbon dioxide by the sample before it can be analyzed.

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

Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value did not exceed recalibration criteria were considered to be reliable and were not adjusted. Differences between sensor responses documented during cleaning or verification of sensor calibration that exceeded the criteria listed below (recalibration criteria) indicated the need for sensor recalibration and adjustment of the recorded data for the period between

inspections.

| | |
|----------------------|----------------------------|
| Water Temperature | ±0.2 °C |
| Specific Conductance | greater of ±5 uS/cm or 3% |
| pH | ±0.3 units |
| Dissolved Oxygen | greater of ±0.3 mg/L or 5% |
| Turbidity | greater of ±2 NTU or 5% |

Continuous-record water-quality data for periods for which the differences between the sensor's response and a known value exceeded the criteria listed below (deletion criteria) were considered to be unreliable and were not published.

| | |
|----------------------|-----------------------------|
| Water Temperature | ±1.5 °C |
| Specific Conductance | ±25 % |
| pH | ±1.5 units |
| Dissolved Oxygen | greater of ±1.5 mg/L or 25% |
| Turbidity | ±25 % |

Water Temperature

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

At stations where recording instruments are used, maximum, minimum and mean temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the New Jersey District Office.

Sediment

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

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

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment

and bed material are included for some stations.

Laboratory Measurements

Samples for biochemical-oxygen demand, fecal coliform, *E. coli*, enterococcus bacteria, hexavalent chromium, total suspended solids in surface water, and kjeldahl nitrogen in bottom material are analyzed at the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Chlorophyll A samples are analyzed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Samples for nutrients are analyzed at the New Jersey Department of Health or at the U.S. Geological Survey National Water-Quality Laboratory (NWQL) in Denver, Colorado. Sediment samples--parameter codes, 80154, 80157, and 80164--are analyzed in the U.S. Geological Survey Laboratories in Iowa City, Iowa. Replicate samples for the ASMN were analyzed by the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment. All other samples are analyzed in the U.S. Geological Survey laboratory in Denver, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the U.S. Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

Analyses of pesticides in surface-water and ground-water samples (schedule 2001)

Selected water samples from ASMN, AGWQN, and NAWQA study sites were analyzed for pesticides by use of NWQL schedule 2001. This table lists the pesticides on the schedule, the unit of measure (micrograms per liter, mg/L), the U.S. Geological Survey National Water Information System parameter code, and the reporting level. **Only pesticides measured at or above the minimum reporting level for one or more samples are listed in the water-quality tables.**

SCHEDULE DESCRIPTION.--Pesticides in filtered water extracted on C-18 Solid Phase Extraction (SPE) cartridge and analyzed by Gas Chromatography/Mass Spectrometry (GC/MS).

SAMPLE REQUIREMENTS.--1 liter of water filtered through 0.7-micron glass-fiber depth filter, chilled at 4° C (packed in ice).

CONTAINER REQUIREMENTS.--1 liter baked amber glass bottle (GCC) from NWQL.

PCODE.--The USGS/EPA parameter code.

COMMON NAME.--Common or trade name(s) for constituent

LRL.--Laboratory reporting level

| PCode | Common Name | LRL (mg/L) |
|-------|--------------------|---------------|
| 82660 | 2,6-Diethylaniline | 0.0017 |
| 49260 | Acetochlor | 0.0041 |
| 46342 | Alachlor | 0.0024 |
| 34253 | alpha-HCH | 0.0046 |
| 39632 | Atrazine | 0.007 |
| 82673 | Benfluralin | 0.010 |
| 04028 | Butylate | 0.002 |
| 82680 | Carbaryl | 0.041 |
| 82674 | Carbofuran | 0.020 |
| 38933 | Chlorpyrifos | 0.005 |
| 04041 | Cyanazine | 0.018 |
| 82682 | Dacthal | 0.0030 |
| 04040 | Deethylatrazine | 0.006 |
| 39572 | Diazinon | 0.005 |
| 39381 | Dieldrin | 0.0048 |
| 82677 | Disulfoton | 0.021 |
| 82668 | EPTC | 0.0020 |
| 82663 | Ethalfuralin | 0.009 |
| 82672 | Ethoprophos | 0.005 |
| 04095 | Fonofos | 0.0027 |
| 39341 | Lindane | 0.0040 |
| 82666 | Linuron | 0.035 |
| 39532 | Malathion | 0.027 |
| 82686 | Azinphos-methyl | 0.05 |
| 82667 | Parathion-methyl | 0.007 |
| 39415 | Metolachlor | 0.013 |
| 82630 | Metribuzin | 0.006 |
| 82671 | Molinate | 0.0016 |
| 82684 | Napropamide | 0.007 |
| 34653 | p,p'-DDE | 0.0025 |
| 39542 | Parathion | 0.007 |
| 82669 | Pebulate | 0.0016 |
| 82683 | Pendimethalin | 0.010 |
| 82687 | cis-Permethrin | 0.006 |
| 82664 | Phorate | 0.011 |
| 04037 | Prometon | 0.015 |
| 82676 | Propyzamide | 0.0041 |
| 04024 | Propachlor | 0.010 |
| 82679 | Propanil | 0.011 |
| 82685 | Propargite | 0.023 |
| 04035 | Simazine | 0.011 |
| 82670 | Tebuthiuron | 0.016 |
| 82665 | Terbacil | 0.034 |
| 82675 | Terbufos | 0.017 |
| 04022 | Terbuthylazine | 0.1 |
| 82681 | Thiobencarb | 0.0048 |
| 82678 | Triallate | 0.0023 |
| 82661 | Trifluralin | 0.009 |

Analyses of volatile organic compounds in surface-water and ground-water samples (schedule 2020/2021)

Selected samples from NAWQA study sites were analyzed for volatile organic compounds (VOCs) by use of NWQL schedules 2020/2021. The NWQL created this schedule to provide a method for accurate determination of VOCs in water in the nanogram per liter range. The method described in USGS Open-File Report 97-829 (Connor and others) is similar to USEPA method 524-2 (Mund, 1995) and the method described

by Rose and Schroeder (1995). Minor improvements to instrument operating conditions include the following: additional compounds, quantitation ions that are different from those recommended in USEPA Method 524.2 because of interferences from the additional compounds, and a data reporting strategy for measuring detected compounds extrapolated at less than the lowest calibration standard or measured at less than the reporting limit. The laboratory reporting limit (LRL) is introduced as a statistically defined reporting limit designed to limit false positives and false negatives to less than 1 percent.

This table lists the volatile organic compounds on the schedule, the unit of measure (micrograms per liter (mg/L), the U.S. Geological Survey National Water Information System parameter code, the Union of Pure and Applied Chemistry (IUPAC) compound name, and the National Water Quality Laboratory compound name. Positive detections measured at less than LRL but greater than or equal to the long-term method-detection limit are reported as estimated concentrations (E) to alert the data user to decreased confidence in accurate quantitation. Values for analytes in the 2020/2021 schedules are preceded by an "E" in the following situations:

1. When the calculated concentration is less than the lowest calibration standard. The analyte meets all identification criteria to be positively identified, but the amount detected is below where it can be reliably quantified.
2. If a sample is diluted for any reason. The method reporting level is multiplied by the dilution factor to obtain the adjusted method reporting level. Values below the lowest calibration standard, multiplied by the dilution factor are qualified with an "E". For example, a value of 0.19 in a 1:2 dilution is reported as E0.1.
3. If the set spike has recoveries out of the specified range (60-140%).
4. If the analyte is also detected in the set blank. If the value in the sample is less than five times the blank value and greater than the blank value plus the long term method detection limit, the value is preceded by an "E" to indicate that the analyte is positively identified but not positively quantified because the analyte was also detected in the blank.

Only VOCs measured at or above the minimum reporting level for one or more samples are listed in the water-quality tables.

SCHEDULE DESCRIPTION.--The sample water is actively purged with helium to extract the volatile organic compounds. The volatile compounds are trapped onto a sorbent trap, thermally desorbed, separated by a megabore gas chromatographic capillary column, and finally determined by a full scan quadro-

pole mass spectrometer. Compound identification is confirmed by the gas chromatographic retention time and by the resultant mass spectrum, typically identified by three unique ions.

SAMPLE REQUIREMENTS.--Water collected in vials placed in stainless steel VOC sampler. Hydrochloric acid is used for preservation. Chilled at 4°C (packed in ice).

CONTAINER REQUIREMENTS.--40 milliliter baked amber septum glass vial, from Ocala Quality Water Service Unit.

PCODE.--The EPA/USGS parameter code

COMPOUND NAME.--IUPAC nomenclature.

LRL.--Laboratory reporting level.

| PCode | Compound Name | LRL (mg/L) |
|-------|-----------------------------|------------|
| 77041 | Carbon disulfide | 0.07 |
| 34506 | 1,1,1-Trichloroethane | 0.032 |
| 34516 | 1,1,2,2-Tetrachloroethane | 0.09 |
| 34511 | 1,1,2-Trichloroethane | 0.06 |
| 34496 | 1,1-Dichloroethane | 0.035 |
| 34501 | 1,1-Dichloroethylene | 0.04 |
| 77168 | 1,1-Dichloropropene | 0.026 |
| 77443 | 1,2,3-Trichloropropane | 0.16 |
| 77651 | 1,2-Dibromoethane | 0.036 |
| 32103 | 1,2-Dichloroethane | 0.13 |
| 34541 | 1,2-Dichloropropane | 0.029 |
| 34546 | trans-1,2-Dichloroethylene | 0.032 |
| 77170 | 2,2-Dichloropropane | 0.05 |
| 73547 | trans-1,4-Dichloro-2-butene | 0.7 |
| 77103 | 2-Hexanone | 0.7 |
| 81552 | Acetone | 7.0 |
| 34215 | Acrylonitrile | 1.2 |
| 77613 | 1,2,3-Trichlorobenzene | 0.27 |
| 77221 | 1,2,3-Trimethylbenzene | 0.12 |
| 34551 | 1,2,4-Trichlorobenzene | 0.19 |
| 77222 | 1,2,4-Trimethylbenzene | 0.056 |
| 77226 | 1,3,5-Trimethylbenzene | 0.044 |
| 34566 | 1,3-Dichlorobenzene | 0.030 |
| 34571 | 1,4-Dichlorobenzene | 0.050 |
| 77223 | Isopropylbenzene | 0.032 |
| 77342 | Butylbenzene | 0.19 |
| 77224 | n-Propylbenzene | 0.042 |
| 34536 | 1,2-Dichlorobenzene | 0.048 |
| 77350 | sec-Butylbenzene | 0.032 |
| 77353 | tert-Butylbenzene | 0.06 |
| 34030 | Benzene | 0.021 |
| 81555 | Bromobenzene | 0.036 |
| 50002 | Bromoethene | 0.10 |
| 32104 | Bromoform | 0.06 |
| 32102 | Tetrachloromethane | 0.06 |
| 34301 | Chlorobenzene | 0.028 |
| 32105 | Dibromochloromethane | 0.18 |
| 34311 | Chloroethane | 0.12 |
| 32106 | Chloroform | 0.024 |

| PCode | Compound Name | LRL (mg/L) |
|-------|--------------------------------|------------|
| 77093 | cis-1,2-Dichloroethylene | 0.038 |
| 34704 | cis-1,3-Dichloropropene | 0.09 |
| 82625 | 1,2-Dibromo-3-chloropropane | 0.21 |
| 30217 | Dibromomethane | 0.050 |
| 32101 | Bromodichloromethane | 0.048 |
| 34668 | Dichlorodifluoromethane | 0.27 |
| 81577 | Diisopropyl ether | 0.10 |
| 77562 | 1,1,1,2-Tetrachloroethane | 0.030 |
| 34396 | Hexachloroethane | 0.19 |
| 81576 | Diethyl ether | 0.17 |
| 50004 | Ethyl tert-butyl ether | 0.054 |
| 50005 | tert-Pentyl methyl ether | 0.11 |
| 34371 | Ethylbenzene | 0.030 |
| 77652 | 1,1,2-Trichlorotrifluoroethane | 0.06 |
| 81607 | Tetrahydrofuran | 2.2 |
| 39702 | Hexachlorobutadiene | 0.14 |
| 50000 | 1,2,3,5-Tetramethylbenzene | 0.20 |
| 73570 | Ethyl methacrylate | 0.18 |
| 81597 | Methyl methacrylate | 0.35 |
| 81593 | Methyl acrylonitrile | 0.6 |
| 77297 | Bromochloromethane | 0.044 |
| 49991 | Methyl acrylate | 1.4 |
| 77424 | Methyl iodide | 0.12 |
| 78032 | tert-Butyl methyl ether | 0.17 |
| 34413 | Bromomethane | 0.26 |
| 34418 | Chloromethane | 0.25 |
| 34423 | Dichloromethane | 0.16 |
| 81595 | 2-Butanone | 1.6 |
| 78133 | 4-Methyl-2-pentanone | 0.37 |
| 85795 | m- and p-Xylene | 0.06 |
| 34696 | Naphthalene | 0.25 |
| 77275 | 2-Chlorotoluene | 0.026 |
| 77135 | o-Xylene | 0.038 |
| 77356 | 4-Isopropyl-1-methylbenzene | 0.07 |
| 49999 | 1,2,3,4-Tetramethylbenzene | 0.23 |
| 77173 | 1,3-Dichloropropane | 0.12 |
| 78109 | 3-Chloropropene | 0.07 |
| 77128 | Styrene | 0.042 |
| 34475 | Tetrachloroethylene | 0.10 |
| 77220 | o-Ethyl toluene | 0.06 |
| 77277 | 4-Chlorotoluene | 0.06 |
| 34010 | Toluene | 0.05 |
| 34699 | trans-1,3-Dichloropropene | 0.09 |
| 39180 | Trichloroethylene | 0.038 |
| 34488 | Trichlorofluoromethane | 0.09 |
| 39175 | Vinyl chloride | 0.11 |

Analyses of pesticides in ground-water samples (schedule 2060)

Selected water samples from the DELR-NAWQA study sites were analyzed for pesticides by use of NQWL schedule 2060. This table lists the pesticides analyzed for by the schedule, the unit of measure (micrograms per liter, mg/L), the U.S. Geological Survey National Water Information System parameter code, and the reporting level. **Only pesticides measured at or above the minimum reporting level for one or more samples are listed in the water-quality tables.**

WATER RESOURCES DATA - NEW JERSEY, 2001

SCHEDULE DESCRIPTION.--Determination of pesticides in filtered water by Graphitized Carbon-based Solid Phase Extraction (SPE) and analyzed by High Performance Liquid Chromatography/Mass Spectrometry (HPLC/MS).

SAMPLE REQUIREMENTS.--1 liter of water filtered through 0.7-micron glass-fiber depth filter, chilled at 4 °C (packed in ice).

CONTAINER REQUIREMENTS.--1 liter baked amber glass bottle (GCC) from NWQL.

PCODE.--The EPA/USGS parameter code.

COMMON NAME.--Common or trade name(s) for constituent.

MRL.--Minimum reporting level.

| PCode | Common Name | MRL (mg/L) |
|-------|--------------------------------|------------|
| 39732 | 2,4-D | 0.021 |
| 50470 | 2,4-D methyl ester | 0.0086 |
| 38746 | 2,4-DB | 0.016 |
| 50355 | 2-Hydroxyatrazine | .008 |
| 61692 | 3(4-Chlorophenyl)-1-methylurea | 0.024 |
| 49308 | 3-Hydroxycarbofuran | 0.0058 |
| 50295 | 3-Ketocarbafuran | 1.5 |
| 49315 | Acifluoren | 0.0066 |
| 49312 | Aldicarb | 0.04 |
| 49313 | Aldicarb sulfone | 0.02 |
| 49314 | Aldicarb sulfoxide | 0.0082 |
| 39632 | Atrazine | 0.009 |
| 50299 | Bendiocarb | 0.025 |
| 50300 | Benomyl | 0.0038 |
| 61693 | Bensulfuron-methyl | 0.015 |
| 38711 | Bentazon | 0.011 |
| 04029 | Bromacil | 0.033 |
| 49311 | Bromoxynil | 0.017 |
| 5030 | Caffeine | 0.0096 |
| 49310 | Carbaryl | 0.028 |
| 49309 | Carbofuran | 0.0056 |
| 61188 | Chloramben methyl ester | 0.018 |
| 50306 | Chlorimuron-ethyl | 0.0096 |
| 49306 | Chlorothalonil | 0.035 |
| 49305 | Clopyralid | 0.013 |
| 04031 | Cycloate | 0.013 |
| 49304 | Dacthal monoacid | 0.011 |
| 04040 | Deethylatrazine | 0.028 |
| 04039 | Deethyldeisopropylatrazine | 0.01 |
| 04038 | Deisopropylatrazine | 0.044 |
| 38442 | Dicamba | 0.012 |
| 49302 | Dichloroprop | 0.013 |
| 49301 | Dinoseb | 0.012 |
| 04033 | Diphenamid | 0.026 |
| 49300 | Diuron | 0.015 |
| 49297 | Fenuron | 0.031 |
| 61694 | Flumetsulam | 0.011 |
| 38811 | Fluometuron | 0.031 |

| PCode | Common Name | MRL (mg/L) |
|-------|---------------------|------------|
| 50356 | Imazaquin | 0.016 |
| 50407 | Imazethapyr | 0.017 |
| 61695 | Imidacloprid | 0.0068 |
| 38478 | Linuron | 0.014 |
| 38482 | MCPA | 0.016 |
| 38487 | MCPB | 0.015 |
| 50359 | Metaxyl | 0.02 |
| 38501 | Methiocarb | 0.008 |
| 49296 | Methomyl | 0.0044 |
| 61696 | Methomyl oxime | 0.011 |
| 61697 | Metsulfuron-methyl | 0.025 |
| 49294 | Neburon | 0.012 |
| 50364 | Nicosulfuron | 0.013 |
| 49293 | Norflurazon | 0.016 |
| 49292 | Oryzalin | 0.017 |
| 38866 | Oxamyl | 0.012 |
| 50410 | Oxamyl oxime | 0.013 |
| 49291 | Picloram | 0.019 |
| 49236 | Propham | 0.0096 |
| 50471 | Propiconazole | 0.021 |
| 38538 | Propoxur | 0.008 |
| 38548 | Siduron | 0.016 |
| 50337 | Sulfometuron-methyl | 0.0088 |
| 82670 | Tebuthiuron | .0062 |
| 04032 | Terbacil | 0.0098 |
| 61159 | Tribenuron-methyl | 0.0088 |
| 49235 | Triclopyr | 0.022 |

Analyses of pesticide metabolites in ground-water samples (schedule LCAA)

Ground-water samples from Delaware River Basin National Water-Quality Assessment Program (DELNAWQA) study sites were analyzed for pesticide metabolites by use of NWQL schedule LCAA (Hostetler and Thurman, 1999).

SCHEDULE DESCRIPTION.--Determination of pesticide metabolites in filtered water analyzed by High Performance Liquid Chromatograph-Diode Array Detection and High Performance Liquid Chromatograph/Mass Spectrometry.

SAMPLE REQUIREMENTS.--500 milliliter (ml) of water filtered through a 0.7-micron glass-fiber depth filter, chilled at 4 °C (packed on ice).

CONTAINER REQUIREMENTS.--Four 125 baked amber glass bottle (GCC) from Ocala Quality Water Service Unit.

PCODE.--The USGS/EPA parameter code.

MRL.--Minimum reporting level.

| PCode | Pesticide Metabolite (OA, Oxanilic Acid; ESA, Ethanesulfonic Acid) | MRL (ug/L) | Metabolite parent compound (PCode) |
|-------|--|------------|------------------------------------|
| 61030 | Acetochlor OA | .05 | Acetochlor (49260) |
| 61029 | Acetochlor ESA | .05 | Acetochlor (49260) |

| PCode | Pesticide Metabolite (OA, Oxanilic Acid; ESA, Ethanesulfonic Acid) | MRL (ug/ L) | Metabolite parent compound (PCode) |
|-------|---|-------------------|---------------------------------------|
| 61031 | Alachlor OA | .05 | Alachlor (46342) |
| 50009 | Alachlor ESA | .05 | Alachlor (46342) |
| 62482 | Dimethenamid OA | .05 | Dimethenamid (61588) |
| 61951 | Dimethenamid ESA | .05 | Dimethenamid (61588) |
| 62483 | Flufenacet OA | .05 | Flufenacet (62481) |
| 61952 | Flufenacet ESA | .05 | Flufenacet (62481) |
| 61044 | Metolachlor OA | .05 | Metolachlor (39415) |
| 61043 | Metolachlor ESA | .05 | Metolachlor (39415) |

Polyaromatic hydrocarbons in stream bottom material

Stream bed sediments collected at stations in the Ambient Stream Monitoring Network were analyzed for polyaromatic hydrocarbons during the months of August and September. Full parameter names are listed in the table below; abbreviated parameter names are used in the station records.

| PCode | Compound Name |
|-------|----------------------------------|
| 39519 | Total Polychlorinated Byphenyls |
| 49429 | Acenaphthene |
| 49428 | Acenaphthylene |
| 49434 | Anthracene |
| 49436 | Benzo(a)anthracene |
| 49458 | Benzo(b)fluoranthene |
| 49397 | Benzo(k)fluoranthene |
| 49408 | Benzo(g,h,i)perylene |
| 49389 | Benzo(a)pyrene |
| 49450 | Chrysene |
| 49451 | p-Cresol |
| 49411 | 4h-Cyclopenta(d,e,f)phenanthrene |
| 49461 | Dibenzo(a,h)anthracene |
| 49403 | 1, 2-Dimethylnaphthalene |
| 49404 | 1, 6-Dimethylnaphthalene |
| 49406 | 2, 6-Dimethylnaphthalene |
| 49948 | 2-Ethylnaphthalene |
| 49399 | 9h-Fluorene |
| 49466 | Fluoranthene |
| 49400 | Isophorone |
| 49435 | 2-methylantracene |
| 49398 | 1-Methyl-9h-fluorene |
| 49390 | 1-Methylindeno(1,2,3-c,d)pyrene |
| 49410 | 1-Methylphenanthrene |
| 49388 | 1-Methylpyrene |
| 49402 | Naphthalene |
| 49409 | Phenanthrene |
| 49393 | Phenanthridine |
| 49387 | Pyrene |
| 49405 | 2, 3, 6-Trimethylnaphthalene |

Methylene blue active substances

MBAS determinations made from January 1, 1970 through August 29, 1993, at the National Water Quality

Laboratory in Denver (Analyzing Agency Code 80020) are positively biased. These data can be corrected by using the following equation, if concentrations of dissolved nitrate plus nitrite, as nitrogen, and dissolved chloride, determined concurrently with the MBAS data, are applied:

$$\text{MBASCOR} = \text{M} - 0.0088\text{N} - 0.00019\text{C}$$

where:

MBASCOR = corrected MBAS concentration, in mg/L;

M = reported MBAS concentration, in mg/L;

N = dissolved nitrate plus nitrite, as nitrogen, concentration, in mg/L; and

C = dissolved chloride concentration, in mg/L.

The detection limit of the new method is 0.02 mg/L, whereas the detection limit for the old method was 0.01 mg/L. A detection limit of 0.02 mg/L should be used with corrected MBAS data from January 1, 1970 through August 29, 1993.

Analysis of acid neutralizing capacity (ANC)

Prior to October 1, 1996, ANC was called ALKALINITY, LAB.

Analysis of inorganic carbon in bottom material

Prior to October 1996, the analysis of total inorganic carbon in bottom material by the National Water Quality Laboratory (NWQL) was subject to a systematic positive bias of 3 percent. That is, results calculated before this date were found to be about 3 percent higher than results calculated correctly with a new computer system. The average agreement between analysis results for duplicate samples (a measure of the NWQL's precision for this analysis) is 98 percent. The 3-percent bias, therefore, approximates the precision of the analytical method. The overall effect on historical data from New Jersey is minor. Ninety-three percent of the reported concentrations for this analysis were less than 1.7 grams per kilogram; values of this magnitude are unaffected because the difference is obscured by rounding prior to publication of the analysis results. The magnitude of the error is such that the 3 percent difference, effective October 1, 1996, is indiscernible in the relatively small data set for any station.

Data Presentation

Precision varies for different analytical methods used to determine the same constituent. The presence of trailing zeros after the decimal in values printed in this report does not necessarily indicate that the method used for the determination is as precise as the level implied by the rightmost zero.

The column headings for water-quality constituents include 5-digit EPA Storet parameter codes. The codes are included to permit accurate cross reference to data from other data bases using the same code system.

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, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, and dissolved oxygen, then follow in sequence.

Station manuscript

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.--Information on locations is obtained from the most accurate maps available. The location of the station with respect to the cultural and physical features in the vicinity and with respect to the reference place.

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

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 recorder, 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 records.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. 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 or minimums may not have been sampled. Extremes, when given, are provided 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 in the U.S. Geological Survey's distributed data system, NWIS, and subsequently to its web-based National data system, NWISWeb [<http://water.usgs.gov/nwis/nwis>]. 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 NWIS or NWISWeb to ensure the most recent updates. Updates to NWISWeb are currently made on an annual basis.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites which are not at a surface-water daily record station are published in separate tables following the continuous record data. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark codes

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

| <u>PRINTED OUTPUT</u> | <u>REMARK</u> |
|----------------------------------|---|
| 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. |
| M | Presence of material verified but not quantified. |
| K | Results based on colony count outside the acceptance range (non-ideal colony count). |
| L | Biological organism count less than 0.5 percent (organism may be observed rather than counted). |
| D | Biological organism count equal to or greater than 15 percent (dominant). |
| & | Biological organism estimated as dominant. |
| V | Analyte was detected in both the environmental sample and the associated blanks. |

Quality-control data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this District are described in the following sec-

tion. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

BLANK SAMPLES.--Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this District are:

Source solution blank - a blank solution that is transferred to a sample bottle in an area of the office laboratory with an atmosphere that is relatively clean and protected with respect to target analytes.

Ambient blank - a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

Field blank - a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank - a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank - a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank - a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Pump blank - a blank solution that is processed through the same pump-and-tubing system used for an environmental sample.

Standpipe blank - a blank solution that is poured from the containment vessel (standpipe) before the pump is inserted to obtain the pump blank.

Filter blank - a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank - a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank - a blank solution that is treated with the sampler preservatives used for an environmental sample.

Cannister blank - a blank solution that is taken directly from a stainless steel containment vessel just before the VOC sampler is submerged to obtain a field blank sample.

REFERENCE SAMPLES.--Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

REPLICATE SAMPLES.--Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this District are:

Concurrent sample - a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

Sequential sample - a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample - a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

SPIKE SAMPLES.--Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the

extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

Concurrent sample - a type of spike sample that is collected at the same time with the same sampling and compositing devices then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Split sample - a type of spike sample in which a sample is split into subsamples contemporaneous in time and space then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Dissolved Trace-Element Concentrations

Note.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (mg/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's and 100's of nanograms per liter (ng/L). Data above the mg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols in water year 1994. Full implementation of the protocols took place during the 1995 water year.

CURRENT WATER RESOURCES PROJECTS IN NEW JERSEY

The Geological Survey is currently involved in a number of hydrologic investigations in the State of New Jersey. The following is a list of these investigations. Results are published at the conclusion of short-term projects or periodically in the case of long-term projects. Hydrologic data from these projects are entered into the NWIS data base.

Delaware River Basin National Water Quality Assessment

Development of Database and Models to Support Source Water Assessment Program

Distribution of MTBE and Related Volatile Organic Compounds in Lakes in Northern NJ and Investigation of Lake-Well Interactions

Distribution of Radium and Related Radionuclides in Coastal-Plain Aquifers

Effects of Land Use, Septic Systems, and Sewering on the Distribution of Nitrate in Shallow Ground Water

EPA Technical Assistance Program

Estimation of the Relative Importance of Nonpoint Source Loads in the Raritan River Basin

Flood Characteristics of New Jersey Streams

Flow Characteristics and Basis for Development of Ecological Goals for New Jersey Streams

Geohydrology of the Naval Air Warfare Center, West Trenton, New Jersey

Ground-Water Data Collection Network

Ground-Water Levels and Chloride Concentrations in Major Aquifers of the Coastal Plain

Ground-Water Supply Availability in Southern Ocean County

Head of Tide Sampling Program for the New Jersey Harbour Toxic Contaminant Assessment Reduction Program

High-Flow Water Quality Management Objectives

Hydrology of Surficial Aquifer Systems

Hydrogeologic Support to McGuire Air Force Base, Burlington County, New Jersey

Hydrogeologic Support to Picatinny Arsenal, Morris County, New Jersey

Investigation of Contaminant Transport in a Fractured Rock Aquifer, Rutgers University, Busch Campus

Investigation of Ground-Water/Surface-Water Interaction in the Northern Passaic River Valley, New Jersey

Investigation of hydrogeology and Volatile Organic Compound Contamination in Fair Lawn, New Jersey

Investigation of Potential Threats to Water Supply from the Potomac-Raritan-Magothy Aquifer in Salem and Western Gloucester Counties, New Jersey

Lower Delaware Non-Point Source

Low Flow Characteristics of New Jersey Streams

Modeling and Experimental Investigation of Hydrocarbon Transport and Biodegradation in the Unsaturated Zone

Movement of Chromium in the Ground Water of Pennsauken Township, Camden County

New Jersey Drought Monitoring System

Long Island-New Jersey National Water Quality Assessment

New Jersey Tide Telemetry System

Pascack Brook Flood Warning System

Passaic Flood Warning System

Program to Maintain and Update Ground-Water Models to Evaluate Continued Water-Supply Development

Quality of Water Data Collection Network

Rahway Flood Warning System

**CURRENT WATER RESOURCES PROJECTS
IN NEW JERSEY--Continued**

Refinement of a Data Model for Watershed Water Transfer Analysis

Small Watershed Flood Data Collection

Somerset County Flood-Information System

Surface Water Data Collection Network

Vulnerability Assessment of the Kirkwood-Cohansey Aquifer System to Radium, Mercury, and Trace Metals

Vulnerability of Public Supply Wells and Surface-Water Intakes in New Jersey for Chemicals of Concern (Source Water Assessment Program)

Water-Quality Characteristics of Upper-Delaware Watershed

**WATER-RELATED REPORTS FOR NEW
JERSEY COMPLETED BY THE GEOLOGICAL
SURVEY IN RECENT YEARS**

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ACCESS TO USGS WATER DATA

The U.S. Geological Survey provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at

<http://water.usgs.gov>

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (see address on the back of the title page).

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical

list apply to every State. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

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

Algal growth potential (AGP) is the maximum algal 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.

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 to September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the

Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type and the last two digits represent the weight percent of the hydrogen substituted chlorine.

Artificial substrate is a device that 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 substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also "Substrate")

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. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also "Biomass")

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peaks per year will be published.

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bedload is material in transport that is supported primarily by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 ft) that are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler may also contain a component of the suspended load.

Bedload discharge (tons per day) is rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload" and "Sediment")

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

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 mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Blue-green algae (Cyanophyta) 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. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Bottom material (See "Bed material")

Cells/volume refers to the number of cells of any organism that 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 volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (mm^3) is determined by obtaining critical cell measurements on cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

sphere $\frac{4}{3} \pi r^3$ cone $\frac{1}{3} \pi r^2 h$ cylinder $\pi r^2 h$.

π is the ratio of the circumference to the diameter of a circle; $\pi = 3.14159\dots$

From cell volume, total algal biomass expressed as biovolume (mm^3/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes over all species.

Cfs-day (See "Cubic foot per second-day")

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 BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]

Clostridium perfringens (*C. perfringens*) is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of waters and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well. (See also "Aquifer")

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.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel downstream from a gaging station that physically influences the water-surface elevation and thereby determines the stage-discharge relation at the gage.

This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, 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 saltwater.

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-feet" sometimes is used synonymously with "cubic feet per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [$\text{ft}^3/\text{s}/\text{d}$]) 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, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily-mean discharges reported in the daily-value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, ($\text{ft}^3/\text{s}/\text{mi}^2$)] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also "Annual runoff")

Daily mean suspended-sediment concentration is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Daily mean suspended-sediment concentration," "Sediment," and "Suspended-sediment concentration")

Daily-record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

Data Collection Platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

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. (See also "Phytoplankton")

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediments or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents such as suspended sediment, bedload, and dissolved or suspended chemical constituents, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to 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 and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported

in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO_3) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon Index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = - \sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105 °C 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. (See also "Ash mass," "Biomass," and "Wet mass")

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "Wet weight")

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after

incubation at 41 °C on mE agar and subsequent transfer to EIA medium. Enterococci include *Streptococcus faecalis*, *Streptococcus faecium*, *Streptococcus avium*, and their variants. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive, the index usually decreases with pollution.

***Escherichia coli* (*E. coli*)** are bacteria present in the intestine and feces of warm-blooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium. Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the laboratory reporting level (LRL) but greater than the long-term method detection level (LT-MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the LRL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the LRL preceded by a less than sign (<).

Euglenoids (*Euglenophyta*) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried streambed sediments. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediments.

Fecal coliform bacteria 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 plus or minus 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. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestine of warm-blooded animals and are ubiquitous in the environment. 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 plus or minus 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. (See also "Bacteria")

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly larger than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any National geodetic datum. However, if the elevation of the gage datum relative to the National datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the National datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted and/or computed from a gaging station. Gage values

typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

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 milliliter (cells/mL) of sample. (See also "Phytoplankton")

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA web site:

<http://www.co-ops.nos.noaa.gov/tideglos.html>

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution which uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = \frac{\sum(n)(a)}{N}$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic benchmark 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 benchmark station may be

used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

Hydrologic index stations referred to in this report are four continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

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

Inch (IN., in.), as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

Laboratory Reporting Level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a non-detection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.)

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation

$$I = I_0 e^{-\lambda L},$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, k is the light-attenuation coefficient, and e is the base of the natural logarithm. The light attenuation coefficient is defined as

$$k = -\frac{1}{L} \log_e \frac{I}{I_o}.$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-Term Method Detection Level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA web site:
<http://www.co-ops.nos.noaa.gov/tideglos.html>

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

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

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the

National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

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

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

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.

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

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

Micrograms per kilogram (UG/KG, $\mu\text{g/kg}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, mS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent 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.

Minimum Reporting Level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method (Timme, 1995).

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. See NOAA web site: <http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88> (See "North American Vertical Datum of 1988")

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate.")

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the U.S. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and U.S. first-order terrestrial leveling networks.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediments. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m²), acre, or hectare. 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 milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter Code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, Sedigraph) 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, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

| Classification | Size (mm) | Method of analysis |
|----------------|----------------|---------------------|
| Clay | 0.00024- 0.004 | Sedimentation |
| Silt | 0.004 - 0.062 | Sedimentation |
| Sand | 0.062 - 2.0 | Sedimentation/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 matter 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.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation to the true peak, which may occur between the

recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or percent of total 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, numbers, weight, mass, or volume.

Percent shading is determined by using a clinometer to estimate left and right bank shading. The values are added together and divided by 180 to determine percent shading relative to a horizontal surface.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year, but at a frequency insufficient to develop a daily record.

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

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

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. (See also "Plankton")

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that

yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 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. Concentrations are expressed as a number of cells per milliliter (cells/mL of sample).

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

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 (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton. Carbon method defines 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. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton. Oxygen method defines 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. (See also "Primary productivity")

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Recoverable from bed (bottom) material is 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 readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or non-exceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the non-exceedances of the $7Q_{10}$ occur less than 10

years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council, and typically used to denote location along a river.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin in a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Sea level, as used in this report, refers to one of the two commonly used national vertical datums, (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums. See conversion of units page (inside back cover) for identification of the datum used in this report.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment 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 and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Seven-day 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-run average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also "Recurrence interval" and "Annual 7-day minimum")

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. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 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.

Stable isotope ratio (per MILL/MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See "Gage height")

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

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.

Substrate Embeddedness Class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as percent covered by fine sediment:

| | | | |
|---|---------------------------------|---|-------|
| 0 | < no gravel or larger substrate | | |
| 1 | > 75% | | |
| 2 | 51-75% | 4 | 5-25% |
| 3 | 26-50% | 5 | < 5% |

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on

USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 ft) of the bed material such as that material which is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is operationally defined as the 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 suspended water-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 are 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 directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also "Sediment")

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). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/day) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given

time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended, total is the total amount of a given constituent in the part of a water-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. 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 directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa richness is the total number of distinct species or groups and usually decreases with pollution. (See also "Percent Shading")

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom: Animal

| | |
|----------|--------------------------|
| Phylum: | Arthropoda |
| Class: | Insecta |
| Order: | Ephemeroptera |
| Family: | Ephemeridae |
| Genus: | <i>Hexagenia</i> |
| Species: | <i>Hexagenia limbata</i> |

Temperature preferences:

Cold – preferred water temperature for the species is less than 20 °C or spawning temperature preference less than 16 °C and native distribution is considered to be predominantly north of 45° N. latitude.

Warm – preferred water temperatures for the species is greater than 20 °C or spawning temperature preference greater than 16 °C and native distribution is considered to be predominantly south of 45° N. latitude.

Cool – intermediate between cold and warm water temperature preferences.

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term “temperature recorder” is used in the table descriptions 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 resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (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, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) 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 determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. 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 all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 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. (See also “Bacteria”)

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as “total sediment discharge,” “total chloride discharge,” and so on.

Total in bottom material is the 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 length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also “Organism count/volume.”)

Total recoverable is the amount of a given constituent in a whole-water sample after a 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 particu-

late 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 for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Sediment," "Suspended sediment," "Suspended-Sediment Concentration," "Bedload," and "Bedload discharge")

Total sediment load or total load is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-Sediment Load," and "Total load")

Trophic group:

Filter feeder – diet composed of suspended plant and/or animal material.

Herbivore – diet composed predominantly of plant material.

Invertivore – diet composed predominantly of invertebrates.

Omnivore – diet composed of at least 25-percent plant and 25-percent animal material.

Piscivore – diet composed predominantly of fish.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of tur-

bidity in the USGS include those that conform to EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

Vertical datum (See "Datum")

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

Water table is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which is found the water table.

Water year in USGS 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, 2001, is called the "2001 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976.)

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.

Wet mass is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

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

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements 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. (See also "Plankton")

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TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

The U.S.G.S. 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.G.S., Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a 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 publica-

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- 1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J.F. Ficke, and G. F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A. R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.
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Section F. Drilling and Sampling Methods

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Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

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- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.
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- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.
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- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS-TWRI book 3, chap. A21. 1995. 56 p.

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- 3-B4. *Supplement 1. Regression modeling of ground-water flow -- Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS-TWRI book 3, chap. B4. 1993. 8 p.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS-TWRI book 3, chap. B5. 1987. 15 p.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS-TWRI book 3, chap. B6. 1987. 28 p.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS-TWRI book 3, chap. B7. 1992. 190 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS-TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS-TWRI book 3, chap. C1. 1970. 55 p.
- 3-C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS-TWRI book 3, chap. C2. 1999. 89 p.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS-TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS-TWRI book 4, chap. A1. 1968. 39 p.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS-TWRI book 4, chap. A2. 1968. 15 p.

Section B. Surface Water

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS-TWRI book 4, chap. B1. 1972. 18 p.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS-TWRI book 4, chap. B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS-TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS-TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS-TWRI book 5, chap. A1. 1989. 545 p.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS-TWRI book 5, chap. A2. 1971. 31 p.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS-TWRI book 5, chap. A3. 1987. 80 p.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by

L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 p.

- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

- 5-C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques

Section A. Ground Water

- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS–TWRI book 6, chap. A5, 1993. 243 p.
- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A5, 1996. 125 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.
- 9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.
- 9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B.

Radtke, Jacob Gibbs, and R.T. Iwatsubo:
USGS–TWRI book 9, chap. A3. 1998. 75 p.

- 9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.
- 9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.
- 9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.
- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.
- 9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.



01398102 South Branch Raritan River at South Branch
Watershed Integrator Station
Ambient Stream Monitoring Network
(File photograph, U.S. Geological Survey, West Trenton, New Jersey)

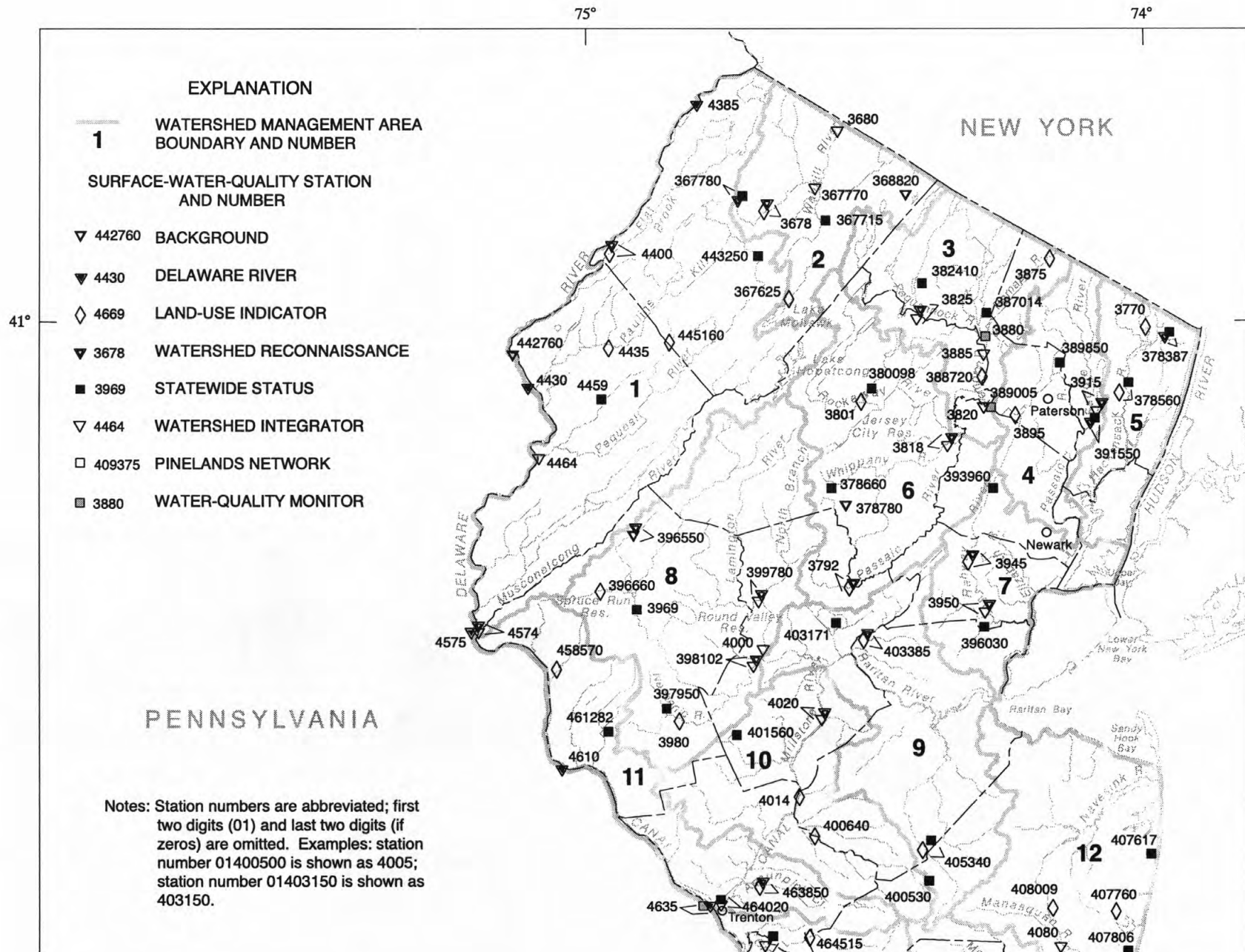




Figure 22. Locations and types of surface-water-quality stations.

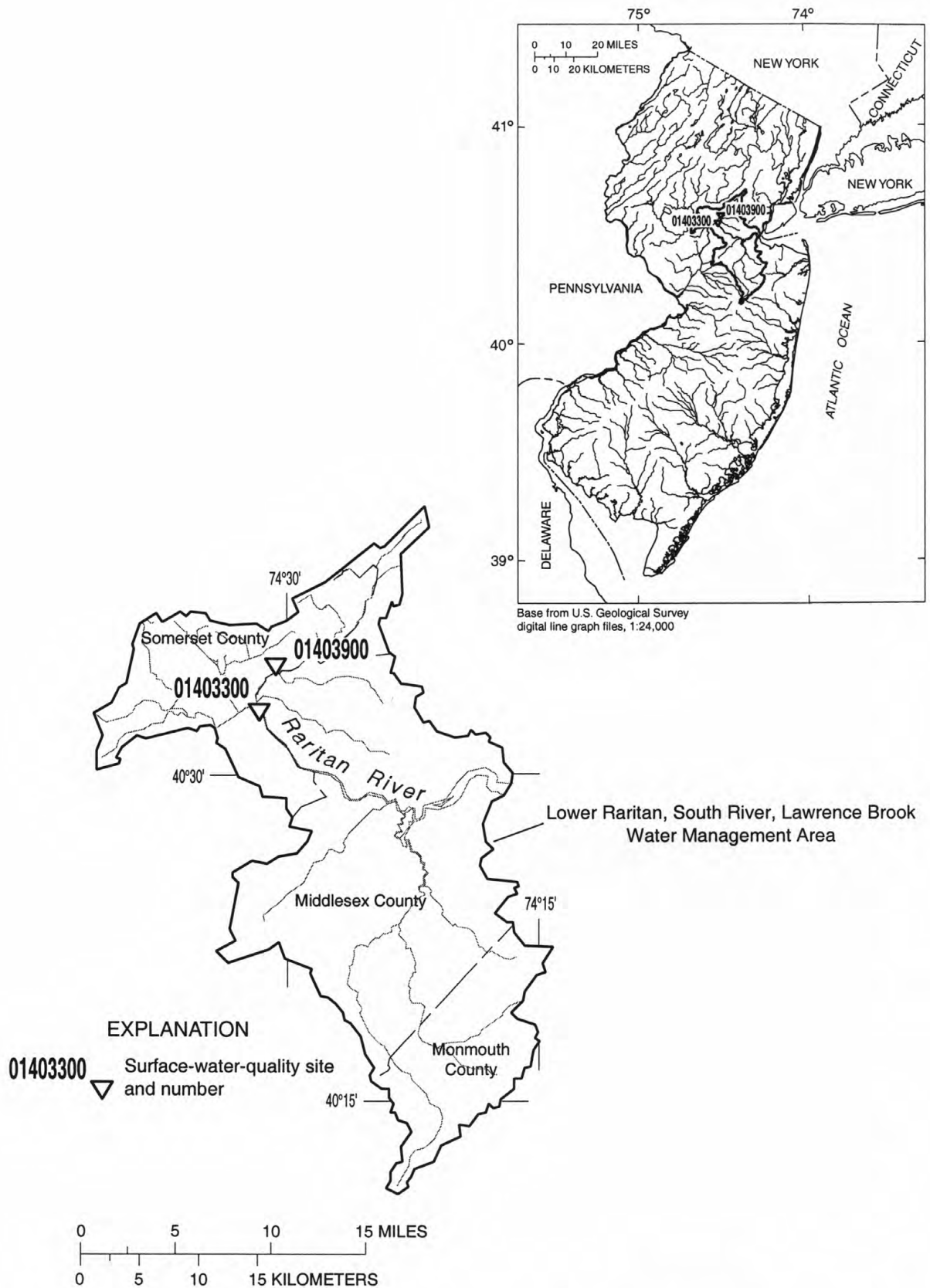


Figure 23. Location of stations in the Long Island-New Jersey National Water-Quality Assessment Program, surface-water low-intensity-phase network, water year 2001.

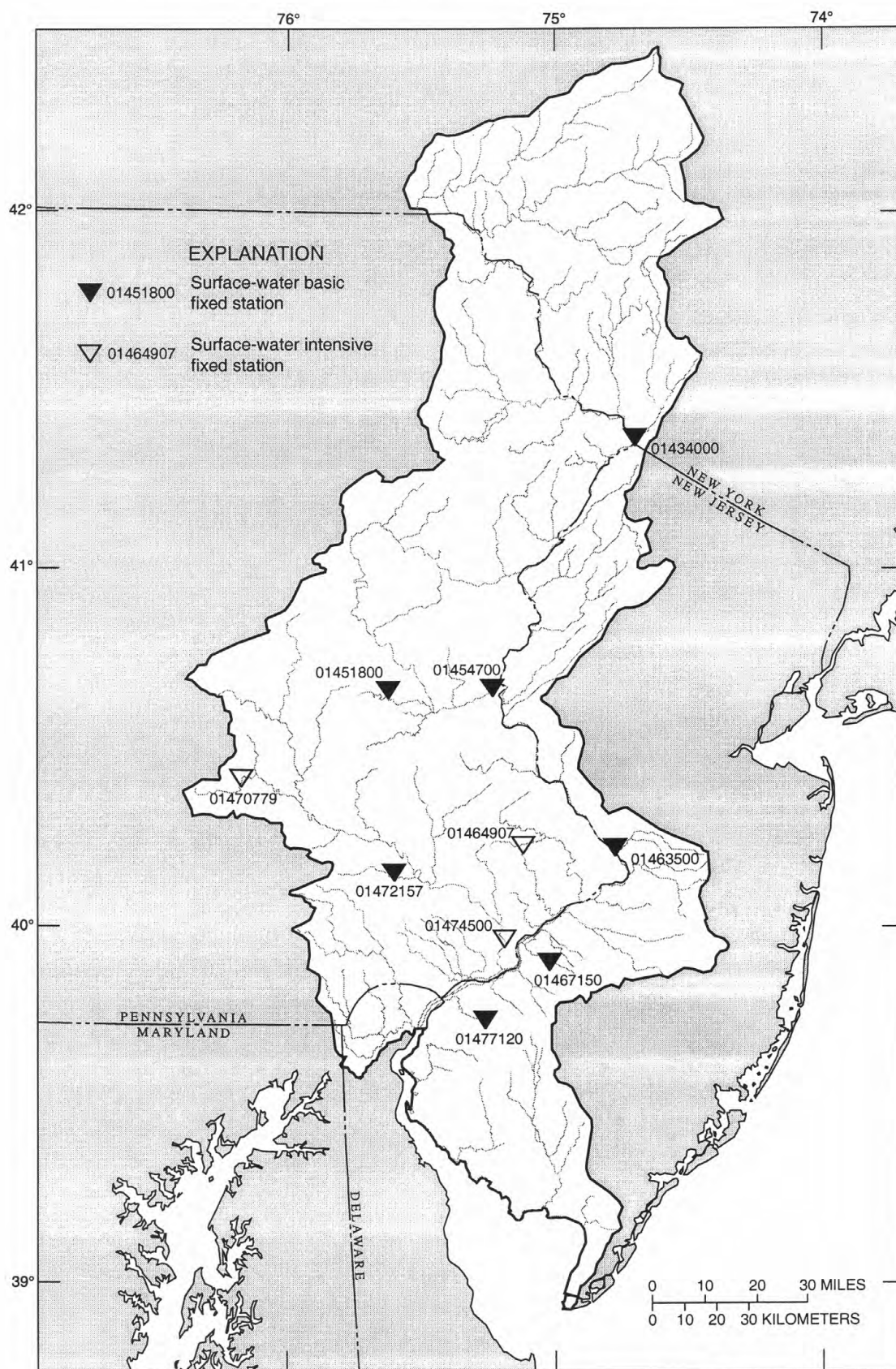


Figure 24. Location of the stations in the Delaware River National Water-Quality Assessment Program surface-water fixed station network, water year 2001.

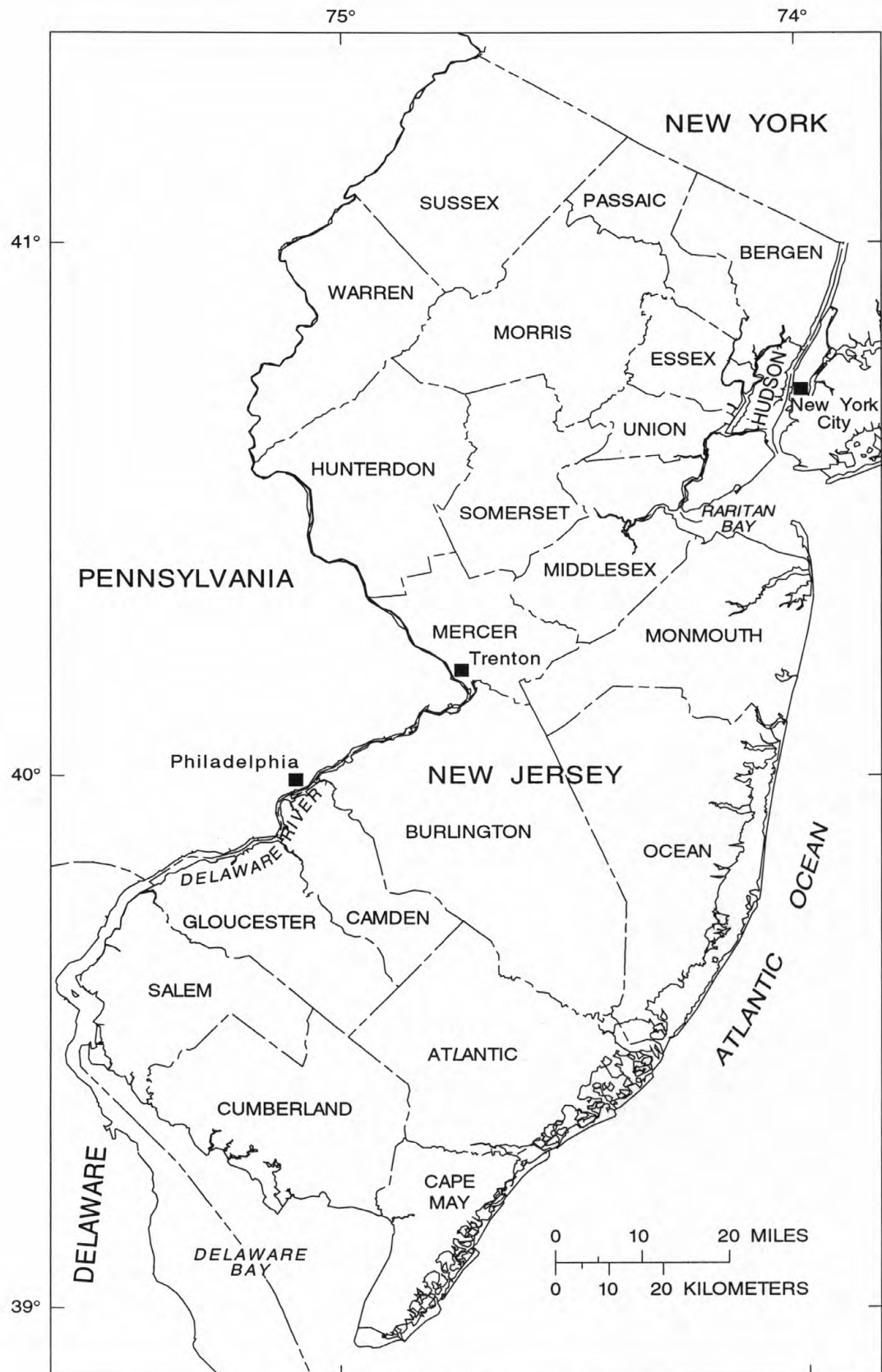
WATER RESOURCES DATA - NEW JERSEY, 2001

Figure 25. Counties in New Jersey.

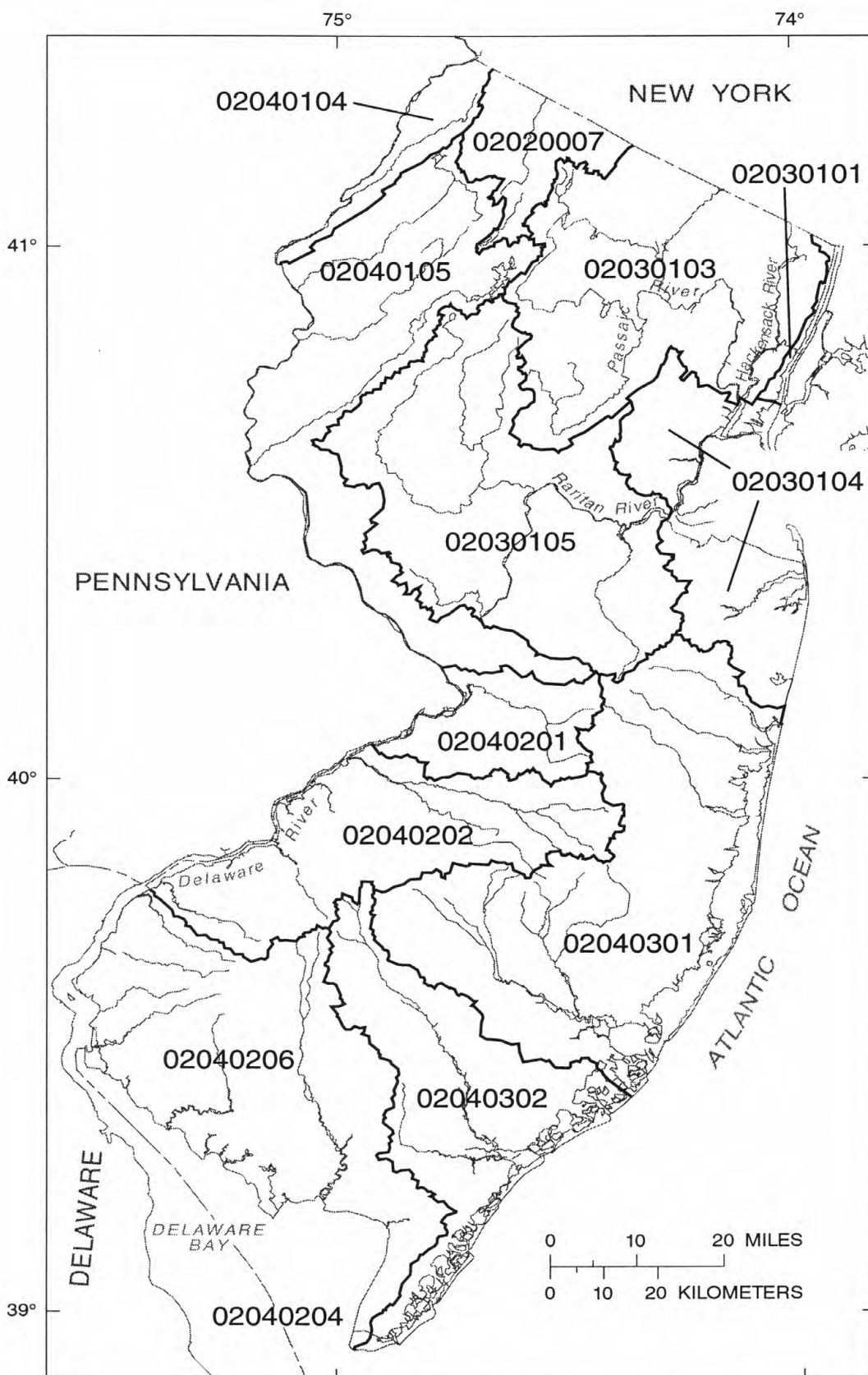


Figure 26. Cataloging units and codes in New Jersey. (Modified from Seaber and others, 1987)

HUDSON RIVER BASIN

01367625 WALLKILL RIVER AT SPARTA, NJ

LOCATION.--Lat 41°02'20", long 74°37'48", Sussex County, Hydrologic Unit 02020007, 0.4 mi northeast of Sparta, 1.2 mi downstream of outlet of Lake Mohawk, and 1.8 mi east of Fox Hollow Lake.

DRAINAGE AREA.--5.88 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLT RD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|---|--|--|---|---|---|--|--|---|---|--|--|
| NOV 16... | 1200 | 6.5 | -- | .066 | .049 | 742 | 99 | 11.4 | 8.3 | 642 | 7.0 | 8.0 | 180 | |
| FEB 14... | 1330 | 15 | -- | .058 | .043 | 744 | 101 | 13.2 | 8.3 | 770 | <5.0 | 3.0 | 170 | |
| MAY 17... | 1210 | 3.0 | 3.7 | .049 | .036 | 745 | 93 | 9.5 | 8.0 | 772 | 14.5 | 13.5 | 230 | |
| AUG 08... | 1220 | 1.1 | 1.7 | .101 | .071 | 743 | 93 | 8.1 | 7.8 | 743 | 32.5 | 21.0 | 240 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 16... | 43.9 | 17.8 | 1.57 | 53.9 | 144 | 107 | E.1 | 5.5 | 17.2 | 345 | 335 | <.030 | .26 | |
| FEB 14... | 41.0 | 16.1 | 1.41 | 69.7 | 120 | 134 | <.2 | 4.3 | 19.3 | 365 | 360 | .060 | .23 | |
| MAY 17... | 54.0 | 21.9 | 1.41 | 64.2 | 164 | 132 | E.1 | 6.7 | 17.8 | 408 | 402 | .070 | .29 | |
| AUG 08... | 55.2 | 24.9 | 2.11 | 54.4 | 181 | 116 | E.1 | 10.9 | 16.1 | 417 | 393 | <.030 | .20 | |
| DATE | | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (00600) | NITRO-GEN, PHOS-PHORUS DIS-SOLVED (MG/L AS P) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 16... | <.03 | .38 | .436 | .005 | .69 | .81 | .100 | .015 | .036 | .9 | <.1 | 2.9 | .9 | |
| FEB 14... | .10 | .29 | .462 | .005 | .69 | .75 | .080 | .009 | .020 | .6 | <.1 | 2.7 | .6 | |
| MAY 17... | .08 | .33 | 1.07 | .057 | 1.4 | 1.4 | .132 | .022 | .047 | .9 | <.1 | 2.3 | .9 | |
| AUG 08... | <.03 | .24 | .910 | .008 | 1.1 | 1.2 | .060 | .022 | .035 | .4 | <.1 | 3.2 | .4 | |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|----|----|
| NOV 16... | 2.9 | -- | 22 | 1 |
| FEB 14... | <1.0 | -- | 18 | <1 |
| MAY 17... | E1.3 | 3.00 | 36 | 1 |
| AUG 08... | <1.0 | 4.90 | 29 | 5 |

E Estimated value.

< Actual value is known to be less than the value shown.

HUDSON RIVER BASIN

01367625 WALLKILL RIVER AT SPARTA, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 05... | 1105 | <20 | <100 | 90 | 01... | 1105 | <20 | <100 | 20 |
| 11... | 1103 | 490 | 100 | 280 | | | | | |
| 18... | 1110 | 50 | <100 | 30 | | | | | |
| 25... | 1100 | 20 | <100 | 20 | | | | | |

< Actual value is known to be less than the value shown.

HUDSON RIVER BASIN

01367715 WALLKILL RIVER AT SCOTT ROAD, AT FRANKLIN, NJ

LOCATION.--Lat 41°08'00", long 74°34'44", Sussex County, Hydrologic Unit 02020007, at bridge on on Scott Road, 1.2 mi north of Franklin, 1.7 mi south of Hamburg, and 3.4 mi downstream of Franklin Pond.

DRAINAGE AREA.--40.6 mi².

PERIOD OF RECORD.--Water year 1999, November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | TUR- BID- ITY FIELD WATER (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|---|---|---|--|---|--|--|---|--|---|
| NOV 15... | 0800 | -- | .151 | .116 | 742 | | 9.6 | 8.2 | -- | -- | 7.0 | 190 | 45.5 | |
| FEB 08... | 0830 | -- | .087 | .066 | 758 | | 12.0 | 7.7 | -- | -- | .00 | 150 | 37.1 | |
| MAY 10... | 0800 | 3.5 | .107 | .081 | 750 | 77 | 7.4 | 8.3 | 598 | 11.0 | 16.5 | 200 | 46.0 | |
| AUG 07... | 0800 | 2.9 | .112 | .086 | 750 | 75 | 6.2 | 8.0 | 669 | 26.0 | 24.0 | 250 | 53.4 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AM- MONIA TOTAL (MG/L AS N) (00610) |
| NOV 15... | 19.4 | 2.20 | 33.3 | 171 | 63.6 | E.1 | 8.5 | 14.4 | 298 | 290 | <.030 | .32 | <.03 | |
| FEB 08... | 14.1 | 1.26 | 56.2 | 117 | 108 | E.1 | 6.9 | 15.1 | 324 | 311 | .070 | .21 | .04 | |
| MAY 10... | 21.3 | 1.33 | 40.6 | 173 | 79.1 | E.1 | 5.4 | 14.2 | 349 | 313 | <.030 | .29 | <.03 | |
| AUG 07... | 27.2 | 1.73 | 40.0 | 209 | 78.9 | E.1 | 8.7 | 14.8 | 341 | 352 | .050 | .31 | .04 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, WAT FLT TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 15... | .39 | .243 | <.003 | .56 | .63 | .036 | .007 | .018 | .5 | <.1 | 4.7 | .5 | E1.5 | |
| FEB 08... | .29 | .472 | <.003 | .68 | .76 | .054 | .008 | .015 | .4 | <.1 | 2.8 | .4 | 3.4 | |
| MAY 10... | .33 | .250 | .004 | .54 | .58 | .072 | .009 | .025 | .6 | M | 3.7 | E.6 | E1.8 | |
| AUG 07... | .38 | .557 | .004 | .87 | .94 | .074 | .011 | .023 | <.1 | <.1 | 3.3 | <.1 | E1.2 | |
| | | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | |
| | | | | | | | DATE | | | | | | | |
| | | | | | | | NOV 15... | -- | E12 | 4 | | | | |
| | | | | | | | FEB 08... | -- | E12 | 1 | | | | |
| | | | | | | | MAY 10... | 3.20 | 20 | 1 | | | | |
| | | | | | | | AUG 07... | 9.10 | 32 | 5 | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

HUDSON RIVER BASIN

71

01367715 WALLKILL RIVER AT SCOTT ROAD, AT FRANKLIN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|

| | | | | | | | | | | | | | | |
|-----|-------|------|---|------|------|----|-----|----|-----|-----|----|-----|------|---|
| AUG | 07... | 0800 | 4 | 56.7 | <.06 | 27 | .06 | <1 | 1.1 | 220 | <1 | 130 | <.01 | 1 |
|-----|-------|------|---|------|------|----|-----|----|-----|-----|----|-----|------|---|

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|------|---|--|--|
|------|---|--|--|

| | | | | |
|-----|-------|-----|------|----|
| AUG | 07... | <.4 | <.05 | 25 |
|-----|-------|-----|------|----|

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYLENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHYLENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|------|------|---|--|--|---|---|--|---|---|---|---------------------------------------|--|---|
|------|------|---|--|--|---|---|--|---|---|---|---------------------------------------|--|---|

| | | | | | | | | | | | | | |
|-----|-------|------|------|------|------|-----|------|------|------|------|------|------|------|
| FEB | 08... | 0830 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
|-----|-------|------|------|------|------|-----|------|------|------|------|------|------|------|

| DATE | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2- DI- CHLORO- ETHYLENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL WATER UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL WATER UNFLTRD RECOVER (UG/L) (50005) | ETHER METHYL BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|------|--|---|---|---|---|---|---|--|---|--|--|---|--|
|------|--|---|---|---|---|---|---|--|---|--|--|---|--|

| | | | | | | | | | | | | | | |
|-----|-------|------|-----|------|------|------|-----|-----|-----|------|-----|------|------|-----|
| FEB | 08... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
|-----|-------|------|-----|------|------|------|-----|-----|-----|------|-----|------|------|-----|

| DATE | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|

| | | | | | | | | | | |
|-----|-------|-----|------|------|------|-----|------|------|------|-----|
| FEB | 08... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 |
|-----|-------|-----|------|------|------|-----|------|------|------|-----|

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|------|------|--|--|--|---|---|--|--|--|--|---|--|---|
|------|------|--|--|--|---|---|--|--|--|--|---|--|---|

| | | | | | | | | | | | | | | |
|-----|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MAY | 10... | 0800 | <.004 | <.002 | <.005 | E.005 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.003 | <.005 |
|-----|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|

< Actual value is known to be less than the value shown.

HUDSON RIVER BASIN

01367715 WALLKILL RIVER AT SCOTT ROAD, AT FRANKLIN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|---|--|--|---|---|---|---|
| | MAY 10... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| MAY 10... | <.011 | <.016 | <.034 | <.005 | <.009 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|
| JUL 05... | 1035 | 330 | 600 | 250 |
| 11... | 1030 | 1300 | 800 | 2500 |
| 18... | 1035 | 130 | 200 | 190 |
| 25... | 1025 | 310 | 300 | 310 |
| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
| AUG 01... | 1035 | 110 | 100 | 90 |

E Estimated value.

< Actual value is known to be less than the value shown.

01367770 WALLKILL RIVER NEAR SUSSEX, NJ

LOCATION.--Lat 41°11'38", long 74°34'32", Sussex County, Hydrologic Unit 02020007, at bridge on Glenwood Road, 0.6 mi upstream from Papakating Creek, 1.7 mi southwest of Independence Corner, and 2.0 mi southeast of Sussex.

DRAINAGE AREA.--60.8 mi².

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | |
|-----------|------|---|--|--|--|--|--|---|--|--|---|---|---|--|
| | | | | | | | | | | | | | | |
| NOV 16... | 1000 | 149 | -- | .138 | .105 | 750 | 85 | 10.4 | 7.9 | 579 | 7.5 | 6.0 | 210 | |
| FEB 14... | 0940 | 177 | -- | .086 | .065 | 754 | 93 | 13.0 | 7.4 | 538 | 6.0 | 1.0 | 160 | |
| MAY 17... | 0940 | 34 | 6.5 | .097 | .074 | 756 | 76 | 7.8 | 7.8 | 669 | 14.0 | 14.0 | 240 | |
| AUG 14... | 0930 | 12 | 5.4 | .109 | .084 | 751 | 86 | 7.3 | 8.1 | 754 | 25.0 | 22.5 | 250 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC UNFLTRD LAB AS CaCO3 (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 16... | 48.2 | 21.1 | 2.72 | 35.0 | 183 | 65.9 | E.1 | 9.5 | 16.6 | 326 | 315 | <.030 | .35 | |
| FEB 14... | 38.8 | 16.2 | 1.52 | 40.6 | 133 | 75.5 | <.2 | 7.4 | 16.1 | 297 | 280 | .040 | .22 | |
| MAY 17... | 54.9 | 25.0 | 2.15 | 42.8 | 198 | 82.3 | E.1 | 6.6 | 17.2 | 367 | 359 | .060 | .39 | |
| AUG 14... | 55.2 | 28.1 | 3.92 | 46.8 | 213 | 93.4 | E.1 | 10.5 | 19.5 | 397 | 402 | .040 | .39 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (00600) | NITRO-GEN, WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 16... | <.03 | .35 | 1.42 | .003 | 1.8 | 1.8 | .063 | .014 | .024 | .5 | <.1 | 4.3 | .4 | |
| FEB 14... | .04 | .29 | .865 | -- | 1.1 | 1.2 | .112 | .007 | .018 | .4 | <.1 | 2.8 | .4 | |
| MAY 17... | .05 | .43 | 2.15 | .017 | 2.5 | 2.6 | .112 | .027 | .057 | .9 | <.1 | 3.3 | .9 | |
| AUG 14... | .13 | .49 | 3.74 | .012 | 4.1 | 4.2 | .067 | .069 | .087 | .6 | <.1 | 3.3 | .6 | |
| DATE | | | | | | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | |
| NOV 16... | | | | | | <1.0 | -- | 25 | 7 | | | | | |
| FEB 14... | | | | | | <1.0 | -- | 18 | <1 | | | | | |
| MAY 17... | | | | | | E1.5 | 3.90 | 32 | 10 | | | | | |
| AUG 14... | | | | | | <1.0 | 2.10 | 50 | 4 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

HUDSON RIVER BASIN

01367770 WALLKILL RIVER NEAR SUSSEX, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 05... | 1010 | 330 | 400 | 380 | 01... | 1040 | 140 | 300 | 130 |
| 11... | 1030 | 3500 | 400 | 550 | | | | | |
| 18... | 1015 | 130 | 400 | 60 | | | | | |
| 25... | 1030 | 310 | 100 | 140 | | | | | |

HUDSON RIVER BASIN

75

01367780 PAPA KATING CREEK NEAR WYKERTOWN, NJ

LOCATION.--Lat 41°09'59", long 74°43'39", Sussex County, Hydrologic Unit 02020007, at bridge at intersection of County Route 629 and Gunn Road, 0.7 mi north of intersection of County Routes 629 and 519, and 1.7 mi northeast of Culvers Lake.

DRAINAGE AREA.--1.99 mi².

PERIOD OF RECORD.--Water Year 1999, November 2000 to September 2001.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|--|---|---|--|--|--|--|--|--|---|
| NOV 16... | 1115 | -- | .129 | .100 | 746 | 100 | 12.5 | 7.7 | 294 | -- | 5.0 | 86 | 27.6 | |
| FEB 14... | 1115 | -- | .061 | .047 | 749 | 97 | 13.6 | 7.7 | 310 | 4.0 | 1.0 | 77 | 24.3 | |
| MAY 10... | 1100 | -- | .142 | .108 | 748 | 94 | 9.2 | 7.9 | 325 | 26.0 | 15.5 | 95 | 30.7 | |
| SEP 17... | 0800 | 12 | .078 | .057 | 747 | 87 | 9.4 | 7.8 | 419 | -- | 11.0 | 130 | 41.2 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| | | | | | | | | | | | | | | |
| NOV 16... | 4.10 | 2.52 | 18.4 | 54 | 43.2 | E.1 | 8.4 | 17.6 | 171 | 155 | <.030 | .23 | <.03 | |
| FEB 14... | 3.91 | 1.16 | 24.9 | 37 | 53.8 | <.2 | 8.0 | 16.7 | 177 | 158 | .030 | .14 | <.03 | |
| MAY 10... | 4.49 | 1.27 | 22.9 | 62 | 51.2 | E.1 | 4.7 | 12.1 | 201 | 165 | <.030 | .30 | <.03 | |
| SEP 17... | 6.00 | 2.05 | 26.3 | 73 | 67.6 | <.2 | 10.2 | 17.0 | 218 | 216 | <.030 | .20 | <.03 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| | | | | | | | | | | | | | | |
| NOV 16... | .28 | .184 | <.003 | .41 | .47 | .060 | .013 | .022 | .3 | <.1 | 3.9 | .3 | 2.1 | |
| FEB 14... | .19 | .704 | .003 | .85 | .89 | .051 | .007 | .014 | .3 | <.1 | 2.0 | .3 | E1.9 | |
| MAY 10... | .79 | .137 | <.003 | .44 | .93 | .392 | .023 | .122 | 2.4 | M | 3.9 | E2.4 | 3.0 | |
| SEP 17... | .40 | .352 | <.003 | .55 | .75 | .217 | .040 | .077 | 3.2 | <.1 | 2.8 | 3.2 | <1.0 | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

HUDSON RIVER BASIN

01367780 PAPAKATING CREEK NEAR WYKERTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | | | | BORON, DIS- SOLVED (UG/L AS B) (01020) | | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | | | | | | | | | | | | |
|--------------|------|---|------|--|------|--|------|---|------|---|------|---|------|---|------|---|------|---|------|--|--|--|--|--|--|
| DATE | | | | | | | | | | | | | | | | | | | | | | | | | |
| NOV 16... | | | | | | -- | | E8 | | 2 | | | | | | | | | | | | | | | |
| FEB 14... | | | | | | -- | | E10 | | <1 | | | | | | | | | | | | | | | |
| MAY 10... | | | | | | 67.7 | | E9 | | 6 | | | | | | | | | | | | | | | |
| SEP 17... | | | | | | 1.00 | | E9 | | 10 | | | | | | | | | | | | | | | |
| | | ARSENIC TOTAL (UG/L AS AS) (01002) | | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | |
| SEP 17... | 0800 | <2 | 11.3 | <.06 | 9 | E.03 | <1 | 1.6 | 520 | <1 | 187 | <.01 | <1 | | | | | | | | | | | | |
| | | | | | | DATE | | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | | | | | | | | | | | | | |
| SEP 17... | | | | | | | | <.4 | | <.05 | | 15 | | | | | | | | | | | | | |
| | | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | | BENZENE TOTAL (UG/L) (34030) | | BROMO- FORM TOTAL (UG/L) (32104) | | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | |
| FEB 14... | 1115 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | | | | | |
| | | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | | CHLORO- FORM TOTAL (UG/L) (32106) | | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | | ETHYL- BENZENE TOTAL (UG/L) (34371) | | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | |
| FEB 14... | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.2 | | | | | |
| | | | | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | | TOLUENE TOTAL (UG/L) (34010) | | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | | | | | |
| FEB 14... | | | | <.2 | | <.20 | | <.10 | | <.10 | | <.1 | | <.10 | | <.10 | | <.20 | | <.2 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

HUDSON RIVER BASIN

77

01367780 PAPA KATING CREEK NEAR WYKERTOWN, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS WATER, DIS- SOLVED REC (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED REC (UG/L) (39572) | |
|--------------|-------|--|---|--|---|---|---|--|---|--|---|--|---|---|
| | | | | | | | | | | | | | | |
| MAY 23... | 1000 | E.003 | <.002 | <.005 | .013 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.005 | <.005 | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | | | | | | | | | | | | | |
| MAY 23... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .032 | <.006 | .026 | <.007 | <.003 | <.010 | <.015 | |
| DATE | TIME | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| | | | | | | | | | | | | | | |
| MAY 23... | | <.011 | <.016 | <.034 | .009 | <.009 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 05... | 1140 | 1100 | 300 | 450 | AUG 01... | 1125 | 790 | 200 | 660 |
| 11... | 1059 | 2200 | <100 | 2800 | | | | | |
| 18... | 1120 | 330 | <100 | 100 | | | | | |
| 25... | 1120 | 940 | 800 | 1090 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

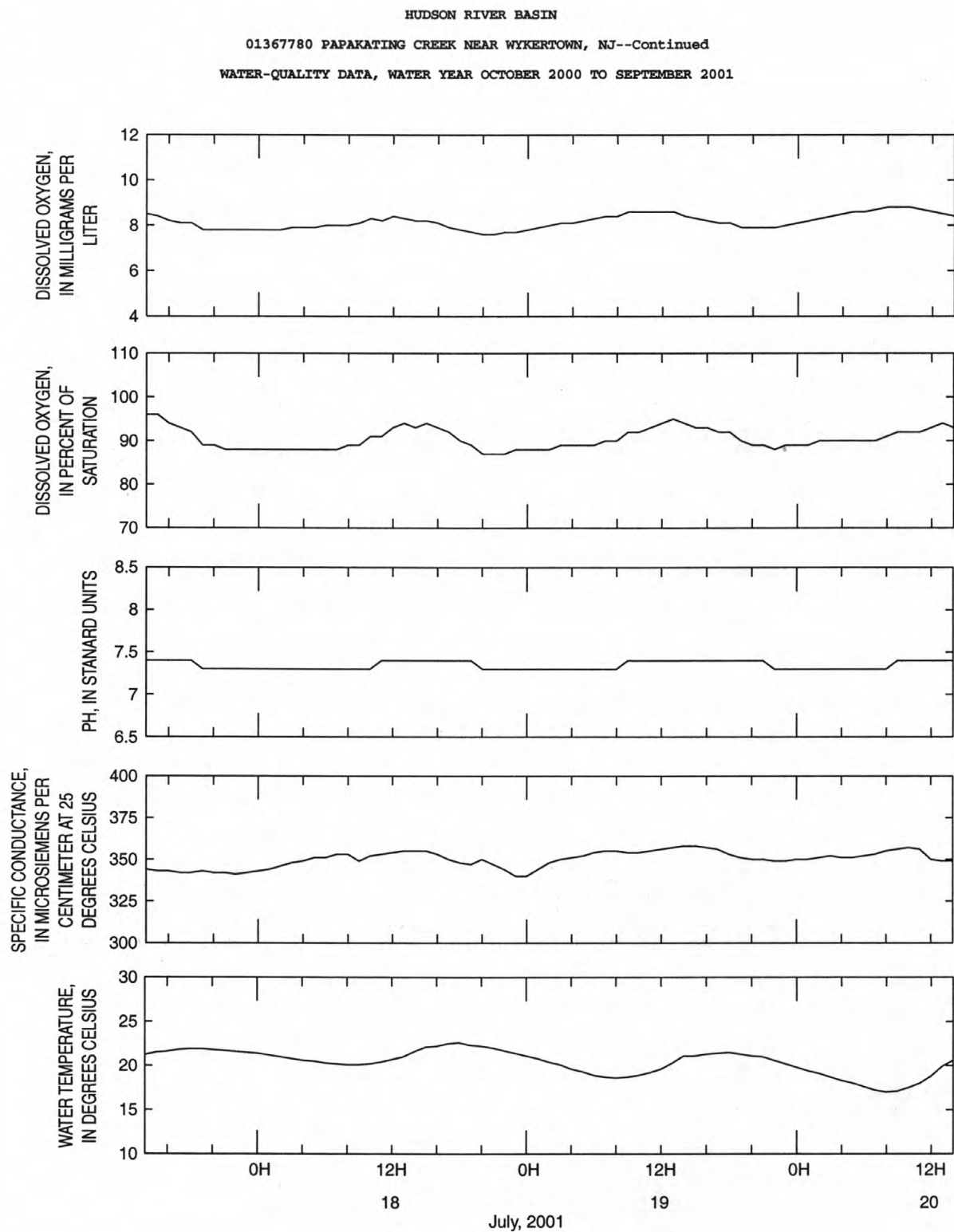


Figure 27. Reconnaissance Study -- Physical characteristics and concentrations of constituents measured at 01367780 Papakating Creek near Wykertown.

HUDSON RIVER BASIN

01367800 PAPA KATING CREEK AT PELLETOWN, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 05... | 1025 | 790 | 100 | 400 | 01... | 1055 | 790 | 200 | 110 |
| 11... | 1045 | 2400 | 1800 | 830 | | | | | |
| 18... | 1035 | 5400 | 1100 | 280 | | | | | |
| 25... | 1115 | 1300 | 300 | 270 | | | | | |

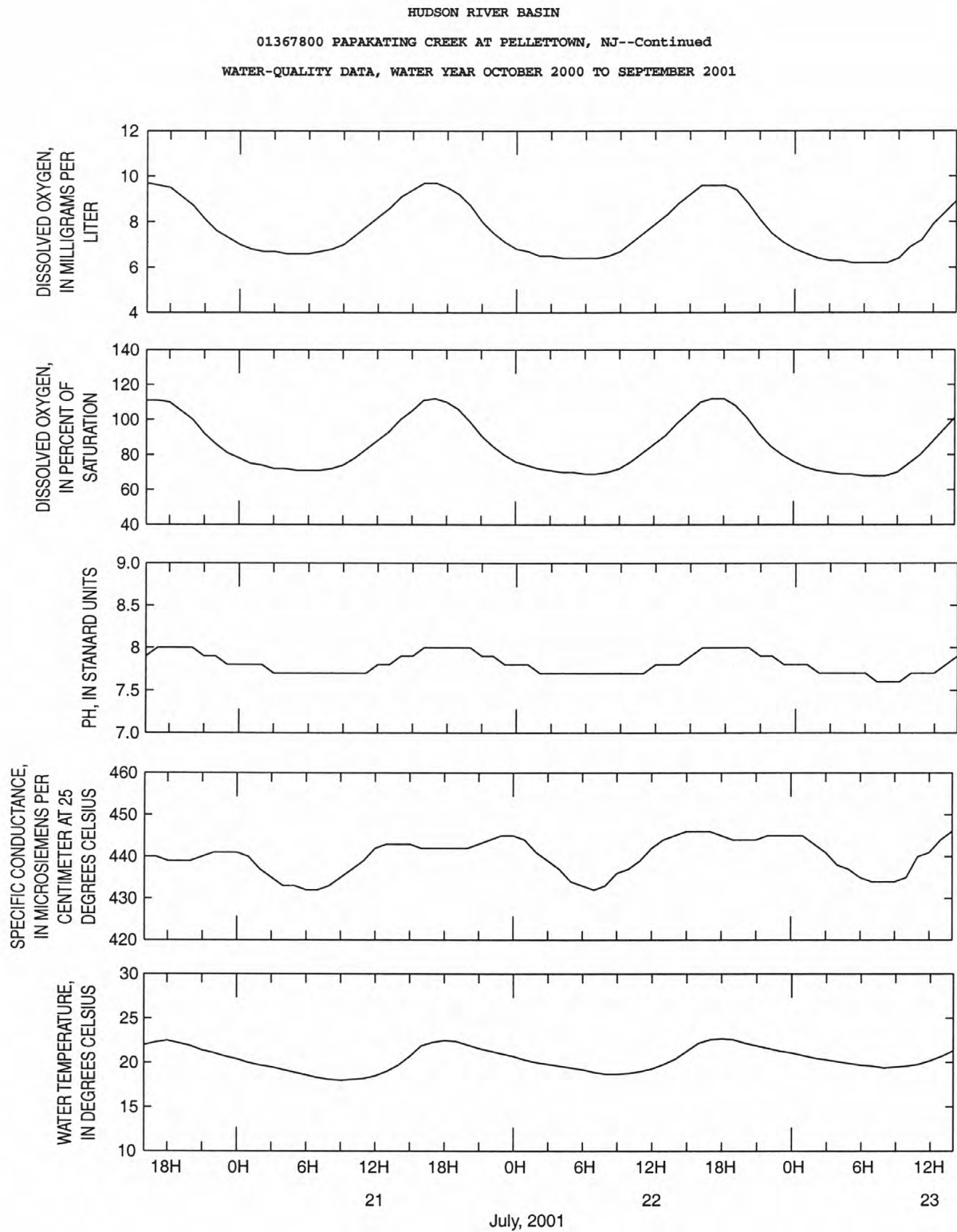


Figure 28. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01367800 Papakating Creek at Pelletown, water year 2001.

HUDSON RIVER BASIN

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY

LOCATION.--Lat 41°15'36", long 74°32'58", Sussex County, New Jersey, Hydrologic Unit 02020007, at bridge on Quarryville-Milton Road, 2.0 mi south of New York-New Jersey State line, and 3.0 mi south of Unionville.

DRAINAGE AREA.--140 mi².

PERIOD OF RECORD.--Water years 1963-78, 1991 to September 1997, and November 2000 to August 2001.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR- BID- ITY FIELD WATER UNFLTRD (MTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS (CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS (CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) |
|--------------|------|---|--|--|--|---|---|--|--|--|---|---|--|
| NOV 21... | 1300 | 60 | -- | .168 | .129 | 747 | 89 | 11.7 | 7.7 | 490 | -- | 3.0 | 170 |
| FEB 14... | 1040 | 280 | -- | .104 | .079 | 754 | 85 | 12.0 | 7.7 | 437 | 8.0 | 1.0 | 120 |
| MAY 17... | 1250 | 65 | 13 | .133 | .100 | 753 | 70 | 7.0 | 7.9 | 558 | 17.5 | 15.0 | 200 |
| AUG 27... | 1210 | 16 | 7.1 | .139 | .103 | 747 | 156 | 12.6 | 7.8 | 647 | 26.5 | 25.0 | 220 |

| DATE | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C TUEVTS, DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|--------------|---|---|--|---|---|--|---|--|--|--|--|--|--|
| NOV 21... | 42.2 | 14.9 | 2.28 | 28.2 | 138 | 54.3 | E.1 | 8.3 | 22.4 | 271 | 260 | .050 | .35 |
| FEB 14... | 32.4 | 10.1 | 1.67 | 33.8 | 87 | 63.5 | <.2 | 7.2 | 18.7 | 241 | 224 | .040 | .26 |
| MAY 17... | 50.0 | 17.7 | 1.86 | 34.5 | 158 | 65.5 | E.1 | 6.6 | 18.5 | 294 | 296 | .080 | .42 |
| AUG 27... | 51.5 | 21.7 | 3.41 | 43.4 | 180 | 81.5 | E.1 | 6.0 | 20.8 | 364 | 345 | <.030 | .43 |

| DATE | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN, PAR- TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) |
|--------------|---|---|--|--|--|--|--|--|---|--|---|---|--|
| NOV 21... | .05 | .47 | .947 | <.003 | 1.3 | 1.4 | .044 | .014 | .040 | .8 | <.1 | 4.5 | .8 |
| FEB 14... | .05 | .28 | .971 | .039 | 1.2 | 1.2 | .055 | .015 | .031 | .6 | <.1 | 3.1 | .6 |
| MAY 17... | .08 | .47 | 1.41 | .024 | 1.8 | 1.9 | .130 | .027 | .065 | .9 | <.1 | 3.8 | .9 |
| AUG 27... | .07 | .54 | 1.98 | .016 | 2.4 | 2.5 | .184 | .032 | .057 | 1.2 | <.1 | 4.5 | 1.2 |

| DATE | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) |
|--------------|---|---|---|---|
| NOV 21... | E1.7 | -- | 21 | 9 |
| FEB 14... | <1.0 | -- | E10 | 2 |
| MAY 17... | E1.2 | 3.30 | 27 | 8 |
| AUG 27... | E1.4 | 28.9 | 38 | 1 |

E Estimated value.

< Actual value is known to be less than the value shown.

HUDSON RIVER BASIN

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 05... | 0945 | 110 | <100 | 210 | 01... | 1015 | 50 | 100 | 30 |
| 11... | 1010 | 330 | 100 | 150 | | | | | |
| 18... | 0955 | 130 | 200 | 30 | | | | | |
| 25... | 1015 | 110 | <100 | 40 | | | | | |

< Actual value is known to be less than the value shown.

HUDSON RIVER BASIN

01368820 DOUBLE KILL AT WAWAYANDA, NJ

LOCATION.--Lat 41°11'13", long 74°25'13", Sussex County, Hydrologic Unit 02020007, 0.4 mi downstream of Wawayanda Lake, 3.5 mi east of Vernon, and 4.6 mi upstream of Wawayanda Creek.

DRAINAGE AREA.--6.46 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|---|---|---|--|--|--|--|---|---|---|--|--|
| NOV 16... | 0930 | 4.1 | -- | .132 | .098 | 760 | 92 | 11.7 | 7.4 | 256 | 3.0 | 5.0 | 66 | |
| FEB 14... | 1100 | 11 | -- | .132 | .098 | 735 | 96 | 13.0 | 7.6 | 216 | 5.5 | 1.5 | 56 | |
| MAY 24... | 0930 | 7.3 | 2.8 | .125 | .093 | 728 | 102 | 9.7 | 7.5 | 238 | 15.5 | 15.5 | 65 | |
| AUG 08... | 0950 | E.03 | 1.6 | .152 | .114 | 732 | 44 | 3.6 | 7.4 | 285 | 29.5 | 23.0 | 80 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 16... | 16.9 | 5.79 | .98 | 20.6 | 57 | 39.5 | E.1 | 2.8 | 7.5 | 143 | 128 | <.030 | .29 | |
| FEB 14... | 14.4 | 4.82 | .92 | 16.9 | 43 | 30.1 | <.2 | 3.9 | 8.8 | 122 | 106 | <.030 | .21 | |
| MAY 24... | 16.9 | 5.51 | .97 | 21.8 | 47 | 38.8 | E.1 | 1.2 | 9.4 | 136 | 123 | .030 | .33 | |
| AUG 08... | 20.6 | 7.02 | .82 | 23.6 | 64 | 44.1 | <.2 | 7.0 | 5.8 | 179 | 148 | .050 | .38 | |
| DATE | | NITRO-GEN, AM-MONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | |
| NOV 16... | <.03 | .32 | <.037 | <.003 | -- | -- | .080 | .005 | .011 | .4 | <.1 | 4.7 | .4 | |
| FEB 14... | .04 | .26 | .078 | <.003 | .29 | .33 | .051 | .004 | .011 | .4 | <.1 | 4.1 | .4 | |
| MAY 24... | <.03 | .40 | .042 | .003 | .38 | .44 | .130 | .012 | .030 | .7 | <.1 | 4.3 | .7 | |
| AUG 08... | .06 | .42 | .150 | <.003 | .53 | .57 | .073 | .020 | .032 | .3 | <.1 | 4.3 | .3 | |
| | | | | | DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | |
| | | | | | NOV 16... | E1.1 | -- | 15 | 4 | | | | | |
| | | | | | FEB 14... | E1.6 | -- | E11 | <1 | | | | | |
| | | | | | MAY 24... | E1.9 | 7.80 | 15 | 5 | | | | | |
| | | | | | AUG 08... | <1.0 | 1.70 | 20 | 4 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01368820 DOUBLE KILL AT WAWAYANDA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|--------------|------|--|--|--|--|--|---|--|--|--|--|--|--|
| AUG 08... | 0950 | <2 | 10.8 | <.06 | 17 | <.04 | <1 | .6 | 270 | <1 | 418 | <.01 | <1 |

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|--------------|---|--|--|
| AUG 08... | <.4 | <.05 | 2 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|--------------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|
| FEB 14... | 1100 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |

| DATE | TIME | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHER METHYL BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|--------------|------|--|---|---|---|---|---|---|--|---|---|--|---|--|
| FEB 14... | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD TOTAL (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|--------------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
| FEB 14... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|---|--|---|---|---|--|--|--|--|---|--|---|
| MAY 24... | 0930 | <.004 | <.002 | <.005 | E.005 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

HUDSON RIVER BASIN

01368820 DOUBLE KILL AT WAWAYANDA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|--|---|--|---|---|---|--|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| MAY 24... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 | E.004 |
| DATE | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
| MAY 24... | | | | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | |

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 05... | 0947 | <20 | <100 | 350 | AUG 01... | 0945 | 1300 | 1700 | 540 |
| 11... | 0946 | 210 | 200 | 2100 | | | | | |
| 18... | 0946 | 40 | 100 | 170 | | | | | |
| 25... | 0945 | <20 | <100 | 140 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01377000 HACKENSACK RIVER AT RIVERVALE, NJ

LOCATION.--Lat 40°59'55", long 73°59'27", Bergen County, Hydrologic Unit 02030103, at bridge on Westwood Avenue in Rivervale, 1.5 mi upstream from Pascack Brook, 4.6 mi upstream from Oradell Dam, and 27.2 mi upstream from mouth.

DRAINAGE AREA.--58.0 mi².

PERIOD OF RECORD.--Water years 1962, 1964 to current year.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | |
|-----------|------|---|--|--|--|--|--|--|--|--|---|---|---|---|
| | | | | | | | | | | | | | | |
| NOV 28... | 0800 | 23 | -- | .142 | .106 | 757 | 72 | 9.0 | 7.6 | 428 | -- | 5.5 | 130 | |
| FEB 22... | 0830 | 42 | -- | .105 | .076 | 768 | 71 | 10.0 | 8.0 | 903 | -5.0 | 1.5 | 160 | |
| MAY 23... | 0800 | 86 | 9.1 | .119 | .086 | 755 | 68 | 6.6 | 7.7 | 570 | 14.0 | 16.5 | 120 | |
| AUG 09... | 0800 | 86 | 16 | .137 | .099 | 758 | 60 | 4.9 | 7.6 | 502 | 27.0 | 25.0 | 110 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| | | | | | | | | | | | | | | |
| NOV 28... | 40.6 | 7.49 | 2.10 | 31.2 | 94 | 55.5 | E.1 | 5.1 | 15.5 | 228 | 217 | .060 | .51 | |
| FEB 22... | 49.2 | 8.73 | 2.09 | 98.8 | 98 | 180 | <.2 | 5.3 | 18.3 | 425 | 425 | .120 | .38 | |
| MAY 23... | 36.0 | 6.34 | 1.68 | 59.9 | 80 | 112 | <.2 | 2.4 | 15.9 | 323 | 284 | .150 | .48 | |
| AUG 09... | 34.7 | 6.25 | 2.09 | 47.0 | 83 | 88.5 | <.2 | 6.0 | 9.7 | 268 | 245 | .200 | .57 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| | | | | | | | | | | | | | | |
| NOV 28... | .08 | .52 | .531 | .005 | 1.0 | 1.1 | .101 | .020 | .043 | .6 | <.1 | 5.1 | .6 | |
| FEB 22... | .11 | .56 | .777 | .005 | 1.2 | 1.3 | .088 | .011 | .031 | .7 | <.1 | 3.8 | .7 | |
| MAY 23... | .11 | .59 | .371 | .016 | .85 | .96 | .181 | .021 | .063 | 1.5 | <.1 | 4.7 | 1.5 | |
| AUG 09... | .20 | .96 | .189 | .021 | .76 | 1.2 | .253 | .011 | .098 | 1.7 | <.1 | 5.3 | 1.7 | |
| DATE | | | | | | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | |
| | | | | | | | | | | | | | | |
| NOV 28... | | | | | | E1.8 | -- | 50 | <1 | | | | | |
| FEB 22... | | | | | | E1.1 | -- | 51 | 7 | | | | | |
| MAY 23... | | | | | | 2.8 | 10.9 | 44 | 12 | | | | | |
| AUG 09... | | | | | | 2.4 | 42.5 | 43 | 12 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

HACKENSACK RIVER BASIN

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | JUL | | | | |
| 05... | 1015 | 5400 | 2100 | 4500 | 16... | 1105 | 220 | 100 | 170 |
| 09... | 1112 | 220 | 600 | 260 | 23... | 1120 | 1700 | 500 | 340 |
| | | | | | 30... | 1114 | 330 | 300 | 90 |

HACKENSACK RIVER BASIN

89

01378387 TENAKILL BROOK AT OLD CLOSTER DOCK ROAD, AT CLOSTER, NJ

LOCATION.--Lat 41°58'43", long 73°58'02", Bergen County, Hydrologic Unit 02030103, at bridge on Old Closter Dock Road, 0.4 mi upstream of Oradell Reservoir, 0.4 mi north of Closter, and 1.6 mi north of Demarest.

DRAINAGE AREA.--8.69 mi².

PERIOD OF RECORD.--Water Year 1999, November 2000 to September 2001.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|--|---|--|--|---|--|---|--|--|---|
| NOV 08... | 1000 | -- | .078 | .061 | 766 | 74 | 8.9 | 7.7 | 578 | -- | 7.5 | 220 | 67.7 | |
| FEB 01... | 1000 | -- | .159 | .120 | 763 | 86 | 11.3 | 7.5 | 671 | 5.5 | 4.0 | 150 | 45.1 | |
| MAY 23... | 1000 | 5.8 | .201 | .154 | 760 | 56 | 5.7 | 7.4 | 377 | 15.5 | 14.5 | 120 | 38.6 | |
| SEP 05... | 1030 | 3.5 | .059 | .043 | 766 | 84 | 8.1 | 8.0 | 587 | 23.0 | 17.5 | 210 | 67.5 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | ANC UNFLTRD TIT 4.5 LAB SOLVED (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA (MG/L AS N) (00610) | |
| NOV 08... | 11.3 | 2.36 | 29.3 | 162 | 65.9 | <.2 | 17.5 | 25.8 | 324 | 322 | .060 | .23 | .09 | |
| FEB 01... | 8.68 | 2.79 | 68.0 | 91 | 127 | <.2 | 12.5 | 25.8 | 372 | 352 | .110 | .35 | .08 | |
| MAY 23... | 6.81 | 2.59 | 23.9 | 88 | 46.9 | <.2 | 10.7 | 18.7 | 234 | 206 | .150 | .70 | .14 | |
| SEP 05... | 11.1 | 2.05 | 30.9 | 159 | 71.4 | <.2 | 17.4 | 27.7 | 348 | 324 | <.030 | E.29 | <.03 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR- TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 08... | .24 | 1.27 | .021 | 1.5 | 1.5 | .045 | .015 | .031 | .4 | <.1 | 2.8 | .4 | E1.2 | |
| FEB 01... | .48 | 1.73 | .013 | 2.1 | 2.2 | .067 | .018 | .040 | .6 | <.1 | 4.8 | .6 | E1.1 | |
| MAY 23... | .78 | .952 | .034 | 1.6 | 1.7 | .215 | .052 | .103 | 1.7 | <.1 | 6.3 | 1.7 | 2.3 | |
| SEP 05... | .30 | E1.54 | .034 | -- | -- | .069 | .033 | .058 | .5 | <.1 | 2.3 | .5 | <1.0 | |

E Estimated value.

< Actual value is known to be less than the value shown.

HACKENSACK RIVER BASIN

01378387 TENAKILL BROOK AT OLD CLOSTER DOCK ROAD, AT CLOSTER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | | | | BORON, DIS- SOLVED (UG/L) AS B (01020) | | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | |
|--------------|------|---|--|--|---|---|---|---|---|---|--|--|--|-----|
| DATE | | NOV 08... | | | | -- | | 66 | | 1 | | | | |
| FEB 01... | | | | | | -- | | 51 | | 1 | | | | |
| MAY 23... | | | | | | 10.2 | | 64 | | 8 | | | | |
| SEP 05... | | | | | | 12.7 | | 65 | | 5 | | | | |
| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | |
| SEP 05... | 1030 | <2 | 126 | <.06 | 63 | <.04 | <1 | 1.5 | 250 | <1 | 76 | <.01 | 1 | |
| | | DATE | | | | SELE- NIUM, TOTAL (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | | | | | | |
| SEP 05... | | | | | | .4 | <.05 | 3 | | | | | | |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | |
| FEB 01... | 1000 | 1.09 | .67 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |
| DATE | TIME | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | |
| FEB 01... | | <.10 | <.2 | .10 | .50 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | 1.7 |
| DATE | TIME | METHYL CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | | |
| FEB 01... | | <.2 | <.20 | <.10 | <.10 | 1.1 | <.10 | .12 | <.20 | <.2 | | | | |

< Actual value is known to be less than the value shown.

HACKENSACK RIVER BASIN

91

01378387 TENAKILL BROOK AT OLD CLOSTER DOCK ROAD, AT CLOSTER, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD | ALA- CHLOR, WATER, DISS, | ALPHA BHC DIS- | ATRA- ZINE, WATER, DISS, | BEN- FLUR- ALIN WAT FLD | CAR- BARYL WATER FLTRD | CARBO- FURAN WATER FLTRD | CHLOR- PYRIFOS DIS- | CYANA- ZINE, WATER, DISS, | DCPA WATER FLTRD | DEETHYL ATRA- ZINE, WATER, DISS, | DI- AZINON, DIS- | |
|--------------|-------|-------------------------------------|------------------------------------|---------------------------------|------------------------------------|----------------------------------|------------------------------------|------------------------------------|-----------------------------------|------------------------------------|------------------------------------|--|------------------------------------|-----------------------------------|
| | | REC | REC, | SOLVED | REC | GF, REC | GF, REC | GF, REC | SOLVED | REC | GF, REC | REC | SOLVED | |
| | | (UG/L) (49260) | (UG/L) (46342) | (UG/L) (34253) | (UG/L) (39632) | (UG/L) (82673) | (UG/L) (82680) | (UG/L) (82674) | (UG/L) (38933) | (UG/L) (04041) | (UG/L) (82682) | (UG/L) (04040) | (UG/L) (39572) | |
| MAY 23... | 1000 | <.004 | <.002 | <.005 | .011 | E.005 | E.618 | <.020 | E.003 | <.018 | <.003 | <.006 | .051 | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED | EPTC WATER FLTRD | LINDANE DIS- | LIN- URON WATER FLTRD | MALA- THION, DIS- | METHYL AZIN- PHOS WAT FLT | METO- LACHLOR WATER FLTRD | METRI- BUZIN WATER FLTRD | MOL- INATE WATER FLTRD | NAPROP- AMIDE WATER FLTRD | P,P' DDE DISSOLV | PENDI- METH- ALIN WAT FLT | PRO- METON, WATER, DISS, |
| | | GF, REC | GF, REC | SOLVED | GF, REC | SOLVED | GF, REC | DISSOLV | DISSOLV | GF, REC | GF, REC | DISSOLV | GF, REC | REC |
| | | (UG/L) (39381) | (UG/L) (82668) | (UG/L) (39341) | (UG/L) (82666) | (UG/L) (39532) | (UG/L) (82686) | (UG/L) (39415) | (UG/L) (82630) | (UG/L) (82671) | (UG/L) (82684) | (UG/L) (34653) | (UG/L) (82683) | (UG/L) (04037) |
| MAY 23... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 | .061 | |
| DATE | TIME | SI- MAZINE, WATER, DISS, | TEBU- THIURON WATER FLTRD | TER- BACIL WATER FLTRD | THIO- BENCARB WATER FLTRD | TRI- FLUR- ALIN WAT FLT | | | | | | | | |
| | | REC | GF, REC | GF, REC | GF, REC | GF, REC | | | | | | | | |
| | | (UG/L) (04035) | (UG/L) (82670) | (UG/L) (82665) | (UG/L) (82681) | (UG/L) (82661) | | | | | | | | |
| MAY 23... | | .041 | <.016 | <.034 | <.005 | E.007 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 05... | 0945 | >24000 | 5900 | 7500 | JUL 16... | 1056 | 230 | 900 | 230 |
| 09... | 1104 | 2400 | 1800 | 2200 | 23... | 1105 | 490 | 800 | 200 |
| | | | | | 30... | 1104 | 2400 | 500 | 320 |

E Estimated value.

< Actual value is known to be less than the value shown.

> Actual value is known to be greater than the value shown.

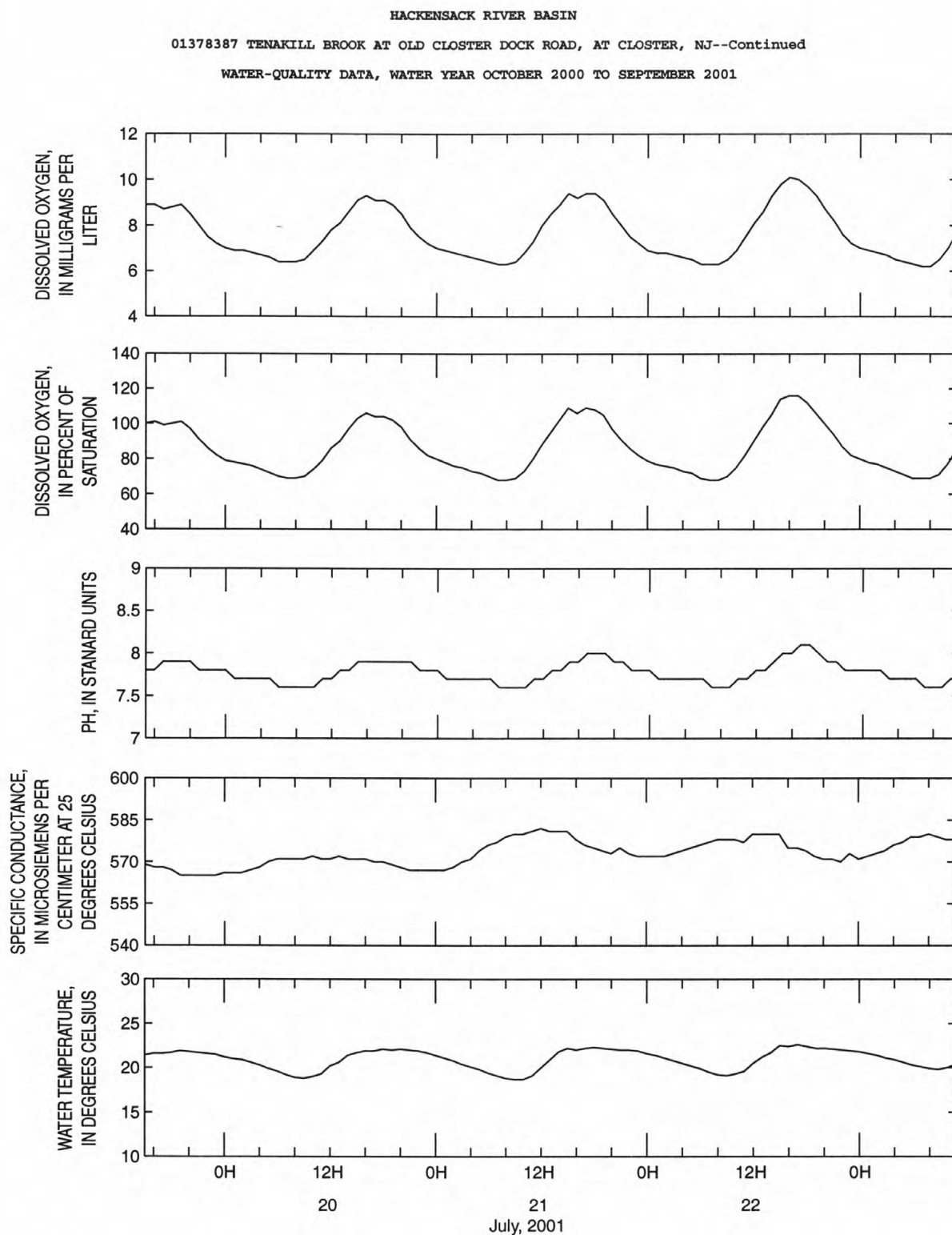


Figure 29. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01378387 Tenakill Brook at Old Closter Dock Road, at Closter, water year 2001.

HACKENSACK RIVER BASIN

93

01378560 COLES BROOK AT HACKENSACK, NJ

LOCATION.--Lat 40°54'40", long 74°02'26", Bergen County, Hydrologic Unit 02030103, at bridge on Main Street in Hackensack, 0.8 mi above mouth, and 1.9 mi northwest of Teaneck.

DRAINAGE AREA.--7.0 mi².

PERIOD OF RECORD.--Water years 1962, 1965, 1967, 1998 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator and Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|---|--|--|--|---|---|--|--|---|---|---|--|
| NOV 01... | 1140 | 1.3 | -- | .100 | .079 | 759 | 60 | 7.1 | 7.9 | 689 | 14.0 | 8.0 | 240 | |
| FEB 13... | 1130 | 5.5 | -- | .077 | .056 | 769 | 106 | 14.0 | 7.8 | 855 | 8.0 | 4.0 | 220 | |
| MAY 03... | 0950 | 4.3 | -- | .090 | .069 | 767 | 70 | 6.6 | 7.8 | 759 | 28.0 | 18.5 | 220 | |
| AUG 13... | 1030 | 4.1 | 10 | .173 | .132 | 759 | 68 | 5.8 | 7.2 | 130 | 28.0 | 23.0 | 37 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB AS CACO3 (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 01... | 70.7 | 15.2 | 2.87 | 39.1 | 170 | 97.3 | <.2 | 15.1 | 24.6 | 388 | 371 | .070 | .34 | |
| FEB 13... | 67.6 | 13.0 | 2.01 | 74.5 | 144 | 153 | <.2 | 11.8 | 30.1 | 477 | 447 | .060 | .23 | |
| MAY 03... | 67.3 | 13.4 | 2.28 | 50.2 | 158 | 124 | <.2 | 9.2 | 25.5 | 440 | 392 | .150 | .56 | |
| AUG 13... | 11.3 | 2.11 | 1.69 | 8.0 | 26 | 14.1 | <.2 | 3.3 | 6.9 | 76 | 67 | .120 | .40 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 01... | .12 | .41 | .855 | .010 | 1.2 | 1.3 | .061 | .027 | .043 | .4 | <.1 | 3.4 | .4 | |
| FEB 13... | .05 | .30 | 1.95 | .017 | 2.2 | 2.3 | .064 | .008 | .030 | .6 | <.1 | 3.3 | .6 | |
| MAY 03... | .20 | .73 | 1.20 | .074 | 1.8 | 1.9 | .116 | .023 | .068 | E.9 | <.1 | 2.9 | E.9 | |
| AUG 13... | .13 | .56 | .731 | .021 | 1.1 | 1.3 | .100 | .082 | .131 | 1.2 | <.1 | 4.5 | 1.1 | |

< Actual value is known to be less than the value shown.

HACKENSACK RIVER BASIN

01378560 COLES BROOK AT HACKENSACK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310) | | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | | BORON, DIS-SOLVED (UG/L) AS B) (01020) | | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | |
|------|--|--|---|--|--|--|--|--|--|--|
| DATE | | | NOV 01... | | FEB 13... | | MAY 03... | | AUG 13... | |
| | | | E1.6 | | -- | | 45 | | 1 | |
| | | | E1.0 | | -- | | 30 | | 6 | |
| | | | E1.4 | | 20.3 | | 45 | | 14 | |
| | | | E1.6 | | 10.3 | | 18 | | 3 | |

| DATE | | TIME | | SAMPLE TYPE | | PH SED BED MAT (STD UNITS) (70310) | | NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | | NITRO-GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | | PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | | CARBON, INOR-GANIC, TOT. IN BOT MAT (G/KG AS C) (00686) | | ARSENIC TOTAL (UG/L AS AS) (01002) | | BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007) | | BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012) | | BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022) | |
|-----------|--|------|--|---------------|--|------------------------------------|--|---|--|--|--|---|--|--|--|---|--|------------------------------------|--|---|--|---|--|---|--|
| AUG 13... | | 0945 | | CHURN BLANK | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |
| 13... | | 0946 | | FIELD BLANK | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |
| 13... | | 1030 | | ENVIRONMENTAL | | -- | | -- | | -- | | -- | | -- | | -- | | 2 | | 32.3 | | <.06 | | 20 | |
| 13... | | 1030 | | BED MATERIAL | | 7.00 | | 100 | | 3.5 | | 130 | | 2.4 | | .2 | | -- | | -- | | -- | | -- | |

| DATE | | TIME | | SAMPLE TYPE | | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | | CHRO-MIUM, RECOV-ERABLE (UG/L AS CR) (01034) | | COPPER, DIS-SOLVED (UG/L AS CU) (01040) | | COPPER, RECOV-ERABLE (UG/L AS CU) (01042) | | IRON, RECOV-ERABLE (UG/L AS FE) (01045) | | LEAD, DIS-SOLVED (UG/L AS PB) (01049) | | LEAD, RECOV-ERABLE (UG/L AS PB) (01051) | | MANGA-NESE, RECOV-ERABLE (UG/L AS MN) (01055) | | MERCURY TOTAL (UG/L AS HG) (01052) | | NICKEL, DIS-SOLVED (UG/L AS NI) (01065) | | NICKEL, RECOV-ERABLE (UG/L AS NI) (01067) | | SELE-NIUM, TOTAL (UG/L AS SE) (01147) | |
|-----------|--|------|--|-------------|--|--|--|--|--|---|--|---|--|---|--|---------------------------------------|--|---|--|---|--|------------------------------------|--|---|--|---|--|---------------------------------------|--|
| AUG 13... | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |
| 13... | | -- | | -- | | <.2 | | -- | | -- | | -- | | <.08 | | -- | | -- | | <.01 | | -- | | <.06 | | -- | | -- | |
| 13... | | .04 | | <1 | | -- | | 4.2 | | 450 | | -- | | 4 | | 87 | | -- | | <.01 | | -- | | 1 | | E.2 | | -- | |
| 13... | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |

| DATE | | TIME | | SAMPLE TYPE | | SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077) | | ZINC, DIS-SOLVED (UG/L AS ZN) (01090) | | ZINC, RECOV-ERABLE (UG/L AS ZN) (01092) | | ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003) | | CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028) | | CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029) | | COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038) | | COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043) | | IRON, SEDIMT, BED MA-TERIAL (UG/G AS FE) (01170) | | LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052) | | MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053) | | MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (01067) | | NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI) (01068) | |
|-----------|--|------|--|-------------|--|---|--|---------------------------------------|--|---|--|---|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| AUG 13... | | -- | | 4 | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |
| 13... | | -- | | 7 | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |
| 13... | | <.05 | | -- | | 11 | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |
| 13... | | -- | | -- | | -- | | <1 | | .1 | | 7.7 | | 2.7 | | 18 | | 5600 | | 27 | | 87 | | .01 | | 7.7 | | -- | | -- | |

| DATE | | TIME | | SAMPLE TYPE | | SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148) | | ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093) | | 4HCYPEN PHENAN-THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | | 9H-FLU-ORENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | | 9H-FLU-ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | | ACENAPH-THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | | ACENAPH-THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) | | ANTHRA-CENE, 2-METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | | ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | | BENZ (A) ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | | BENZOB-ANTHRENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | | BENZO (G HI) PERY-LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | | | |
|-----------|--|------|--|-------------|--|--|--|--|--|--|--|---|--|---|--|--|--|--|--|---|--|--|--|---|--|---|--|--|--|---|--|----|--|
| AUG 13... | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |
| 13... | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |
| 13... | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |
| 13... | | <1 | | 60 | | 80 | | <50 | | E40 | | <50 | | 90 | | E40 | | 170 | | 400 | | 430 | | 400 | | 280 | | -- | | -- | | -- | |

E Estimated value.

< Actual value is known to be less than the value shown.

HACKENSACK RIVER BASIN

95

01378560 COLES BROOK AT HACKENSACK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM (UG/KG) (49400) | NAPTHAL ENE, 12 DIMETHYL SED, BM WS, <2MM (UG/KG) (49403) | NAPTHAL ENE, 16 DIMETHYL SED, BM WS, <2MM (UG/KG) (49404) | NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM (UG/KG) (49405) | NAPTHAL ENE, 26 DIMETHYL SED, BM WS, <2MM (UG/KG) (49406) | NAPTHAL ENE, 2- ETHYL- SED, BM WS <2MM DW REC (UG/KG) (49948) | NAPHTH- ALENE, BM SED, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) |
|--------------|---|---|--|---|--|--|---|---|---|--|--|--|--|
| AUG 13... | 370 | 510 | 80 | 930 | 310 | <50 | <50 | <50 | <50 | <50 | <50 | E30 | 20 |
| DATE | | | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. FALL DIAM. % FINER THAN .004 MM (80157) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) | | | |
| AUG 13... | | | <50 | 50 | 560 | <50 | 50 | 760 | <1 | <1 | | | |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYLENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
| FEB 13... | 1130 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
| DATE | | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL WATER UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL WATER UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
| FEB 13... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | 3.1 |
| DATE | | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | |
| FEB 13... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

HACKENSACK RIVER BASIN

01378560 COLES BROOK AT HACKENSACK, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|---|--|---|---|---|--|--|--|--|---|--|---|
| DATE | TIME | | | | | | | | | | | | |
| MAY 03... | 0950 | <.004 | <.002 | <.005 | E.003 | <.010 | E.017 | <.020 | .005 | <.018 | <.003 | <.006 | .005 |
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WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 05... | 0915 | >24000 | 3200 | 6000 | JUL 16... | 1036 | 3500 | 700 | 350 |
| 09... | 1034 | 1700 | 1800 | 3600 | 23... | 1030 | 1100 | 1500 | 360 |
| | | | | | 30... | 1032 | 2200 | 1000 | 460 |

E Estimated value.

< Actual value is known to be less than the value shown.

> Actual value is known to be greater than the value shown.

01378660 PASSAIC RIVER AT TEMPE WICK ROAD, NEAR MENDHAM, NJ

LOCATION.--Lat 40°46'17", long 74°34'12", Morris County, Hydrologic Unit 02030103, at bridge on Tempe Wick Road, 1.2 mi east of intersection of Tempe Wick Road and State Route 24, 0.6 mi upstream of Ledells Pond, and 1.7 mi east of Mendham.

DRAINAGE AREA.--1.80 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) |
|--------------|------|--|--|--|---|---|--|---|--|---|---|--|---|
| NOV 29... | 0800 | -- | .098 | .077 | 754 | 89 | 11.4 | 7.4 | 181 | 20.0 | 4.5 | 53 | 12.9 |
| FEB 27... | 0800 | -- | .078 | .059 | 753 | 80 | 10.8 | 7.5 | 265 | -- | 2.5 | 48 | 12.0 |
| MAY 24... | 0800 | -- | .107 | .084 | 749 | 72 | 7.5 | 7.1 | 213 | 14.0 | 12.6 | 55 | 13.5 |
| AUG 14... | 0800 | 6.8 | .232 | .182 | 750 | 79 | 7.2 | 7.0 | 207 | 20.0 | 19.0 | 52 | 12.8 |

| DATE | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
|--------------|---|--|---|--|--|---|--|--|---|--|--|--|---|
| NOV 29... | 5.07 | 1.06 | 12.2 | 33 | 19.7 | E.1 | 23.3 | 15.2 | 120 | 111 | E.030 | .15 | <.03 |
| FEB 27... | 4.43 | .86 | 26.1 | 23 | 46.7 | <.2 | 15.8 | 13.0 | 142 | 135 | .040 | .10 | .04 |
| MAY 24... | 5.18 | .86 | 17.6 | 34 | 30.4 | E.1 | 23.5 | 15.0 | 129 | 128 | <.030 | .22 | .03 |
| AUG 14... | 4.93 | 1.25 | 17.1 | 36 | 27.7 | E.1 | 19.5 | 13.7 | 134 | 120 | <.030 | .31 | <.03 |

| DATE | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
|--------------|---|--|--|--|--|---|--|---|--|---|---|--|---|
| NOV 29... | .46 | .303 | <.003 | .45 | .76 | .212 | .010 | .025 | 2.3 | <.1 | 3.0 | 2.3 | E1.8 |
| FEB 27... | .20 | .543 | <.003 | .64 | .74 | .046 | .007 | .021 | .7 | <.1 | 2.2 | .7 | <1.0 |
| MAY 24... | .24 | .348 | <.003 | .57 | .58 | .087 | .015 | .034 | .8 | <.1 | 3.1 | .8 | E1.4 |
| AUG 14... | .46 | .461 | .004 | .78 | .92 | .076 | .023 | .069 | 1.2 | <.1 | 5.5 | 1.2 | <1.1 |

| DATE | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) |
|------|---|---|---|
|------|---|---|---|

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|--------------|------|-----|----|
| NOV 29... | -- | 17 | 6 |
| FEB 27... | -- | 18 | 3 |
| MAY 24... | 3.40 | E10 | 6 |
| AUG 14... | 3.20 | 26 | 16 |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01378660 PASSAIC RIVER AT TEMPE WICK ROAD, NEAR MENDHAM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

01378660 PASSAIC RIVER AT TEMPE WICK ROAD, NEAR MENDHAM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1-TRI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHYL-ENE | 1,2-DI-CHLORO-ETHANE | 1,2-DI-CHLORO-PROPANE | TRANS-1,2-DI-CHLORO-ETHENE | BENZENE | BENZENE | BENZENE | BROMO-FORM | CARBON TETRA-CHLO-RIDE | | | |
|--------------|------|-------------------------|----------------------|--------------------------|-------------------------|--------------------------|-----------------------------|-------------------|-------------------|-------------------|---------------|-------------------------|-------------------|-------------------|-------------------|
| | | TOTAL | TOTAL | TOTAL | TOTAL | TOTAL | TOTAL | TOTAL | TOTAL | TOTAL | | | | | |
| | | (UG/L) (34506) | (UG/L) (34496) | (UG/L) (34501) | (UG/L) (32103) | (UG/L) (34541) | (UG/L) (34546) | (UG/L) (34566) | (UG/L) (34571) | (UG/L) (34536) | | | (UG/L) (34030) | (UG/L) (32104) | (UG/L) (32102) |
| FEB 27... | 0800 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | | |
| DATE | TIME | CHLORO-DI-BROMO-METHANE | CHLORO-BROMO-FORM | CIS-1,2-DI-CHLORO-ETHENE | BROMO-DI-CHLORO-METHANE | DI-CHLORO-FLUORO-METHANE | DI-ISO-PROPYL-ETHER, WATER, | ETHER | ETHER | ETHER | ETHYL-BENZENE | METHYL TERT-BUTYL ETHER | | | |
| | | TOTAL | TOTAL | TOTAL | TOTAL | TOTAL | UNFLTRD RECOVER | ETHYL | ETHER | ETHER | | | | | |
| | | (UG/L) (34301) | (UG/L) (32105) | (UG/L) (32106) | (UG/L) (77093) | (UG/L) (32101) | (UG/L) (34668) | (UG/L) (81577) | ETHER | ETHER | | | ETHER | (UG/L) (81576) | (UG/L) (50004) |
| FEB 27... | | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | |
| DATE | TIME | METHYL-CHLORIDE | METHYL-PARA-XYLENE | O-XYLENE | TETRA-CHLORO-ETHYL-ENE | TRI-CHLORO-ETHYL-ENE | TRI-CHLORO-FLUORO-METHANE | VINYL-CHLORIDE | | | | | | | |
| | | UNFLTRD REC | WHOLE TOTAL | STYRENE TOTAL | TOLUENE TOTAL | ETHYL-ENE TOTAL | METHANE TOTAL | RIDE TOTAL | | | | | | | |
| | | (UG/L) (34423) | (UG/L) (85795) | (UG/L) (77135) | (UG/L) (77128) | (UG/L) (34475) | (UG/L) (34010) | (UG/L) (39180) | (UG/L) (34488) | (UG/L) (39175) | | | | | |
| FEB 27... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED REC, (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED REC (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED REC (UG/L) (39572) | | | | |
|--------------|-------|---|---|---|---|---|---|---|---|--|---|--|---|---|--|--|--|
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| MAY 24... | 0800 | <.004 | <.002 | <.005 | E.002 | <.010 | E.060 | <.020 | <.005 | <.018 | <.003 | E.003 | E.002 | | | | |
| DATE | | DI- ELDRIN DIS- SOLVED GF, REC (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED GF, REC (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED GF, REC (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER FLTRD DISSOLV (UG/L) (39415) | METRI- BUZIN WATER FLTRD DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | | | |
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| MAY 24... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.001 | <.006 | <.003 | <.007 | <.003 | <.010 | <.015 | | | | |
| DATE | | | | DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| MAY 24... | | | | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01378660 PASSAIC RIVER AT TEMPE WICK ROAD, NEAR MENDHAM, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 1155 | 5400 | 4500 | 4300 | 06... | 1110 | 270 | 400 | 130 |
| 30... | 1045 | 490 | 1100 | 900 | 13... | 1110 | 790 | 400 | 190 |
| | | | | | 19... | 1123 | 230 | 200 | 90 |

PASSAIC RIVER BASIN

101

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ

LOCATION.--Lat 40°45'54", long 74°31'48", Morris County, Hydrologic Unit 02030103, at bridge on Camp Trail Road in Morristown National Historical Park, 20 ft downstream of unnamed tributary, 500 ft west of Mount Kemble, and 2.4 mi northeast of Bernardsville.

DRAINAGE AREA.--1.07 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | |
|-----------|--|--|---|---|--|--|---|--|--|---|---|---|---|
| | | | | | | | | | | | | | |
| NOV 16... | 1050 | ENVIRONMENTAL | .63 | -- | .044 | .035 | 750 | 94 | 11.4 | 7.4 | 130 | -- | |
| FEB 26... | 1010 | ENVIRONMENTAL | 2.6 | -- | .081 | .062 | 749 | 95 | 12.4 | 6.7 | 88 | 11.0 | |
| MAY 08... | 1050 | ENVIRONMENTAL | 1.5 | 2.8 | .040 | .031 | 763 | 96 | 10.6 | 7.5 | 119 | 16.5 | |
| AUG 21... | 1150 | ENVIRONMENTAL | .64 | 3.9 | .052 | .041 | 750 | 96 | 8.9 | 7.1 | 133 | 24.5 | |
| 21... | 1150 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 21... | 1151 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| DATE | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CAC03) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) |
| | | | | | | | | | | | | | |
| NOV 16... | 6.5 | 46 | 11.8 | 4.12 | .96 | 5.4 | 38 | 5.8 | E.1 | 27.3 | 14.9 | 94 | 94 |
| FEB 26... | 3.5 | 31 | 7.86 | 2.72 | .62 | 3.8 | 21 | 4.0 | <.2 | 18.0 | 12.6 | 73 | 64 |
| MAY 08... | 11.0 | 41 | 10.4 | 3.60 | .55 | 5.6 | 31 | 5.5 | E.1 | 23.0 | 14.9 | 90 | 89 |
| AUG 21... | 18.0 | 47 | 12.0 | 4.10 | .91 | 5.6 | 39 | 6.3 | E.1 | 25.9 | 14.0 | 98 | 94 |
| 21... | -- | 47 | 12.0 | 4.20 | .99 | 6.0 | 39 | 5.8 | <.1 | -- | 13.0 | 100 | 68 |
| 21... | -- | 47 | 12.0 | 4.20 | 1.00 | 6.0 | 38 | 5.8 | <.1 | -- | 13.0 | 100 | 66 |
| DATE | NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AM-MONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR-TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | |
| | | | | | | | | | | | | | |
| NOV 16... | <.030 | E.08 | <.03 | E.08 | .124 | <.003 | -- | -- | .038 | .004 | -- | -- | .004 |
| FEB 26... | .050 | E.09 | .04 | .13 | .381 | <.003 | -- | .51 | .061 | E.003 | -- | -- | .011 |
| MAY 08... | <.030 | E.08 | <.03 | .11 | 1.59 | <.003 | -- | 1.7 | E.013 | .005 | -- | -- | .020 |
| AUG 21... | <.030 | .12 | <.03 | .29 | .337 | <.003 | .46 | .63 | .100 | .014 | <.020 | <.020 | .023 |
| 21... | .025 | .09 | .03 | <.10 | .600 | <.050 | .69 | -- | .009 | .042 | .042 | .042 | .022 |
| 21... | .025 | .13 | .03 | .28 | .270 | <.050 | .40 | .55 | -- | .018 | .046 | .042 | .032 |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED TOTAL (MG/L AS C) (00681) | CARBON, ORGANIC ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) | | | | | | |
|-------|-------|---|---|--|---|---|--|--|--|---|---|--|---|--|--|
| DATE | TIME | SAMPLE TYPE | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | | | |
| AUG | | | | | | | | | | | | | | | |
| 21... | 1002 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 21... | 1150 | ENVIRONMENTAL | -- | -- | -- | -- | -- | -- | <2 | 12.0 | E.03 | 9 | | | |
| 21... | 1150 | BED MATERIAL | 7.00 | 4000 | 17 | 780 | 66 | <.2 | -- | -- | -- | -- | | | |
| 21... | 1150 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | <2 | 13.0 | <1.30 | 30 | | | |
| 21... | 1151 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | <2 | 13.0 | <1.30 | 21 | | | |
| DATE | TIME | SAMPLE TYPE | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71890) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL (UG/L AS SE) (01147) |
| AUG | | | | | | | | | | | | | | | |
| 21... | -- | -- | <.2 | -- | -- | <.08 | -- | -- | -- | <.01 | -- | <.06 | -- | -- | -- |
| 21... | E.03 | <1 | -- | .9 | 280 | -- | <1 | 28 | -- | <.01 | -- | <1 | <.4 | -- | -- |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | <1.00 | <2 | -- | <1.5 | 350 | -- | 3 | 20 | -- | -- | -- | -- | <5 | <1.8 | -- |
| 21... | <1.00 | <2 | -- | <2.5 | 260 | -- | 2 | 20 | -- | -- | -- | -- | <5 | <1.8 | -- |
| DATE | TIME | SAMPLE TYPE | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) | COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053) | MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) |
| AUG | | | | | | | | | | | | | | | |
| 21... | -- | <1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | <.05 | -- | 6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | -- | -- | -- | 3 | 14 | 31 | 11 | 46 | 2500 | 33 | 510 | .04 | .4 | -- | -- |
| 21... | <1.50 | -- | <8 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | <1.50 | -- | <8 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DATE | TIME | SAMPLE TYPE | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148) | ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH- THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH- THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ (A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO (G HI) PERY- LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) |
| AUG | | | | | | | | | | | | | | | |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | <1 | 80 | <50 | <50 | <50 | <50 | <50 | E50 | <50 | <50 | 60 | 70 | E50 | <50 | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

103

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403) | NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPTHAL ENE, 2- ETHYL- SED, BM WS <2MM DW REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | |
|-------|--|---|---|--|--|--|---|---|--|---|--|---|--|-----|
| AUG | | | | | | | | | | | | | | |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 21... | E40 | 80 | <50 | 110 | E40 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <10 | |
| | | | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN- THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. FALL DIAM. % FINER THAN .004 MM (80157) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) | | | | |
| AUG | | | | | | | | | | | | | | |
| 21... | | | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 21... | | | -- | -- | -- | -- | -- | -- | -- | -- | | | | |
| 21... | | | <50 | <50 | <50 | <50 | <50 | 90 | 19 | 56 | | | | |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | |
| FEB | 26... | 1010 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |
| DATE | | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL WATER UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | |
| FEB | 26... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
| | | | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYLL CHLO- RIDE TOTAL (UG/L) (39175) | | | |
| FEB | 26... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ACETO- CHLOR, WATER FLTRD | ALA- CHLOR, WATER, DISS, | ALPHA BHC DIS- | ATRA- ZINE, WATER, DISS, | BEN- FLUR- ALIN WAT FLT | CAR- BARYL WATER FLTRD | CARBO- FURAN WATER FLTRD | CHLOR- PYRIFOS DIS- | CYANA- ZINE, WATER, DISS, | DCPA WATER FLTRD | DEETHYL ATRA- ZINE, WATER, DISS, | DI- AZINON, DIS- | | |
|--------------|------|--|---|--|---|---|---|---|--|---|---|--|---|---|--|
| | | REC (UG/L) (49260) | REC, (UG/L) (46342) | SOLVED (UG/L) (34253) | REC (UG/L) (39632) | GF, REC (UG/L) (82673) | GF, REC (UG/L) (82680) | GF, REC (UG/L) (82674) | SOLVED (UG/L) (38933) | REC (UG/L) (04041) | GF, REC (UG/L) (82682) | REC (UG/L) (04040) | SOLVED (UG/L) (39572) | | |
| | | | | | | | | | | | | | | | |
| MAY 08... | 1050 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 | | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER FLTRD 0.7 U DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER FLTRD 0.7 U DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| MAY 08... | | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | |
| DATE | TIME | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| MAY 08... | | | | | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| MAY | | | | | JUN | | | | |
|-------|------|---|--|---|-------|------|---|--|---|
| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
| MAY | | | | | JUN | | | | |
| 23... | 1213 | 130 | <100 | 60 | 06... | 1128 | <20 | <100 | 90 |
| 30... | 1105 | 50 | <100 | 80 | 13... | 1130 | 20 | 200 | 180 |
| | | | | | 19... | 1145 | 70 | 100 | 400 |

< Actual value is known to be less than the value shown.

01379200 DEAD RIVER NEAR MILLINGTON, NJ

LOCATION.--Lat 40°38'56", long 74°31'26", Morris County, Hydrologic Unit 02030103, at bridge on King George Road (Spur County Route 527), 100 ft upstream from mouth, 2.0 mi south of Millington, and 4.2 mi south of Basking Ridge.

DRAINAGE AREA.--20.8 mi².

PERIOD OF RECORD.--Water years 1962, 1963-65, 1967, 1998 to current year.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 14... | 1310 | E13 | -- | .143 | .111 | 750 | 73 | 8.0 | 7.5 | 500 | 11.5 | 10.5 | 130 |
| FEB 26... | 1310 | 153 | -- | .202 | .159 | 757 | 90 | 12.0 | 6.6 | 558 | 11.5 | 3.0 | 87 |
| MAY 23... | 1240 | 51 | 33 | .226 | .175 | 753 | 65 | 6.5 | 7.3 | 422 | 18.0 | 14.5 | 96 |
| AUG 30... | 1140 | 5.5 | 20 | .096 | .071 | 759 | 91 | 8.2 | 7.5 | 712 | 25.5 | 20.0 | 160 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|---|
| NOV 14... | 33.0 | 11.4 | 4.90 | 42.4 | 78 | 67.3 | E.2 | 15.8 | 38.8 | 293 | 287 | <.030 | .52 |
| FEB 26... | 22.2 | 7.74 | 1.54 | 63.9 | 28 | 135 | <.2 | 10.4 | 14.6 | 311 | 278 | .040 | .26 |
| MAY 23... | 24.5 | 8.34 | 2.70 | 38.7 | 55 | 68.8 | E.1 | 13.3 | 25.1 | 252 | 223 | .120 | .71 |
| AUG 30... | 41.3 | 14.4 | 6.99 | 72.1 | 79 | 109 | .2 | 14.0 | 53.4 | 427 | 359 | .070 | .59 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|--|---|---|--|--------------------------------------|--|--|---------------------------------------|---|---|--|--|
| NOV 14... | <.03 | .54 | 5.94 | .014 | 6.5 | 6.5 | .067 | 1.17 | 1.23 | .7 | <.1 | 4.8 | .6 |
| FEB 26... | .16 | .36 | 1.26 | <.003 | 1.5 | 1.6 | .080 | .087 | .096 | .7 | <.1 | 5.4 | .7 |
| MAY 23... | .11 | .89 | 1.90 | .038 | 2.6 | 2.8 | .245 | .519 | .619 | 1.9 | <.1 | 6.9 | 1.9 |
| AUG 30... | .07 | .64 | E11.6 | .015 | -- | -- | .127 | E2.57 | 2.70 | .8 | <.1 | 3.7 | .8 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|----|
| NOV 14... | E1.1 | -- | 230 | 4 |
| FEB 26... | E1.2 | -- | 61 | 7 |
| MAY 23... | 2.8 | 6.00 | 138 | 28 |
| AUG 30... | <1.0 | 4.50 | 312 | 11 |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01379200 DEAD RIVER NEAR MILLINGTON, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 1045 | 16000 | 500 | 3600 | 06... | 1045 | 2200 | 200 | 300 |
| 30... | 1110 | 490 | 300 | 390 | 13... | 1020 | 3500 | 1900 | 2500 |
| | | | | | 19... | 1015 | 3500 | 3000 | 890 |

PASSAIC RIVER BASIN

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01379200 DEAD RIVER NEAR MILLINGTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

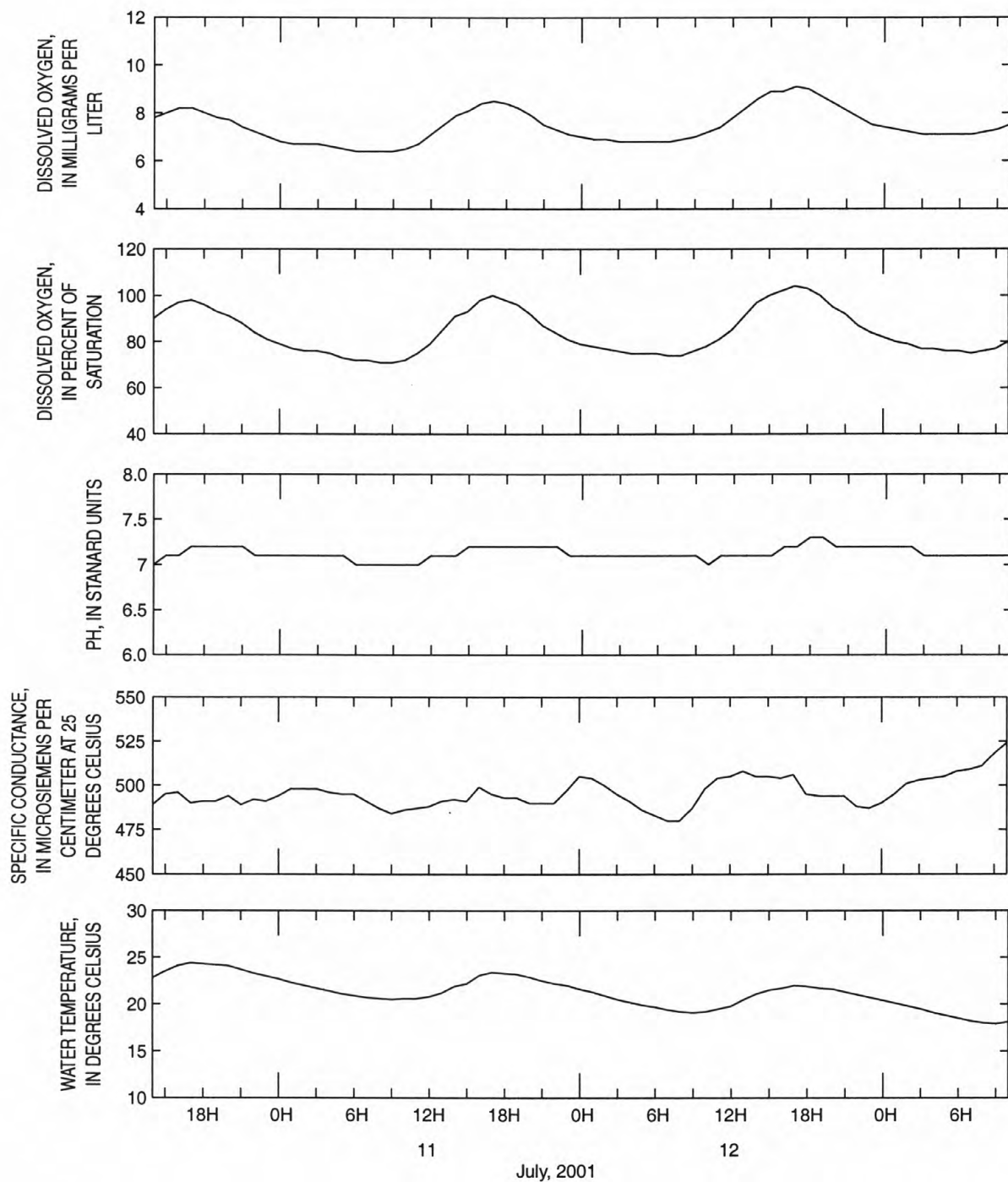


Figure 30. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01379200 Dead River near Millington, water year 2001.

PASSAIC RIVER BASIN

01380098 BEAVER BROOK AT MORRIS AVENUE, AT DENVILLE, NJ

LOCATION.--Lat 40°54'21", long 74°29'50", Morris County, Hydrologic Unit 02030103, at bridge on Morris Avenue, 0.8 mi upstream of mouth, 1.3 mi northeast of Denville, and 1.4 mi downstream of White Meadow Lake.

DRAINAGE AREA.--22.1 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY | UV ABSORB- ANCE | UV ABSORB- ANCE | BARO- METRIC PRES- | OXYGEN, DIS- SOLVED | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE | SPE- CIFIC | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|--|--|---|--|--|--|--|---|--|---|
| | | FIELD | 254 NM, WTR FLT | 280 NM, WTR FLT | SURE (MM OF HG) | (PER- CENT SATUR- ATION) | | FIELD (STAND- ARD UNITS) (00400) | CON- DUCT- ANCE (US/CM) (00095) | | | | | |
| | | UNFLTRD (NTU) (61028) | (CM) (50624) | (CM) (61726) | (00025) | (00301) | | | | | | | | |
| NOV 30... | 1100 | -- | .160 | .127 | 744 | 79 | 10.0 | 6.7 | 157 | 4.5 | 4.5 | 45 | 11.2 | |
| MAR 08... | 1100 | -- | .081 | .061 | 750 | 89 | 12.0 | 7.3 | 264 | 14.5 | 2.5 | 52 | 13.5 | |
| MAY 16... | 1100 | 9.0 | .163 | .129 | 747 | 56 | 5.4 | 7.0 | 201 | 18.3 | 16.0 | 58 | 14.5 | |
| AUG 09... | 1100 | 5.7 | .187 | .148 | 746 | 46 | 3.7 | 6.9 | 177 | 25.0 | 25.5 | 58 | 14.3 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| | | NOV 30... | 4.18 | .94 | 10.9 | 27 | 20.7 | <.2 | 10.7 | 11.1 | 89 | 87 | .040 | .25 |
| MAR 08... | 4.35 | .91 | 26.2 | 26 | 47.4 | <.2 | 7.3 | 15.4 | 139 | 132 | <.030 | .14 | <.03 | |
| MAY 16... | 5.15 | .93 | 15.0 | 38 | 29.9 | E.1 | 9.3 | 8.8 | 144 | 107 | .050 | .29 | .06 | |
| AUG 09... | 5.34 | .91 | 11.8 | 39 | 25.4 | E.1 | 8.2 | 8.0 | 110 | 98 | .080 | .27 | .09 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| | | NOV 30... | .28 | .244 | <.003 | .49 | .52 | .041 | .008 | .024 | .7 | <.1 | 4.0 | .7 |
| MAR 08... | .19 | .258 | <.003 | .40 | .45 | .032 | .004 | .015 | .4 | <.1 | 2.7 | .3 | <1.0 | |
| MAY 16... | .55 | .191 | .009 | .48 | .74 | .078 | .010 | .068 | .6 | <.1 | 3.4 | .6 | E1.4 | |
| AUG 09... | .34 | .133 | <.003 | .41 | .48 | .087 | .014 | .014 | .6 | <.1 | 3.8 | .6 | E1.7 | |
| DATE | | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEd (MG/L) (00530) | | | | | |
| | | | | | | | NOV 30... | -- | E8 | | | | | |
| MAR 08... | -- | | | | | | | 13 | 1 | | | | | |
| MAY 16... | | | | | | | 3.20 | 14 | 16 | | | | | |
| AUG 09... | | | | | | | 7.70 | E11 | 5 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

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01380098 BEAVER BROOK AT MORRIS AVENUE, AT DENVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|--------------|------|--|--|--|--|--|---|--|--|--|--|--|--|
| AUG 09... | 1100 | E2 | 10.7 | <.06 | 14 | E.02 | <1 | 1.1 | 1090 | <1 | 184 | <.01 | <1 |

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|--------------|---|--|--|
| AUG 09... | <.4 | <.05 | 3 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|--------------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|
| MAR 08... | 1100 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |

| DATE | TIME | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE UNFLTRD RECOVER (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|--------------|------|--|---|---|---|---|--|---|--|--|---|---|---|--|
| MAR 08... | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | E.1 |

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|--------------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
| MAR 08... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|--|--|--|---|---|--|--|--|--|---|--|---|
| MAY 16... | 1100 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01380098 BEAVER BROOK AT MORRIS AVENUE, AT DENVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|---|--|--|---|---|---|---|
| MAY 16... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| MAY 16... | <.011 | <.016 | <.034 | <.005 | <.009 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| MAY 23... | 1040 | 3500 | 2000 | 2300 | JUN 06... | 1015 | 330 | 500 | 120 |
| 30... | 0945 | 230 | <100 | 300 | 13... | 1020 | 210 | 200 | 200 |
| | | | | | 19... | 1025 | 790 | 700 | 430 |

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

111

01380100 BEAVER BROOK AT ROCKAWAY, NJ

LOCATION.--Lat 40°54'08", long 74°30'06", Morris County, Hydrologic Unit 02030103, at bridge on Gill Road in Rockaway, and 0.2 mi above mouth.

DRAINAGE AREA.--22.7 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 13... | 1110 | 12 | -- | .192 | .151 | 748 | 82 | 9.3 | 7.2 | 196 | -- | 9.0 | 55 |
| FEB 12... | 1050 | 63 | -- | .092 | .070 | 764 | 94 | 13.4 | 7.2 | 292 | 3.0 | 1.0 | 71 |
| MAY 02... | 1110 | 19 | 4.1 | .128 | .100 | 756 | 95 | 8.9 | 7.5 | 213 | 30.5 | 18.0 | 55 |
| AUG 22... | 1140 | 4.8 | 5.0 | .146 | .114 | 750 | 88 | 7.6 | 7.0 | 205 | 26.0 | 22.0 | 58 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|---|
| NOV 13... | 13.5 | 5.19 | 1.62 | 13.3 | 33 | 26.5 | E.1 | 10.9 | 14.6 | 114 | 106 | .030 | .30 |
| FEB 12... | 19.3 | 5.63 | 1.33 | 25.5 | 34 | 46.7 | E.1 | 7.6 | 23.9 | 163 | 152 | .040 | .25 |
| MAY 02... | 14.5 | 4.59 | .97 | 16.6 | 35 | 33.7 | E.1 | 6.8 | 12.7 | 132 | 111 | <.030 | .27 |
| AUG 22... | 14.6 | 5.21 | 1.03 | 13.7 | 40 | 30.6 | E.1 | 8.2 | 9.9 | 121 | 108 | <.030 | .25 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORGANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|--|---|---|---|--------------------------------------|--|--|---------------------------------------|---|--|--|---|
| NOV 13... | .03 | .34 | .071 | <.003 | .37 | .42 | .042 | .011 | .027 | .4 | <.1 | 5.4 | .4 |
| FEB 12... | .04 | .22 | .352 | .003 | .60 | .57 | .113 | .006 | .018 | .9 | <.1 | 3.0 | .9 |
| MAY 02... | <.03 | .34 | .123 | .006 | .39 | .46 | .104 | .013 | .029 | .5 | <.1 | 3.4 | .5 |
| AUG 22... | <.03 | .29 | .213 | <.003 | .46 | .50 | .043 | .017 | .044 | .4 | <.1 | 3.4 | .4 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|--|--|---------------------------------------|--|
| NOV 13... | 4.8 | -- | E13 | 3 |
| FEB 12... | <1.0 | -- | E13 | 4 |
| MAY 02... | E1.8 | 7.70 | E7 | 12 |
| AUG 22... | <1.0 | 2.80 | E11 | 14 |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01380100 BEAVER BROOK AT ROCKAWAY, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 1055 | 5400 | 1200 | 2000 | 06... | 1028 | 220 | 300 | 120 |
| 30... | 1000 | 170 | <100 | 310 | 13... | 1030 | 340 | 200 | 150 |
| | | | | | 19... | 1039 | 940 | 100 | 400 |

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

113

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ

LOCATION.--Lat 40°50'42", long 74°20'51", Morris County, Hydrologic Unit 02030103, at site of former bridge on Edwards Road, 200 ft downstream from bridges on Interstate 280, 0.4 mi upstream from Rockaway River, and 1.2 mi southwest of Pine Brook. Water-quality samples collected 450 ft upstream at bridge on Ridgedale Avenue.

DRAINAGE AREA.--68.5 mi².

PERIOD OF RECORD.--Water years 1963 to current year.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNPLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|--|--|---|--|--|--|--|--|--|---|---|---|---|
| NOV 14... | 1100 | 74 | -- | .336 | .257 | 755 | 71 | 7.9 | 7.4 | 460 | -- | 10.0 | 130 |
| FEB 15... | 1100 | 199 | -- | .153 | .116 | 758 | 84 | 10.9 | 7.3 | 754 | 5.0 | 4.0 | 130 |
| MAY 10... | 1100 | 50 | -- | .093 | .067 | 758 | 73 | 6.9 | 7.5 | 568 | 24.0 | 18.0 | 160 |
| AUG 30... | 1030 | 27 | 3.9 | .118 | .087 | 759 | 91 | 8.0 | 7.8 | 631 | 25.0 | 21.5 | 170 |
| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNPLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| NOV 14... | 32.6 | 11.0 | 3.51 | 36.1 | 74 | 75.3 | E.1 | 15.1 | 25.1 | 268 | 250 | .030 | .66 |
| FEB 15... | 35.2 | 10.9 | 2.67 | 85.9 | 65 | 165 | E.1 | 11.0 | 24.8 | 412 | 381 | .170 | .45 |
| MAY 10... | 39.6 | 14.2 | 3.32 | 47.4 | 86 | 104 | E.1 | 13.2 | 25.3 | 350 | 310 | .200 | .59 |
| AUG 30... | 43.9 | 15.4 | 3.65 | 53.7 | 94 | 116 | <.2 | 13.5 | 28.8 | 379 | 332 | .090 | .42 |
| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORGANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 14... | <.03 | .75 | 1.55 | .003 | 2.2 | 2.3 | .125 | .164 | .255 | 1.1 | <.1 | 8.3 | 1.1 |
| FEB 15... | .19 | .50 | 1.45 | .056 | 1.9 | 1.9 | .086 | E.048 | .099 | .7 | <.1 | 4.6 | .7 |
| MAY 10... | .20 | .84 | 2.56 | .042 | 3.2 | 3.4 | .190 | .160 | .324 | 1.8 | M | 3.2 | E1.8 |
| AUG 30... | .07 | .49 | E3.14 | .011 | -- | -- | .079 | .280 | .289 | .5 | <.1 | 3.9 | .5 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

PASSAIC RIVER BASIN

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|--------------|---|---|---|--|
| NOV 14... | E1.3 | -- | 67 | 10 |
| FEB 15... | <1.0 | -- | 46 | 7 |
| MAY 10... | E1.7 | 13.1 | 78 | 27 |
| AUG 30... | <1.3 | 11.3 | 99 | <1 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| MAY 23... | 1015 | 9200 | 4400 | 8200 | JUN 06... | 0945 | 330 | 100 | 150 |
| 30... | 0926 | 5400 | <100 | 2300 | 13... | 0953 | 330 | 400 | 320 |
| | | | | | 19... | 1000 | 2200 | 1300 | 490 |

E Estimated value.

< Actual value is known to be less than the value shown.

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

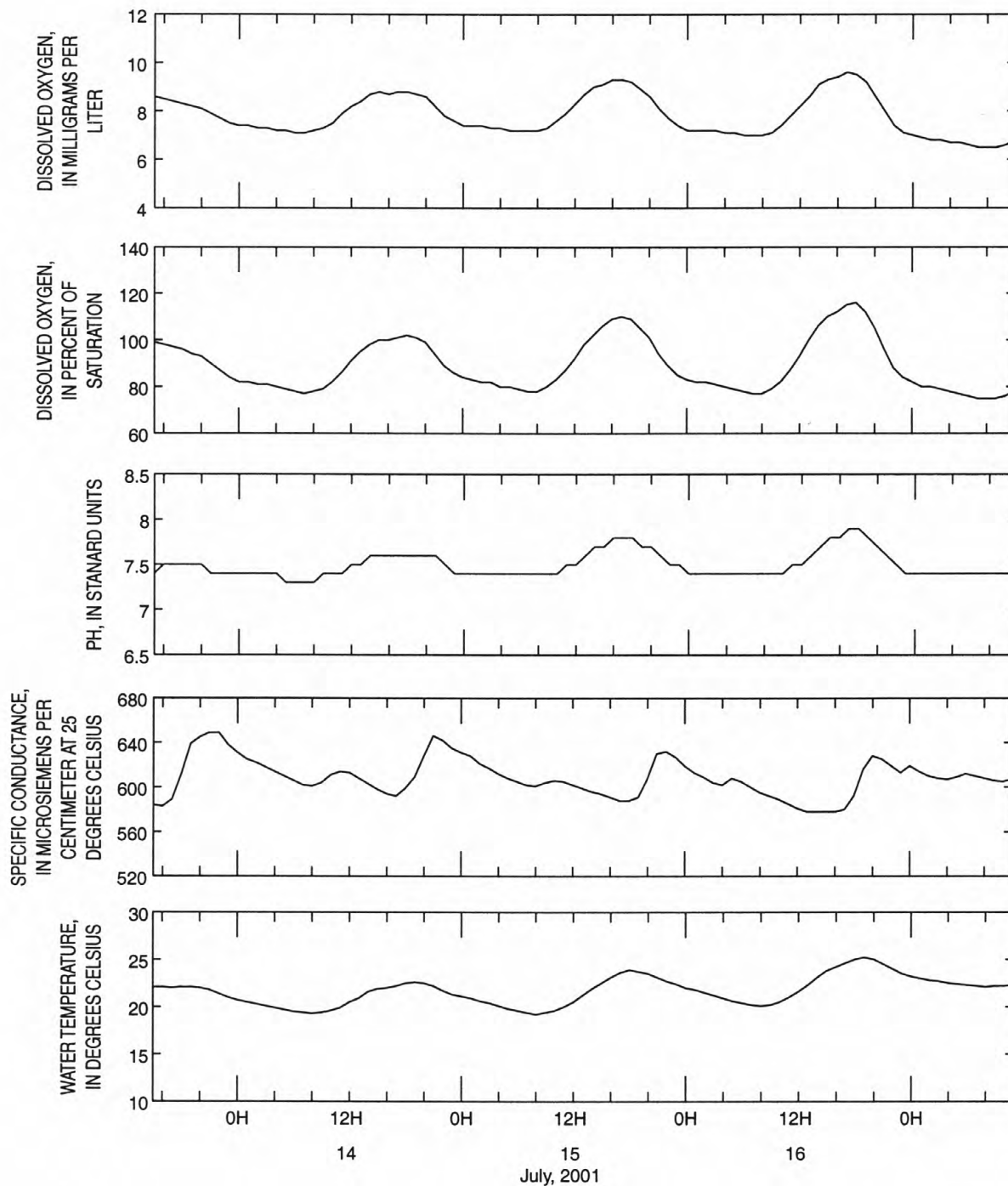


Figure 31. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01381800 Whippany River near Pine Brook, water year 2001.

PASSIAC RIVER BASIN

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ

LOCATION.--Lat 40°53'50", long 74°16'23", Passaic County, Hydrologic Unit 02030103, at bridge on Two Bridges Road in Two Bridges, and 50 ft upstream from Pompton River.

DRAINAGE AREA.--361 mi².

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1969 to September 1974.

pH: June 1969 to September 1974.

WATER TEMPERATURE: October 1962 to May 1969 (once daily), June 1969 to September 1974.

DISSOLVED OXYGEN: June 1969 to September 1974.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|---|---|---|--|--|---|---|---|--|
| NOV 14... | 1020 | 336 | -- | .348 | .278 | 753 | 51 | 5.6 | 7.3 | 418 | 12.0 | 10.5 | 100 | |
| FEB 21... | 1230 | 810 | -- | .168 | .128 | 759 | 98 | 12.9 | 7.6 | 504 | 5.0 | 3.5 | 97 | |
| MAY 02... | 0930 | 230 | 14 | .150 | .114 | 760 | 91 | 8.5 | 7.6 | 590 | 25.5 | 18.5 | 140 | |
| AUG 23... | 1320 | 143 | 20 | .129 | .094 | 755 | 87 | 7.2 | 7.5 | 590 | 27.0 | 24.5 | 140 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 14... | 25.6 | 9.13 | 4.57 | 37.2 | 67 | 60.9 | E.1 | 12.6 | 32.4 | 244 | 230 | .060 | .72 | |
| FEB 21... | 24.7 | 8.49 | 2.52 | 51.5 | 51 | 96.7 | <.2 | 11.3 | 22.3 | 276 | 255 | .050 | .31 | |
| MAY 02... | 35.2 | 12.1 | 3.55 | 54.2 | 84 | 105 | E.1 | 9.9 | 29.1 | 344 | 310 | .080 | .46 | |
| AUG 23... | 35.9 | 12.7 | 5.65 | 53.6 | 83 | 102 | <.2 | 13.6 | 34.8 | 342 | 325 | <.030 | .40 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 14... | .16 | .84 | 1.62 | .019 | 2.3 | 2.5 | .173 | .358 | .445 | 1.2 | <.1 | 8.9 | 1.1 | |
| FEB 21... | .04 | .43 | 1.48 | .013 | 1.8 | 1.9 | .052 | .155 | .187 | .6 | <.1 | 4.6 | .6 | |
| MAY 02... | .10 | .76 | 2.41 | .034 | 2.9 | 3.2 | .250 | .294 | .473 | 1.5 | <.1 | 4.7 | 1.5 | |
| AUG 23... | .03 | .71 | 3.65 | .032 | 4.0 | 4.4 | .324 | .497 | .592 | 2.1 | <.1 | 4.3 | 2.1 | |
| DATE | | OXYGEN DEMAND, BIO-CHEM-ICAL, METHOD 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | | | | | |
| NOV 14... | 2.7 | -- | 109 | 15 | | | | | | | | | | |
| FEB 21... | <1.2 | -- | 61 | 8 | | | | | | | | | | |
| MAY 02... | 3.3 | 43.4 | 113 | 22 | | | | | | | | | | |
| AUG 23... | E1.6 | 78.0 | 141 | 29 | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSIAC RIVER BASIN

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 02... | 1300 | 110 | 100 | 40 | 02... | 1250 | 80 | <100 | 20 |
| 11... | 1155 | 220 | <100 | 90 | | | | | |
| 18... | 1200 | 130 | 100 | 30 | | | | | |
| 25... | 1145 | 40 | 20 | <100 | | | | | |

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01382410 MACOPIN RIVER AT ECHO LAKE, NJ

LOCATION.--Lat 41°02'54", long 74°24'22", Passaic County, Hydrologic Unit 02030103, at bridge on Echo Lake Road, 0.1 mi downstream of Echo Lake, 1.0 mi southwest of community of Echo Lake, and 1.6 mi east of Newfoundland.

DRAINAGE AREA.--4.42 mi².

PERIOD OF RECORD.--Water year 1998, October 1999 to present.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER | UV ABSORB- ANCE 254 NM, WTR FLT | UV ABSORB- ANCE 280 NM, WTR FLT | BARO- METRIC PRES- SURE (MM OF HG) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) | OXYGEN, DIS- SOLVED (MG/L) | PH WATER WHOLE FIELD (STAND- ARD UNITS) | SPE- CIFIC CON- DUCT- ANCE (US/CM) | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | HARD- NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS- SOLVED (MG/L AS CA) | |
|--------------|------|---|--|--|--|---|---|--|--|--|--|---|--|---|
| | | (NTU) | (CM) | (CM) | (00025) | (00301) | (00300) | (00400) | (00095) | (00020) | (00010) | (00900) | (00915) | |
| | | (61028) | (50624) | (61726) | | | | | | | | | | |
| NOV 21... | 0945 | -- | .256 | .189 | 737 | 95 | 11.6 | 7.4 | 120 | -- | 5.5 | 36 | 9.20 | |
| FEB 14... | 1000 | -- | .254 | .188 | 744 | 100 | 13.3 | 7.4 | 133 | 4.0 | 2.5 | 35 | 8.88 | |
| MAY 22... | 1030 | 3.1 | .189 | .141 | 736 | 79 | 7.9 | 7.2 | 125 | 16.0 | 13.5 | 39 | 10.3 | |
| AUG 02... | 1030 | 1.3 | .066 | .048 | 748 | 79 | 7.1 | 7.7 | 309 | 27.0 | 19.5 | 100 | 26.8 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AM- MONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AM- MONIA TOTAL (MG/L AS N) (00610) |
| NOV 21... | 3.21 | .50 | 8.1 | 22 | 13.6 | <.2 | 3.7 | 8.0 | 78 | 60 | .080 | .53 | .09 | |
| FEB 14... | 3.22 | .57 | 9.3 | 21 | 16.6 | <.2 | 3.9 | 8.4 | 84 | 65 | .040 | .43 | .06 | |
| MAY 22... | 3.29 | .53 | 7.7 | 27 | 14.9 | <.2 | 3.5 | 7.5 | 81 | 65 | .030 | .39 | .06 | |
| AUG 02... | 8.89 | .68 | 20.0 | 85 | 39.8 | E.1 | 11.1 | 8.1 | 173 | 167 | <.030 | .11 | .03 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 21... | .74 | .179 | .004 | .71 | .92 | .147 | .007 | .032 | .9 | <.1 | 6.9 | .9 | E1.7 | |
| FEB 14... | .55 | .249 | <.003 | .68 | .80 | .173 | .008 | .025 | 1.0 | <.1 | 6.9 | 1.0 | E1.8 | |
| MAY 22... | .55 | .181 | <.003 | .57 | .73 | .161 | .013 | .036 | 1.1 | <.1 | 5.4 | 1.1 | 2.2 | |
| AUG 02... | .14 | .227 | <.003 | .34 | .37 | .040 | .024 | .027 | .3 | <.1 | 2.2 | .3 | <1.0 | |
| DATE | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEd (MG/L) (00530) | | | | | | |
| NOV 21... | -- | | | | | | E7 | 7 | | | | | | |
| FEB 14... | -- | | | | | | E12 | 4 | | | | | | |
| MAY 22... | 16.9 | | | | | | E7 | 9 | | | | | | |
| AUG 02... | .400 | | | | | | 13 | 4 | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

119

01382410 MACOPIN RIVER AT ECHO LAKE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|

| | | | | | | | | | | | | | | |
|-----|-------|------|---|-----|------|----|------|----|-----|-----|----|----|------|----|
| AUG | 02... | 1030 | M | 9.6 | <.06 | 17 | <.04 | <1 | 1.1 | 100 | <1 | 41 | <.01 | <1 |
|-----|-------|------|---|-----|------|----|------|----|-----|-----|----|----|------|----|

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|------|---|--|--|
|------|---|--|--|

| | | | | |
|-----|-------|-----|------|---|
| AUG | 02... | <.4 | <.05 | 2 |
|-----|-------|-----|------|---|

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|
|------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|

| | | | | | | | | | | | | | |
|-----|-------|------|------|------|------|-----|------|------|------|------|------|------|------|
| FEB | 14... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
|-----|-------|------|------|------|------|-----|------|------|------|------|------|------|------|

| DATE | TIME | CHLORO- DI- BROMO- ETHANE TOTAL (UG/L) (34301) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER TERT- BUTYL WATER, UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- PENTYL METHYL WATER, UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL WATER, UNFLTRD RECOVER (UG/L) (50005) | BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|------|------|--|---|--|---|---|---|--|---|---|---------------------------------------|---|--|
|------|------|--|---|--|---|---|---|--|---|---|---------------------------------------|---|--|

| | | | | | | | | | | | | | |
|-----|-------|------|-----|------|------|------|-----|-----|-----|------|-----|------|-----|
| FEB | 14... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.2 |
|-----|-------|------|-----|------|------|------|-----|-----|-----|------|-----|------|-----|

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
|------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|

| | | | | | | | | | | |
|-----|-------|-----|------|------|------|-----|------|------|------|-----|
| FEB | 14... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 |
|-----|-------|-----|------|------|------|-----|------|------|------|-----|

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|------|------|---|---|--|---|---|--|--|--|--|---|--|---|
|------|------|---|---|--|---|---|--|--|--|--|---|--|---|

| | | | | | | | | | | | | | | |
|-----|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MAY | 22... | 1030 | <.004 | <.002 | <.005 | E.005 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |
|-----|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

PASSAIC RIVER BASIN

01382410 MACOPIN RIVER AT ECHO LAKE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER (UG/L) (39415) | METRI- BUZIN WATER (UG/L) (82630) | MOL- INATE WATER 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|--|---|---|--|---|---|---|
| | MAY 22... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| MAY 22... | <.011 | <.016 | <.034 | <.005 | <.009 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 0945 | <20 | <100 | 70 | JUL 16... | 1000 | 20 | 100 | 20 |
| 09... | 0945 | <20 | <100 | 40 | 23... | 0955 | <20 | 100 | 10 |
| | | | | | 30... | 0935 | <20 | <100 | 20 |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

121

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ

LOCATION.--Lat 41°01'05", long 74°24'07", Morris County, Hydrologic Unit 02030103, at culvert on crossover between northbound and southbound lanes on State Route 23, 1,000 ft downstream from Macopin Intake Dam, 0.6 mi downstream from Macopin River, and 2.8 mi northwest of Butler.

DRAINAGE AREA.--63.7 mi².

PERIOD OF RECORD.--Water years 1924, 1962-69, 1973-79, 1991 to current year.

REMARKS.--Physical properties measured hourly over 3 to 6 days as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | |
|-----------|------|--|---|--|--|---|---|--|--|--|---|---|--|--|
| | | | | | | | | | | | | | | |
| NOV 29... | 1000 | 14 | -- | .252 | .193 | 752 | 115 | 14.5 | 7.6 | 155 | 7.0 | 5.0 | 41 | |
| FEB 21... | 1000 | 15 | -- | .127 | .096 | 750 | 101 | 13.5 | 7.9 | 229 | 3.5 | 2.5 | 47 | |
| MAY 24... | 1000 | 12 | 2.1 | .254 | .196 | 750 | 89 | 9.0 | 7.5 | 218 | 15.0 | 14.0 | 48 | |
| AUG 29... | 1000 | .33 | .8 | .069 | .051 | 750 | 78 | 6.9 | 7.3 | 291 | -- | 20.5 | 84 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA, DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 29... | 10.3 | 3.71 | .91 | 11.9 | 24 | 20.4 | <.2 | 6.8 | 9.3 | 94 | 80 | <.030 | .35 | |
| FEB 21... | 12.1 | 4.00 | .71 | 22.2 | 24 | 42.8 | <.2 | 7.4 | 10.3 | 122 | 116 | <.030 | .17 | |
| MAY 24... | 12.4 | 4.19 | .94 | 20.6 | 29 | 36.8 | E.1 | 7.3 | 9.1 | 129 | 110 | <.030 | .36 | |
| AUG 29... | 22.0 | 7.14 | 1.08 | 21.7 | 61 | 44.4 | E.1 | 6.4 | 11.2 | 160 | 150 | <.030 | .28 | |
| DATE | | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR-TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 29... | <.03 | .44 | .401 | .008 | .75 | .84 | .079 | .009 | .021 | .5 | <.1 | 6.5 | .5 | |
| FEB 21... | .04 | .25 | .472 | <.003 | .65 | .72 | <.022 | .006 | .011 | .3 | <.1 | 3.4 | .3 | |
| MAY 24... | <.03 | .39 | .202 | <.003 | .56 | .59 | .100 | .027 | .034 | .7 | <.1 | 6.3 | .7 | |
| AUG 29... | <.03 | .20 | E.087 | <.003 | -- | -- | .028 | .011 | .010 | .2 | <.1 | 2.4 | .2 | |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|--------------|---|---|---|--|
| NOV 29... | <1.0 | -- | 17 | <1 |
| FEB 21... | <1.0 | -- | E12 | 1 |
| MAY 24... | E1.4 | 3.30 | 13 | 3 |
| AUG 29... | <1.0 | 1.40 | 18 | 1 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 1002 | 50 | <100 | 480 | JUL 16... | 1015 | <20 | <100 | 20 |
| 09... | 1000 | 20 | 200 | 270 | 23... | 1010 | 50 | <100 | 20 |
| | | | | | 30... | 0950 | <20 | 100 | 50 |

E Estimated value.

< Actual value is known to be less than the value shown.

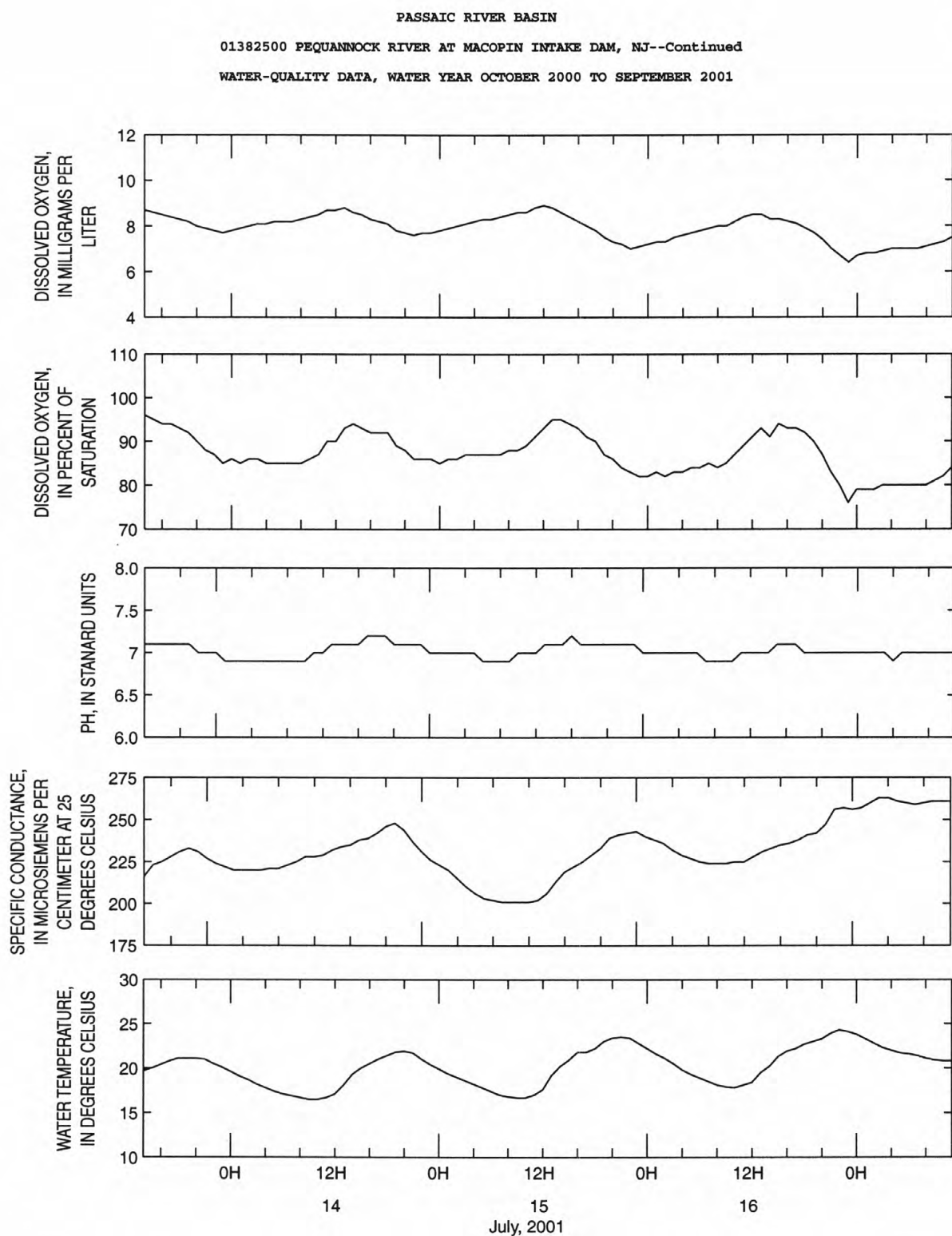


Figure 32. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01382500 Pequannock River at Macopin Intake Dam, water year 2001.

PASSAIC RIVER BASIN

01387014 WANAQUE RIVER AT WANAQUE AVENUE, AT POMPTON LAKES, NJ

LOCATION.--Lat 41°00'25", long 74°17'34", Passaic County, Hydrologic Unit 02030103, at bridge on Wanaque Avenue in Pompton Lakes, 0.1 mi north of intersection of Wanaque Avenue and Paterson Hamburg Turnpike, and 0.1 mi downstream of Lake Inez.

DRAINAGE AREA.--48.0 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|--|---|---|--|--|--|--|---|--|---|
| NOV 21... | 1000 | -- | .071 | .055 | 751 | 99 | 10.0 | 7.4 | 240 | 5.5 | 14.0 | 60 | 16.4 | |
| FEB 15... | 1000 | -- | .068 | .051 | 752 | 104 | 13.6 | 7.6 | 363 | 7.5 | 3.5 | 72 | 19.9 | |
| MAY 22... | 1100 | 7.0 | .100 | .077 | 752 | 83 | 8.8 | 7.6 | 235 | 19.1 | 12.0 | 57 | 15.6 | |
| AUG 16... | 1100 | 2.2 | .067 | .051 | 758 | 92 | 8.5 | 7.5 | 271 | 21.5 | 19.0 | 67 | 17.6 | |
| | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AM- MONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AM- MONIA TOTAL (MG/L AS N) (00610) |
| NOV 21... | 4.72 | 1.62 | 20.2 | 40 | 32.7 | <.2 | 5.4 | 15.1 | 134 | 122 | .530 | .89 | .53 | |
| FEB 15... | 5.47 | 1.71 | 39.0 | 39 | 68.4 | <.2 | 7.5 | 18.1 | 204 | 188 | .200 | .36 | .20 | |
| MAY 22... | 4.48 | 1.81 | 22.6 | 33 | 41.4 | <.2 | 5.3 | 15.3 | 145 | 130 | .150 | .39 | .22 | |
| AUG 16... | 5.50 | 1.96 | 28.1 | 40 | 45.7 | <.2 | 4.8 | 22.5 | 158 | 152 | .120 | .27 | .45 | |
| | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 21... | .97 | .306 | .011 | 1.2 | 1.3 | .095 | .064 | .083 | .8 | <.1 | 3.7 | .8 | 2.9 | |
| FEB 15... | .35 | .930 | .006 | 1.3 | 1.3 | .214 | .012 | .030 | 1.4 | <.1 | 2.6 | 1.3 | E1.0 | |
| MAY 22... | .48 | .715 | .021 | 1.1 | 1.2 | .118 | .023 | .054 | .9 | <.1 | 4.4 | .9 | 3.2 | |
| AUG 16... | .41 | .430 | .012 | .70 | .84 | .063 | .037 | .043 | .4 | <.1 | 3.0 | .4 | E1.3 | |
| | | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) | | | | | |
| | | | | | | | NOV 21... | -- | 36 | 5 | | | | |
| | | | | | | | FEB 15... | -- | 24 | 7 | | | | |
| | | | | | | | MAY 22... | 9.40 | 24 | 3 | | | | |
| | | | | | | | AUG 16... | 6.80 | 37 | 3 | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

125

01387014 WANAQUE RIVER AT WANAQUE AVENUE, AT POMPTON LAKES, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|

AUG 16... 1100 <2 10.3 <.06 36 E.02 <1 2.5 140 <1 93 .15 <1

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|------|---|--|--|
|------|---|--|--|

AUG 16... E.2 <.05 10

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|
|------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|

FEB 15... 1000 <.10 <.10 <.10 <.2 <.10 <.10 <.10 <.10 <.10 <.10 <.10 <.20 <.20

| DATE | TIME | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|------|------|--|---|---|--|---|---|---|---|---|---|---|---|--|
|------|------|--|---|---|--|---|---|---|---|---|---|---|---|--|

FEB 15... <.10 <.2 .11 <.10 <.10 <.2 <.2 <.2 <.10 <.2 <.10 <.10 .3

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
|------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|

FEB 15... <.2 <.20 <.10 <.10 <.1 <.10 <.10 <.20 <.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DISS, SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|------|------|--|--|--|---|--|---|---|---|--|--|--|---|
|------|------|--|--|--|---|--|---|---|---|--|--|--|---|

MAY 22... 1100 <.004 <.002 <.005 E.006 <.010 E.169 <.020 <.005 <.018 <.003 <.006 .013

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01387014 WANAQUE RIVER AT WANAQUE AVENUE, AT POMPTON LAKES, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER (UG/L) (39415) | METRI- BUZIN WATER (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|--|---|--|---|---|---|---|
| | MAY 22... | <.005 | <.002 | <.004 | <.035 | E.070 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| MAY 22... | E.004 | <.016 | <.034 | <.005 | <.009 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 1026 | 9200 | 2200 | 5700 | JUL 16... | 1015 | 330 | 100 | 30 |
| 09... | 1020 | 790 | 300 | 620 | 23... | 1030 | 490 | 400 | 150 |
| | | | | | 30... | 1010 | 170 | 200 | 160 |

E Estimated value.

< Actual value is known to be less than the value shown.

01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'51", long 74°09'48", Bergen County, Hydrologic Unit 02030103, 350 ft downstream from bridge on State Highway 17, 0.6 mi downstream from Mahwah River, and 1.0 mi west of Mahwah. Water-quality samples collected at bridge, 350 ft upstream from gage, at high flows.

DRAINAGE AREA.--120 mi².

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: February 1964 to June 1965.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | |
|-----------|------|---|---|--|--|--|---|--|--|--|---|---|---|--|
| NOV 16... | 0800 | 105 | -- | .106 | .082 | 753 | 76 | 9.2 | 7.7 | 410 | -- | 6.5 | 83 | |
| FEB 20... | 0830 | 235 | -- | .062 | .047 | 756 | 87 | 11.9 | 7.6 | 447 | 3.5 | 2.0 | 81 | |
| MAY 08... | 0800 | 72 | 2.3 | .077 | .060 | 762 | 72 | 7.4 | 7.8 | 541 | 8.0 | 14.0 | 130 | |
| AUG 02... | 0800 | 22 | 3.9 | .077 | .060 | 760 | 70 | 6.1 | 7.4 | 686 | 23.0 | 22.0 | 150 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC UNFLTRD LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 16... | 23.0 | 6.22 | 1.95 | 36.1 | 60 | 59.4 | E.1 | 7.3 | 15.3 | 199 | 192 | <.030 | .31 | |
| FEB 20... | 22.6 | 5.85 | 1.16 | 45.7 | 47 | 79.2 | <.2 | 6.8 | 12.6 | 221 | 206 | .090 | .24 | |
| MAY 08... | 34.9 | 9.90 | 1.92 | 51.2 | 86 | 98.1 | <.2 | 4.7 | 15.8 | 293 | 274 | .120 | .47 | |
| AUG 02... | 39.5 | 11.5 | 3.00 | 69.5 | 93 | 127 | E.1 | 7.5 | 21.6 | 370 | 347 | .270 | .57 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (00600) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 16... | <.03 | .28 | 1.65 | .005 | 2.0 | 1.9 | .058 | .157 | .158 | .6 | <.1 | 3.5 | .6 | |
| FEB 20... | .10 | .25 | .853 | .007 | 1.1 | 1.1 | .058 | <.050 | E.035 | .4 | <.1 | 2.4 | .4 | |
| MAY 08... | .17 | .56 | 1.34 | .033 | 1.8 | 1.9 | .200 | .114 | .151 | E1.3 | <.1 | 2.5 | E1.3 | |
| AUG 02... | .28 | .74 | 2.65 | .074 | 3.2 | 3.4 | .139 | .397 | .460 | .9 | <.1 | 2.9 | .9 | |
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E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | JUL | | | | |
| 05... | 0900 | 460 | 1600 | 2000 | 16... | 0923 | 9200 | 1600 | 130 |
| 09... | 0927 | 1200 | 800 | 570 | 23... | 0915 | 1700 | <100 | 200 |
| | | | | | 30... | 0913 | 3500 | 400 | 350 |

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

129

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ

LOCATION.--Lat 40°59'33", long 74°16'44", Passaic County, Hydrologic Unit 02030103, in Pompton Lakes, at bridge on Paterson-Hamburg Turnpike, 2.0 mi upstream from mouth, and 450 ft downstream from dam.

DRAINAGE AREA.--160 mi².

PERIOD OF RECORD.--Water years 1923, 1962-67, 1982, 1987 to current year.

NUTRIENT AND INORGANIC CHEMICAL DATA: Water years 1923, 1962-67, 1982, 1987-96.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: April 1989 to current year.

SPECIFIC CONDUCTANCE: April 1989 to current year.

WATER TEMPERATURE: April 1989 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1989, pumping system, data recorded hourly.

REMARKS.--Stage is measured on right end of dam at pumping station, 450 ft upstream from bridge. Nutrient and inorganic chemical data from 1987-96 was collected at the same location (above dam); data from earlier years was probably collected at bridge, 450 ft below dam. Interruptions in the daily record were due to instrument or pumping system malfunction. The calibration of water-quality sensors is verified by regular inspections. Cleaning or recalibration is needed occasionally as a result of sensor fouling or drift. When a sensor is recalibrated, the continuous-record water-quality data for the period between inspections are adjusted to account for the difference between the sensor's response and a known value. The adjustment may be constant over the period or may be prorated. Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value does not exceed recalibration criteria are considered to be reliable and are not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection"). Data from the following periods were adjusted:

DISSOLVED OXYGEN: Oct. 1 to Nov. 21, Dec. 21 to Jan. 18, Apr. 3 to May 15, May 31 to Jun. 18, Jun. 19 to Sept. 13, and Sept. 17 to Sept. 30.

SPECIFIC CONDUCTANCE: Nov. 8 to Nov. 21, Jan. 18 to Feb. 1, May 15 to May 31, Jul. 18 to Aug. 23, Aug. 30 to Sept. 13.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: maximum, 15.2 mg/L, Jan. 15, 2000; minimum, 4.5 mg/L, Aug. 4, 1999.

SPECIFIC CONDUCTANCE: maximum, 842 uS/cm, Jan. 18, 1999; minimum, 88 uS/cm, Sept. 7, 1999.

WATER TEMPERATURE: maximum, 31.5 °C, Jul. 5, 1999; minimum, 0.0 °C, on several days during winters.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 15.0 mg/L, Feb. 24; minimum, 5.7 mg/L, Aug. 10.

SPECIFIC CONDUCTANCE: Maximum, 828 uS/cm, Mar. 12; minimum, 193 uS/cm, Dec. 19.

WATER TEMPERATURE: Maximum, 29.9°C, Aug. 9; minimum, 0.4°C, Jan. 2, 3, 4, 5.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---------|------|------|----------|------|------|----------|------|------|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 9.5 | 9.1 | 9.3 | 14.7 | 11.2 | 12.2 | --- | --- | --- | 14.1 | 13.9 | 14.1 |
| 2 | 9.4 | 8.7 | 9.1 | 12.9 | 10.8 | 11.7 | --- | --- | --- | 14.2 | 14.0 | 14.2 |
| 3 | 9.4 | 8.6 | 8.9 | --- | --- | --- | --- | --- | --- | 14.3 | 14.0 | 14.1 |
| 4 | 9.4 | 8.6 | 8.9 | 12.1 | 10.8 | 11.3 | --- | --- | --- | --- | --- | --- |
| 5 | 10.0 | 8.6 | 9.0 | 11.9 | 10.6 | 11.1 | --- | --- | --- | --- | --- | --- |
| 6 | 10.2 | 8.8 | 9.1 | 12.1 | 10.6 | 11.2 | --- | --- | --- | --- | --- | --- |
| 7 | 9.4 | 8.9 | 9.1 | 12.0 | 10.7 | 11.2 | --- | --- | --- | 14.6 | 14.1 | 14.3 |
| 8 | 10.3 | 9.0 | 9.4 | 11.6 | 9.7 | 10.5 | --- | --- | --- | 14.2 | 13.9 | 14.0 |
| 9 | 10.6 | 9.2 | 9.6 | 10.4 | 9.6 | 9.9 | --- | --- | --- | 14.1 | 13.8 | 14.0 |
| 10 | 11.2 | 9.4 | 9.9 | 10.3 | 9.8 | 10.1 | --- | --- | --- | 14.3 | 13.9 | 14.1 |
| 11 | 10.4 | 9.7 | 10.0 | 10.4 | 10.2 | 10.3 | --- | --- | --- | 14.3 | 14.0 | 14.2 |
| 12 | 10.1 | 9.4 | 9.8 | 10.6 | 10.3 | 10.4 | --- | --- | --- | 14.4 | 14.1 | 14.2 |
| 13 | 10.2 | 9.4 | 9.8 | 10.7 | 10.4 | 10.5 | --- | --- | --- | 14.5 | 14.2 | 14.3 |
| 14 | 10.1 | 9.3 | 9.7 | 10.5 | 10.4 | 10.5 | --- | --- | --- | 14.5 | 14.3 | 14.4 |
| 15 | 9.7 | 8.9 | 9.3 | 10.9 | 10.5 | 10.7 | --- | --- | --- | 14.5 | 14.2 | 14.3 |
| 16 | 9.0 | 8.9 | 8.9 | 11.0 | 10.9 | 10.9 | 14.1 | 13.7 | 13.9 | 14.4 | 14.2 | 14.3 |
| 17 | 9.4 | 9.0 | 9.2 | 11.0 | 10.8 | 10.9 | 13.7 | 12.3 | 13.2 | 14.5 | 14.3 | 14.4 |
| 18 | 9.4 | 9.1 | 9.2 | 11.3 | 10.9 | 11.1 | 13.2 | 12.3 | 12.7 | 14.5 | 14.3 | 14.4 |
| 19 | 9.7 | 9.2 | 9.5 | 11.5 | 11.1 | 11.3 | 13.5 | 13.1 | 13.4 | 14.3 | 14.1 | 14.2 |
| 20 | 9.8 | 9.4 | 9.5 | 11.6 | 11.3 | 11.4 | 13.8 | 13.3 | 13.6 | 14.2 | 14.1 | 14.1 |
| 21 | 9.8 | 9.4 | 9.6 | --- | --- | --- | 13.9 | 13.7 | 13.8 | 14.3 | 14.0 | 14.2 |
| 22 | 9.8 | 9.3 | 9.5 | --- | --- | --- | 13.9 | 13.7 | 13.7 | 14.6 | 14.3 | 14.5 |
| 23 | 10.0 | 9.3 | 9.6 | --- | --- | --- | 14.2 | 13.9 | 14.1 | 14.6 | 14.4 | 14.5 |
| 24 | 10.0 | 9.4 | 9.6 | --- | --- | --- | 14.2 | 14.0 | 14.1 | 14.6 | 14.4 | 14.5 |
| 25 | 10.1 | 9.4 | 9.7 | --- | --- | --- | 14.2 | 14.0 | 14.1 | 14.7 | 14.5 | 14.6 |
| 26 | 10.5 | 9.7 | 10.0 | --- | --- | --- | 14.3 | 14.0 | 14.1 | 14.8 | 14.6 | 14.7 |
| 27 | 11.1 | 9.5 | 10.0 | --- | --- | --- | 14.0 | 13.9 | 13.9 | 14.6 | 14.4 | 14.5 |
| 28 | 11.4 | 9.4 | 10.2 | --- | --- | --- | 14.0 | 13.8 | 13.9 | 14.8 | 14.6 | 14.7 |
| 29 | 11.3 | 9.5 | 10.5 | --- | --- | --- | 14.0 | 13.8 | 13.9 | 14.8 | 14.5 | 14.7 |
| 30 | 12.1 | 10.4 | 11.2 | --- | --- | --- | 13.8 | 13.6 | 13.7 | 14.5 | 14.3 | 14.4 |
| 31 | 14.5 | 11.0 | 11.9 | --- | --- | --- | 14.0 | 13.6 | 13.8 | 14.5 | 14.3 | 14.4 |
| MONTH | 14.5 | 8.6 | 9.6 | 14.7 | 9.6 | 10.9 | 14.3 | 12.3 | 13.7 | 14.8 | 13.8 | 14.3 |

PASSAIC RIVER BASIN

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|-----|------|
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 14.5 | 14.3 | 14.4 | 14.2 | 14.0 | 14.1 | --- | --- | --- | 9.7 | 9.2 | 9.5 |
| 2 | 14.4 | 14.2 | 14.3 | 14.2 | 14.0 | 14.1 | --- | --- | --- | 9.6 | 9.0 | 9.3 |
| 3 | 14.3 | 14.1 | 14.3 | 14.3 | 14.0 | 14.1 | --- | --- | --- | 9.2 | 8.5 | 8.9 |
| 4 | 14.5 | 14.3 | 14.4 | 14.3 | 14.1 | 14.2 | 12.4 | 11.9 | 12.2 | 8.8 | 7.7 | 8.3 |
| 5 | 14.5 | 14.4 | 14.4 | 14.4 | 14.0 | 14.2 | 12.0 | 11.5 | 11.8 | 8.4 | 7.7 | 8.1 |
| 6 | 14.7 | 14.4 | 14.6 | 14.6 | 14.2 | 14.4 | 11.7 | 11.4 | 11.5 | 8.9 | 8.2 | 8.5 |
| 7 | 14.9 | 14.6 | 14.8 | 14.7 | 14.4 | 14.5 | 11.6 | 11.3 | 11.4 | 9.0 | 8.4 | 8.7 |
| 8 | 14.9 | 14.6 | 14.8 | 14.5 | 14.3 | 14.4 | 11.5 | 11.2 | 11.4 | 9.1 | 8.5 | 8.8 |
| 9 | 14.6 | 14.2 | 14.4 | 14.3 | 14.0 | 14.2 | 11.4 | 10.3 | 11.0 | 9.1 | 8.0 | 8.6 |
| 10 | 14.3 | 14.0 | 14.2 | 14.3 | 13.9 | 14.1 | 10.3 | 10.0 | 10.2 | 8.6 | 7.8 | 8.2 |
| 11 | 14.5 | 14.2 | 14.4 | 14.1 | 13.9 | 14.0 | 10.2 | 9.8 | 10.0 | 8.5 | 7.8 | 8.2 |
| 12 | 14.7 | 14.5 | 14.6 | 14.2 | 13.6 | 14.0 | 10.1 | 9.9 | 10.0 | 8.4 | 7.5 | 8.0 |
| 13 | 14.8 | 14.5 | 14.7 | 13.8 | 13.6 | 13.7 | 10.1 | 9.7 | 9.8 | 8.2 | 7.5 | 7.8 |
| 14 | 14.7 | 14.4 | 14.6 | 13.8 | 13.6 | 13.7 | 10.1 | 9.4 | 9.8 | 8.4 | 7.7 | 8.1 |
| 15 | 14.5 | 14.3 | 14.4 | 13.9 | 13.7 | 13.8 | 9.7 | 9.2 | 9.4 | 8.7 | 7.8 | 8.2 |
| 16 | 14.4 | 14.2 | 14.3 | 13.9 | 13.4 | 13.7 | 9.6 | 9.2 | 9.4 | 8.7 | 7.8 | 8.3 |
| 17 | 14.4 | 14.1 | 14.3 | 13.6 | 13.4 | 13.5 | 9.8 | 9.3 | 9.6 | 8.8 | 8.2 | 8.5 |
| 18 | 14.6 | 14.4 | 14.5 | 13.8 | 13.4 | 13.5 | 10.2 | 9.6 | 10.0 | 8.8 | 8.5 | 8.7 |
| 19 | 14.6 | 14.5 | 14.5 | --- | --- | --- | 10.4 | 10.1 | 10.3 | 8.9 | 8.1 | 8.5 |
| 20 | 14.6 | 14.5 | 14.5 | --- | --- | --- | 10.5 | 10.2 | 10.4 | 8.7 | 8.0 | 8.4 |
| 21 | 14.6 | 14.4 | 14.5 | --- | --- | --- | 10.5 | 10.2 | 10.4 | 8.9 | 8.4 | 8.6 |
| 22 | 14.7 | 14.4 | 14.6 | --- | --- | --- | 10.5 | 9.6 | 10.2 | 9.1 | 8.6 | 8.9 |
| 23 | 14.7 | 14.3 | 14.5 | --- | --- | --- | 10.5 | 9.3 | 9.8 | 9.2 | 9.0 | 9.1 |
| 24 | 15.0 | 14.7 | 14.8 | --- | --- | --- | 9.7 | 9.0 | 9.3 | 9.3 | 8.9 | 9.1 |
| 25 | 14.8 | 14.6 | 14.7 | --- | --- | --- | 9.5 | 9.0 | 9.3 | 9.3 | 8.9 | 9.1 |
| 26 | 14.7 | 14.5 | 14.6 | --- | --- | --- | 9.7 | 9.4 | 9.5 | 9.4 | 9.2 | 9.3 |
| 27 | 14.6 | 14.2 | 14.4 | --- | --- | --- | 9.6 | 9.3 | 9.5 | 9.3 | 9.2 | 9.2 |
| 28 | 14.4 | 14.1 | 14.2 | --- | --- | --- | 9.6 | 9.3 | 9.5 | 9.3 | 9.0 | 9.2 |
| 29 | --- | --- | --- | --- | --- | --- | 9.8 | 9.4 | 9.6 | 9.3 | 8.8 | 9.0 |
| 30 | --- | --- | --- | --- | --- | --- | 10.0 | 9.4 | 9.7 | 9.3 | 8.8 | 9.1 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.3 | 8.4 | 8.8 |
| MONTH | 15.0 | 14.0 | 14.5 | 14.7 | 13.4 | 14.0 | 12.4 | 9.0 | 10.2 | 9.7 | 7.5 | 8.7 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 8.9 | 8.4 | 8.6 | --- | --- | --- | 8.1 | 7.0 | 7.5 | 8.0 | 6.5 | 7.1 |
| 2 | 9.1 | 8.7 | 8.9 | --- | --- | --- | 7.7 | 6.7 | 7.1 | 7.9 | 6.5 | 7.2 |
| 3 | 9.1 | 9.0 | 9.1 | --- | --- | --- | 7.4 | 6.5 | 6.9 | 8.2 | 6.9 | 7.6 |
| 4 | 9.1 | 8.9 | 9.0 | --- | --- | --- | 7.2 | 6.6 | 6.8 | 8.3 | 7.2 | 7.6 |
| 5 | 9.1 | 8.7 | 8.9 | --- | --- | --- | 7.2 | 6.3 | 6.7 | 8.4 | 6.9 | 7.6 |
| 6 | 9.0 | 8.6 | 8.8 | 7.5 | 7.0 | 7.2 | 7.3 | 6.1 | 6.7 | 8.3 | 6.0 | 7.2 |
| 7 | 8.9 | 8.5 | 8.7 | 7.7 | 7.0 | 7.3 | 7.2 | 6.4 | 6.8 | 8.5 | 6.5 | 7.5 |
| 8 | 8.9 | 8.5 | 8.7 | 7.7 | 6.9 | 7.3 | 7.1 | 6.1 | 6.6 | 8.6 | 7.1 | 7.8 |
| 9 | 8.9 | 8.4 | 8.7 | 7.4 | 6.5 | 7.0 | 7.2 | 5.8 | 6.5 | 8.6 | 7.3 | 7.9 |
| 10 | 9.0 | 8.4 | 8.7 | 7.3 | 6.6 | 6.9 | 6.9 | 5.7 | 6.4 | 8.2 | 7.2 | 7.6 |
| 11 | 9.0 | 8.5 | 8.7 | 7.3 | 6.4 | 6.9 | 7.0 | 6.3 | 6.6 | 8.5 | 6.9 | 7.7 |
| 12 | 9.2 | 8.4 | 8.8 | 7.6 | 6.7 | 7.2 | --- | --- | --- | 8.4 | 7.3 | 7.7 |
| 13 | 8.8 | 8.2 | 8.5 | 7.9 | 7.0 | 7.5 | --- | --- | --- | --- | --- | --- |
| 14 | 9.0 | 8.1 | 8.4 | 8.0 | 7.3 | 7.6 | --- | --- | --- | --- | --- | --- |
| 15 | 10.9 | 8.3 | 9.9 | 7.9 | 7.1 | 7.5 | --- | --- | --- | --- | --- | --- |
| 16 | 10.5 | 9.2 | 9.7 | 7.9 | 7.1 | 7.4 | 8.2 | 6.6 | 7.5 | --- | --- | --- |
| 17 | 9.7 | 8.4 | 9.2 | 7.9 | 7.0 | 7.4 | 7.8 | 6.6 | 7.1 | --- | --- | --- |
| 18 | 9.5 | 7.5 | 8.6 | 8.0 | 6.5 | 7.2 | 8.0 | 6.6 | 7.3 | --- | --- | --- |
| 19 | 9.9 | 8.3 | 8.9 | 9.3 | 7.9 | 8.6 | 7.7 | 6.4 | 7.0 | --- | --- | --- |
| 20 | 9.1 | 7.5 | 8.4 | 9.0 | 8.0 | 8.5 | 7.6 | 6.3 | 6.8 | --- | --- | --- |
| 21 | 8.5 | 7.0 | 7.9 | 9.3 | 8.6 | 9.0 | 7.6 | 6.3 | 7.0 | --- | --- | --- |
| 22 | 8.2 | 6.6 | 7.4 | 9.1 | 7.8 | 8.4 | 7.5 | 6.2 | 6.9 | --- | --- | --- |
| 23 | 7.8 | 6.3 | 7.0 | 8.5 | 7.6 | 8.0 | 7.0 | 6.1 | 6.6 | --- | --- | --- |
| 24 | 8.6 | 7.3 | 8.0 | 8.5 | 7.6 | 8.0 | 7.5 | 6.6 | 7.0 | --- | --- | --- |
| 25 | 9.9 | 8.2 | 8.7 | 8.1 | 7.3 | 7.7 | 7.7 | 6.7 | 7.1 | --- | --- | --- |
| 26 | 9.5 | 8.0 | 8.5 | 7.4 | 6.9 | 7.2 | 7.9 | 6.8 | 7.3 | --- | --- | --- |
| 27 | 8.9 | 8.2 | 8.6 | 7.9 | 6.9 | 7.4 | 7.8 | 6.8 | 7.2 | --- | --- | --- |
| 28 | 8.7 | 7.5 | 8.1 | 8.2 | 7.1 | 7.6 | 8.2 | 6.8 | 7.4 | --- | --- | --- |
| 29 | 8.0 | 7.2 | 7.5 | 8.2 | 7.3 | 7.8 | 8.2 | 7.0 | 7.5 | --- | --- | --- |
| 30 | 7.7 | 6.2 | 7.2 | 8.4 | 7.5 | 7.9 | 7.7 | 6.5 | 7.1 | --- | --- | --- |
| 31 | --- | --- | --- | 8.1 | 7.3 | 7.7 | 7.6 | 6.3 | 6.8 | --- | --- | --- |
| MONTH | 10.9 | 6.2 | 8.5 | 9.3 | 6.4 | 7.6 | 8.2 | 5.7 | 7.0 | 8.6 | 6.0 | 7.5 |
| YEAR | 15.0 | 5.7 | 10.5 | | | | | | | | | |

PASSAIC RIVER BASIN

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01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|-----|-----|----------|-----|-----|----------|-----|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 371 | 368 | 370 | 508 | 491 | 497 | 309 | 299 | 305 | 336 | 328 | 332 |
| 2 | 378 | 371 | 374 | 512 | 484 | 499 | 301 | 291 | 297 | 338 | 336 | 338 |
| 3 | 379 | 373 | 375 | 506 | 481 | 493 | 293 | 290 | 291 | 338 | 337 | 338 |
| 4 | 378 | 375 | 376 | 505 | 477 | 494 | 290 | 289 | 289 | 341 | 338 | 339 |
| 5 | 385 | 376 | 383 | 518 | 505 | 512 | 293 | 290 | 292 | 348 | 341 | 344 |
| 6 | 399 | 384 | 390 | 527 | 518 | 524 | 295 | 293 | 294 | 355 | 348 | 351 |
| 7 | 401 | 393 | 398 | 532 | 527 | 530 | 298 | 295 | 296 | 362 | 355 | 358 |
| 8 | 402 | 398 | 400 | 535 | 532 | 533 | 301 | 298 | 299 | 372 | 362 | 366 |
| 9 | 404 | 400 | 402 | 536 | 529 | 533 | 304 | 301 | 302 | 387 | 372 | 379 |
| 10 | 412 | 403 | 408 | 529 | 511 | 518 | 313 | 304 | 308 | 402 | 387 | 394 |
| 11 | 434 | 412 | 424 | 530 | 521 | 527 | 321 | 313 | 317 | 423 | 402 | 413 |
| 12 | 429 | 418 | 423 | 529 | 524 | 526 | 329 | 321 | 325 | 453 | 423 | 438 |
| 13 | 428 | 420 | 424 | 525 | 519 | 522 | 336 | 329 | 332 | 483 | 453 | 472 |
| 14 | 437 | 423 | 430 | 519 | 509 | 514 | 343 | 332 | 336 | 499 | 483 | 493 |
| 15 | 449 | 423 | 436 | 509 | 486 | 497 | 383 | 343 | 361 | 509 | 499 | 504 |
| 16 | 449 | 437 | 445 | 486 | 470 | 476 | 419 | 380 | 393 | 516 | 509 | 513 |
| 17 | 443 | 437 | 440 | 470 | 460 | 466 | 523 | 379 | 455 | 522 | 516 | 520 |
| 18 | 441 | 431 | 435 | 460 | 450 | 452 | 379 | 199 | 262 | 535 | 522 | 528 |
| 19 | 455 | 441 | 452 | 451 | 443 | 447 | 199 | 193 | 195 | 556 | 535 | 544 |
| 20 | 461 | 452 | 455 | 443 | 423 | 434 | 202 | 194 | 197 | 575 | 556 | 567 |
| 21 | 474 | 461 | 469 | 424 | 422 | 422 | 222 | 202 | 214 | 644 | 575 | 608 |
| 22 | 474 | 465 | 469 | 422 | 410 | 416 | 234 | 222 | 227 | 673 | 644 | 665 |
| 23 | 479 | 474 | 477 | 410 | 404 | 407 | 248 | 234 | 241 | 683 | 672 | 675 |
| 24 | 486 | 474 | 479 | 404 | 403 | 404 | 262 | 248 | 254 | 700 | 683 | 696 |
| 25 | 485 | 467 | 479 | 403 | 403 | 403 | 276 | 262 | 269 | 703 | 697 | 701 |
| 26 | 487 | 479 | 483 | 403 | 379 | 398 | 285 | 276 | 281 | 697 | 681 | 691 |
| 27 | 490 | 478 | 482 | 379 | 358 | 369 | 295 | 285 | 289 | 681 | 665 | 671 |
| 28 | 490 | 479 | 485 | 358 | 343 | 353 | 305 | 295 | 300 | 665 | 643 | 655 |
| 29 | 492 | 488 | 490 | 343 | 320 | 330 | 313 | 305 | 309 | 643 | 624 | 631 |
| 30 | 500 | 486 | 492 | 320 | 309 | 314 | 319 | 313 | 316 | 624 | 616 | 619 |
| 31 | 492 | 487 | 490 | --- | --- | --- | 328 | 319 | 323 | 619 | 592 | 602 |
| MONTH | 500 | 368 | 437 | 536 | 309 | 460 | 523 | 193 | 296 | 703 | 328 | 508 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 633 | 599 | 624 | 519 | 490 | 506 | 256 | 249 | 252 | 426 | 409 | 416 |
| 2 | 627 | 594 | 605 | 490 | 454 | 477 | 266 | 254 | 260 | 426 | 419 | 423 |
| 3 | 594 | 567 | 581 | 454 | 431 | 440 | 282 | 265 | 273 | 432 | 424 | 427 |
| 4 | 567 | 543 | 553 | 433 | 431 | 432 | 295 | 281 | 287 | 432 | 422 | 428 |
| 5 | 543 | 520 | 533 | 442 | 433 | 437 | 303 | 295 | 298 | 439 | 425 | 432 |
| 6 | 520 | 500 | 509 | 478 | 442 | 457 | 314 | 303 | 309 | 449 | 439 | 445 |
| 7 | 500 | 496 | 497 | 522 | 478 | 499 | 324 | 314 | 318 | 457 | 449 | 453 |
| 8 | 538 | 497 | 515 | 605 | 522 | 566 | 328 | 324 | 326 | 464 | 457 | 460 |
| 9 | 560 | 538 | 550 | 707 | 605 | 651 | 333 | 328 | 329 | 465 | 463 | 464 |
| 10 | 574 | 560 | 568 | 750 | 707 | 737 | 331 | 305 | 320 | 467 | 464 | 466 |
| 11 | 588 | 574 | 581 | 806 | 745 | 773 | 305 | 281 | 291 | 475 | 467 | 470 |
| 12 | 585 | 574 | 577 | 828 | 806 | 821 | 285 | 281 | 282 | 479 | 473 | 475 |
| 13 | 574 | 539 | 562 | 815 | 689 | 763 | 291 | 284 | 287 | 479 | 478 | 478 |
| 14 | 539 | 494 | 515 | 689 | 611 | 648 | 300 | 290 | 295 | 481 | 478 | 479 |
| 15 | 494 | 457 | 476 | 613 | 535 | 571 | 313 | 295 | 303 | 496 | 481 | 489 |
| 16 | 457 | 437 | 445 | 535 | 461 | 495 | 330 | 306 | 316 | 500 | 496 | 499 |
| 17 | 437 | 431 | 433 | 461 | 398 | 425 | 333 | 318 | 327 | 505 | 500 | 503 |
| 18 | 462 | 435 | 449 | 400 | 368 | 386 | 346 | 331 | 339 | 511 | 504 | 507 |
| 19 | 465 | 461 | 463 | 368 | 354 | 361 | 349 | 341 | 344 | 518 | 509 | 513 |
| 20 | 465 | 458 | 462 | 355 | 348 | 352 | 353 | 347 | 350 | 520 | 517 | 518 |
| 21 | 458 | 439 | 448 | 351 | 333 | 344 | 362 | 351 | 356 | 521 | 519 | 520 |
| 22 | 439 | 425 | 431 | 333 | 253 | 300 | 368 | 360 | 364 | 519 | 512 | 516 |
| 23 | 425 | 415 | 419 | 253 | 231 | 236 | 382 | 364 | 374 | 530 | 511 | 520 |
| 24 | 419 | 416 | 418 | 248 | 235 | 242 | 388 | 382 | 384 | 538 | 530 | 536 |
| 25 | 450 | 419 | 429 | 258 | 248 | 254 | 388 | 386 | 387 | 533 | 525 | 528 |
| 26 | 506 | 450 | 471 | 270 | 258 | 264 | 388 | 387 | 387 | 525 | 506 | 515 |
| 27 | 550 | 506 | 537 | 294 | 270 | 283 | 392 | 388 | 389 | 506 | 486 | 497 |
| 28 | 542 | 519 | 534 | 311 | 293 | 301 | 399 | 392 | 396 | 486 | 467 | 476 |
| 29 | --- | --- | --- | 321 | 310 | 316 | 405 | 399 | 403 | 467 | 450 | 458 |
| 30 | --- | --- | --- | 326 | 298 | 319 | 410 | 405 | 408 | 450 | 435 | 441 |
| 31 | --- | --- | --- | 298 | 252 | 272 | --- | --- | --- | 437 | 428 | 432 |
| MONTH | 633 | 415 | 507 | 828 | 231 | 449 | 410 | 249 | 332 | 538 | 409 | 477 |

PASSAIC RIVER BASIN

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 428 | 410 | 424 | --- | --- | --- | 466 | 443 | 458 | 514 | 493 | 504 |
| 2 | 411 | 301 | 374 | --- | --- | --- | 457 | 442 | 450 | 501 | 491 | 495 |
| 3 | 301 | 239 | 256 | --- | --- | --- | 476 | 453 | 465 | 497 | 488 | 494 |
| 4 | 239 | 220 | 226 | --- | --- | --- | 472 | 447 | 461 | 493 | 483 | 489 |
| 5 | 232 | 222 | 226 | --- | --- | --- | 457 | 443 | 452 | 489 | 483 | 486 |
| 6 | 244 | 229 | 237 | 372 | 362 | 366 | 458 | 443 | 450 | 493 | 486 | 489 |
| 7 | 262 | 242 | 251 | 393 | 372 | 382 | 459 | 454 | 456 | 495 | 491 | 493 |
| 8 | 278 | 262 | 271 | 393 | 385 | 390 | 476 | 459 | 470 | 499 | 490 | 495 |
| 9 | 293 | 278 | 286 | 396 | 391 | 394 | 486 | 474 | 479 | 500 | 497 | 499 |
| 10 | 309 | 293 | 302 | 398 | 393 | 396 | 486 | 471 | 478 | 501 | 495 | 499 |
| 11 | 329 | 309 | 316 | 397 | 393 | 395 | 493 | 479 | 485 | 499 | 492 | 495 |
| 12 | 336 | 326 | 331 | 397 | 394 | 395 | --- | --- | --- | 499 | 495 | 498 |
| 13 | 355 | 333 | 345 | 398 | 394 | 397 | --- | --- | --- | 501 | 496 | 498 |
| 14 | 375 | 355 | 364 | 402 | 398 | 400 | --- | --- | --- | 498 | 488 | 492 |
| 15 | 392 | 375 | 383 | 405 | 402 | 403 | --- | --- | --- | 488 | 488 | 488 |
| 16 | 400 | 392 | 396 | 409 | 405 | 407 | 517 | 500 | 510 | 495 | 486 | 489 |
| 17 | 395 | 350 | 372 | 413 | 409 | 411 | 521 | 512 | 518 | 500 | 489 | 496 |
| 18 | 350 | 334 | 341 | 422 | 413 | 417 | 521 | 509 | 516 | 502 | 493 | 499 |
| 19 | 336 | 326 | 329 | 427 | 422 | 424 | 522 | 501 | 512 | 503 | 491 | 494 |
| 20 | 332 | 325 | 329 | 435 | 427 | 431 | 510 | 492 | 503 | 498 | 489 | 494 |
| 21 | 331 | 327 | 329 | 443 | 434 | 438 | 511 | 490 | 500 | 492 | 488 | 491 |
| 22 | 340 | 330 | 335 | 455 | 442 | 445 | 499 | 489 | 493 | 496 | 488 | 491 |
| 23 | 346 | 331 | 338 | 469 | 455 | 460 | 505 | 496 | 500 | 495 | 489 | 491 |
| 24 | 335 | 255 | 289 | 482 | 467 | 473 | 515 | 503 | 508 | 495 | 489 | 490 |
| 25 | 255 | 235 | 243 | 483 | 470 | 477 | 517 | 509 | 514 | 518 | 495 | 508 |
| 26 | 241 | 235 | 238 | 471 | 466 | 468 | 512 | 508 | 510 | 517 | 504 | 510 |
| 27 | 252 | 238 | 245 | 477 | 466 | 472 | 516 | 504 | 512 | 514 | 510 | 513 |
| 28 | 262 | 248 | 256 | 477 | 469 | 474 | 512 | 503 | 507 | 514 | 510 | 512 |
| 29 | 283 | 261 | 272 | 480 | 470 | 474 | 508 | 486 | 501 | 514 | 508 | 511 |
| 30 | 295 | 277 | 285 | 482 | 470 | 477 | 498 | 484 | 489 | 511 | 506 | 508 |
| 31 | --- | --- | --- | 474 | 458 | 466 | 517 | 493 | 509 | --- | --- | --- |
| MONTH | 428 | 220 | 306 | 483 | 362 | 428 | 522 | 442 | 489 | 518 | 483 | 497 |
| YEAR | 828 | 193 | 431 | | | | | | | | | |

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|------|------|----------|------|------|----------|-----|------|---------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 16.5 | 15.5 | 16.0 | 10.5 | 10.0 | 10.5 | 5.0 | 4.5 | 5.0 | 1.0 | .5 | .5 |
| 2 | 18.5 | 16.0 | 17.0 | 10.5 | 10.0 | 10.0 | 4.5 | 3.5 | 4.0 | .5 | .5 | .5 |
| 3 | 18.5 | 16.5 | 17.5 | 11.0 | 10.0 | 10.5 | 3.5 | 3.5 | 3.5 | .5 | .5 | .5 |
| 4 | 18.0 | 17.0 | 17.5 | 11.0 | 10.5 | 10.5 | 3.5 | 3.0 | 3.5 | .5 | .5 | .5 |
| 5 | 18.0 | 17.0 | 17.5 | 11.0 | 10.0 | 10.5 | 3.5 | 3.5 | 3.5 | .5 | .5 | .5 |
| 6 | 17.0 | 17.0 | 17.0 | 10.5 | 10.0 | 10.0 | 4.0 | 3.5 | 4.0 | .5 | .5 | .5 |
| 7 | 17.0 | 16.0 | 16.5 | 10.0 | 9.5 | 10.0 | 4.0 | 3.5 | 3.5 | .5 | .5 | .5 |
| 8 | 16.0 | 15.5 | 15.5 | 10.0 | 9.5 | 10.0 | 3.5 | 3.0 | 3.5 | .5 | .5 | .5 |
| 9 | 15.5 | 14.5 | 15.0 | 10.5 | 10.0 | 10.0 | 3.0 | 3.0 | 3.0 | .5 | .5 | .5 |
| 10 | 14.5 | 13.0 | 13.5 | 10.5 | 10.0 | 10.0 | 3.0 | 3.0 | 3.0 | .5 | .5 | .5 |
| 11 | 13.5 | 12.5 | 13.0 | 10.5 | 10.5 | 10.5 | 3.0 | 3.0 | 3.0 | 1.0 | .5 | 1.0 |
| 12 | 15.0 | 13.0 | 13.5 | 10.5 | 10.0 | 10.0 | 3.0 | 3.0 | 3.0 | 1.0 | 1.0 | 1.0 |
| 13 | 14.5 | 13.0 | 13.5 | 10.0 | 10.0 | 10.0 | 3.0 | 2.0 | 2.0 | 1.0 | 1.0 | 1.0 |
| 14 | 14.5 | 13.0 | 13.5 | 10.0 | 9.5 | 10.0 | 2.5 | 2.0 | 2.5 | 1.0 | 1.0 | 1.0 |
| 15 | 16.0 | 14.0 | 15.0 | 9.5 | 9.0 | 9.5 | 2.5 | 2.5 | 2.5 | 1.0 | 1.0 | 1.0 |
| 16 | 16.0 | 15.0 | 15.5 | 9.0 | 8.5 | 8.5 | 3.0 | 2.5 | 2.5 | 1.5 | 1.0 | 1.0 |
| 17 | 15.0 | 14.5 | 15.0 | 8.5 | 8.0 | 8.5 | 5.5 | 2.5 | 3.5 | 1.5 | 1.0 | 1.5 |
| 18 | 14.5 | 14.0 | 14.5 | 8.0 | 7.5 | 8.0 | 5.5 | 3.5 | 5.0 | 1.5 | 1.5 | 1.5 |
| 19 | 14.0 | 14.0 | 14.0 | 7.5 | 7.0 | 7.5 | 3.5 | 3.0 | 3.0 | 2.0 | 1.5 | 2.0 |
| 20 | 14.0 | 13.5 | 13.5 | 7.0 | 6.5 | 6.5 | 3.0 | 2.5 | 2.5 | 2.0 | 2.0 | 2.0 |
| 21 | 13.5 | 13.0 | 13.5 | 6.5 | 5.5 | 6.0 | 2.5 | 2.0 | 2.0 | 2.0 | 1.5 | 2.0 |
| 22 | 14.0 | 13.5 | 13.5 | 5.5 | 4.5 | 5.0 | 2.0 | 1.5 | 2.0 | 1.5 | 1.5 | 1.5 |
| 23 | 13.5 | 13.0 | 13.5 | 4.5 | 3.0 | 4.0 | 1.5 | 1.0 | 1.0 | 1.5 | 1.0 | 1.5 |
| 24 | 13.5 | 13.0 | 13.0 | 3.5 | 3.0 | 3.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.0 | 1.0 |
| 25 | 14.5 | 13.0 | 13.5 | 3.5 | 3.5 | 3.5 | 1.5 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 26 | 14.0 | 13.5 | 13.5 | 4.0 | 3.5 | 3.5 | 1.5 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 27 | 14.5 | 13.5 | 13.5 | 4.5 | 3.5 | 4.0 | 1.5 | 1.5 | 1.5 | 1.0 | 1.0 | 1.0 |
| 28 | 14.0 | 13.0 | 13.5 | 4.5 | 4.5 | 4.5 | 1.5 | 1.0 | 1.5 | 1.0 | 1.0 | 1.0 |
| 29 | 13.0 | 11.5 | 12.5 | 5.0 | 4.5 | 5.0 | 1.5 | 1.0 | 1.5 | 1.5 | 1.0 | 1.0 |
| 30 | 11.5 | 11.0 | 11.0 | 5.0 | 5.0 | 5.0 | 1.5 | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 |
| 31 | 11.0 | 10.5 | 10.5 | --- | --- | --- | 1.0 | 1.0 | 1.0 | 1.5 | 1.5 | 1.5 |
| MONTH | 18.5 | 10.5 | 14.4 | 11.0 | 3.0 | 7.8 | 5.5 | 1.0 | 2.6 | 2.0 | .5 | 1.0 |

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|------|
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 2.0 | 1.5 | 1.5 | 3.0 | 3.0 | 3.0 | 5.0 | 5.0 | 5.0 | 17.5 | 15.0 | 16.5 |
| 2 | 2.0 | 2.0 | 2.0 | 3.0 | 3.0 | 3.0 | 5.5 | 5.0 | 5.0 | 19.0 | 16.5 | 17.5 |
| 3 | 2.5 | 2.0 | 2.5 | 3.0 | 3.0 | 3.0 | 6.5 | 5.0 | 6.0 | 20.0 | 18.5 | 19.0 |
| 4 | 2.0 | 2.0 | 2.0 | 3.0 | 3.0 | 3.0 | 7.5 | 6.5 | 7.0 | 24.0 | 20.0 | 22.0 |
| 5 | 2.0 | 1.5 | 1.5 | 3.0 | 2.0 | 2.5 | 9.0 | 7.5 | 8.0 | 23.5 | 20.5 | 22.0 |
| 6 | 1.5 | 1.0 | 1.5 | 2.0 | 1.5 | 1.5 | 8.5 | 8.5 | 8.5 | 21.0 | 19.0 | 20.0 |
| 7 | 1.0 | 1.0 | 1.0 | 2.5 | 1.5 | 2.0 | 8.5 | 8.0 | 8.5 | 20.0 | 18.5 | 19.0 |
| 8 | 1.5 | 1.0 | 1.5 | 3.0 | 2.5 | 2.5 | 8.5 | 8.0 | 8.0 | 19.0 | 18.0 | 18.5 |
| 9 | 2.0 | 1.5 | 2.0 | 3.5 | 3.0 | 3.0 | 10.5 | 8.0 | 8.5 | 22.0 | 18.5 | 20.0 |
| 10 | 2.5 | 2.0 | 2.0 | 3.5 | 3.0 | 3.5 | 12.0 | 10.0 | 11.0 | 22.0 | 19.5 | 21.0 |
| 11 | 2.5 | 2.5 | 2.5 | 4.0 | 3.5 | 4.0 | 12.0 | 11.0 | 11.5 | 21.5 | 19.5 | 20.5 |
| 12 | 2.5 | 2.0 | 2.0 | 4.5 | 3.5 | 4.0 | 11.0 | 10.5 | 11.0 | 22.0 | 20.5 | 21.0 |
| 13 | 2.0 | 1.5 | 2.0 | 4.5 | 4.0 | 4.5 | 11.5 | 10.5 | 11.0 | 22.0 | 21.0 | 21.5 |
| 14 | 2.0 | 2.0 | 2.0 | 4.5 | 4.0 | 4.0 | 12.0 | 11.0 | 11.5 | 21.0 | 20.0 | 20.5 |
| 15 | 2.5 | 2.0 | 2.0 | 4.0 | 4.0 | 4.0 | 13.5 | 12.0 | 12.5 | 20.5 | 19.5 | 19.5 |
| 16 | 2.5 | 2.5 | 2.5 | 5.0 | 4.0 | 4.5 | 13.0 | 12.5 | 13.0 | 19.5 | 19.0 | 19.0 |
| 17 | 3.0 | 2.5 | 2.5 | 5.5 | 5.0 | 5.5 | 13.0 | 12.0 | 12.5 | 19.0 | 18.0 | 18.5 |
| 18 | 2.5 | 2.5 | 2.5 | 5.5 | 5.0 | 5.0 | 12.0 | 11.5 | 11.5 | 18.0 | 17.5 | 17.5 |
| 19 | 2.5 | 2.0 | 2.5 | 5.5 | 4.5 | 5.0 | 12.0 | 11.0 | 11.5 | 20.0 | 17.5 | 18.5 |
| 20 | 2.5 | 2.0 | 2.0 | 6.0 | 5.0 | 5.5 | 11.5 | 11.0 | 11.5 | 20.0 | 18.5 | 19.5 |
| 21 | 2.5 | 2.0 | 2.5 | 6.0 | 5.5 | 6.0 | 12.5 | 11.5 | 12.0 | 18.5 | 18.0 | 18.5 |
| 22 | 2.5 | 2.5 | 2.5 | 5.5 | 4.5 | 5.0 | 15.5 | 12.0 | 13.0 | 18.0 | 17.5 | 18.0 |
| 23 | 2.5 | 2.0 | 2.5 | 5.0 | 4.0 | 4.5 | 16.0 | 14.5 | 15.0 | 17.5 | 17.0 | 17.5 |
| 24 | 2.0 | 2.0 | 2.0 | 5.5 | 4.5 | 5.0 | 18.0 | 15.0 | 16.5 | 19.5 | 16.5 | 17.5 |
| 25 | 2.0 | 2.0 | 2.0 | 5.5 | 4.5 | 5.0 | 18.0 | 15.5 | 16.5 | 18.5 | 17.0 | 17.5 |
| 26 | 2.5 | 2.0 | 2.0 | 5.0 | 4.5 | 4.5 | 17.0 | 15.0 | 16.0 | 17.0 | 16.5 | 16.5 |
| 27 | 3.0 | 2.5 | 2.5 | 4.5 | 3.5 | 4.0 | 17.0 | 15.5 | 16.0 | 16.5 | 16.5 | 16.5 |
| 28 | 3.0 | 3.0 | 3.0 | 5.5 | 4.0 | 4.5 | 16.5 | 15.5 | 16.0 | 18.5 | 16.5 | 17.0 |
| 29 | --- | --- | --- | 5.5 | 5.0 | 5.0 | 17.0 | 15.0 | 16.0 | 19.5 | 17.5 | 18.5 |
| 30 | --- | --- | --- | 5.0 | 5.0 | 5.0 | 17.0 | 15.0 | 15.5 | 19.0 | 17.5 | 18.0 |
| 31 | --- | --- | --- | 5.0 | 4.5 | 5.0 | --- | --- | --- | 18.5 | 17.0 | 17.5 |
| MONTH | 3.0 | 1.0 | 2.1 | 6.0 | 1.5 | 4.1 | 18.0 | 5.0 | 11.5 | 24.0 | 15.0 | 18.9 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | | |
| 1 | 18.0 | 17.5 | 17.5 | --- | --- | --- | 26.0 | 24.5 | 25.0 | 25.5 | 24.0 | 25.0 |
| 2 | 17.5 | 16.5 | 17.0 | --- | --- | --- | 26.0 | 25.0 | 25.5 | 25.5 | 24.0 | 24.5 |
| 3 | 17.0 | 15.5 | 16.5 | --- | --- | --- | 25.5 | 24.5 | 25.0 | 24.0 | 23.0 | 23.5 |
| 4 | 18.0 | 16.5 | 17.0 | --- | --- | --- | 26.0 | 25.0 | 25.5 | 24.0 | 22.5 | 23.5 |
| 5 | 19.5 | 17.0 | 18.0 | --- | --- | --- | 28.5 | 25.0 | 26.5 | 24.5 | 23.0 | 23.5 |
| 6 | 20.5 | 18.5 | 19.5 | 24.5 | 23.5 | 24.0 | 27.5 | 26.5 | 27.0 | 25.0 | 23.0 | 23.5 |
| 7 | 22.0 | 19.0 | 20.5 | 24.0 | 22.5 | 23.0 | 28.5 | 27.0 | 27.5 | 23.0 | 22.0 | 22.5 |
| 8 | 22.0 | 19.5 | 21.0 | 23.5 | 23.0 | 23.0 | 29.5 | 27.5 | 28.5 | 23.0 | 22.0 | 22.5 |
| 9 | 23.0 | 20.0 | 21.5 | 26.5 | 22.5 | 24.5 | 30.0 | 28.5 | 29.0 | 23.5 | 22.5 | 23.0 |
| 10 | 22.5 | 20.5 | 21.5 | 25.5 | 23.0 | 24.0 | 29.0 | 28.5 | 28.5 | 24.0 | 23.0 | 23.5 |
| 11 | 22.0 | 20.5 | 21.0 | 25.5 | 24.0 | 24.5 | 28.5 | 27.5 | 28.0 | 24.5 | 23.0 | 24.0 |
| 12 | 23.5 | 21.0 | 22.0 | 24.5 | 24.0 | 24.0 | --- | --- | --- | 24.5 | 23.0 | 23.5 |
| 13 | 25.5 | 22.5 | 24.0 | 24.5 | 23.5 | 24.0 | --- | --- | --- | 24.0 | 22.0 | 23.0 |
| 14 | 24.5 | 23.0 | 24.0 | 24.5 | 23.0 | 23.5 | --- | --- | --- | 23.5 | 22.0 | 22.5 |
| 15 | 24.0 | 22.0 | 23.0 | 24.5 | 23.0 | 23.5 | --- | --- | --- | 22.0 | 21.0 | 21.5 |
| 16 | 26.0 | 22.5 | 24.5 | 26.0 | 23.5 | 24.5 | 26.5 | 25.5 | 26.0 | 23.0 | 20.5 | 22.0 |
| 17 | 25.0 | 22.0 | 23.0 | 26.0 | 24.0 | 25.0 | 26.0 | 25.5 | 25.5 | 23.5 | 20.5 | 22.0 |
| 18 | 23.0 | 21.5 | 22.0 | 26.0 | 25.0 | 25.5 | 26.0 | 25.0 | 25.5 | 22.5 | 20.5 | 21.5 |
| 19 | 23.5 | 22.0 | 22.5 | 26.0 | 24.5 | 25.0 | 26.5 | 25.0 | 26.0 | 23.0 | 20.5 | 21.5 |
| 20 | 25.5 | 23.5 | 24.0 | 27.0 | 24.5 | 25.5 | 27.0 | 25.5 | 26.0 | 21.0 | 20.5 | 20.5 |
| 21 | 25.5 | 24.0 | 25.0 | 27.0 | 24.5 | 26.0 | 26.5 | 25.5 | 26.0 | 21.0 | 20.5 | 20.5 |
| 22 | 24.0 | 23.5 | 24.0 | 26.0 | 25.0 | 25.5 | 26.5 | 25.5 | 26.0 | 21.5 | 20.5 | 21.0 |
| 23 | 24.0 | 23.0 | 23.5 | 25.5 | 24.5 | 25.0 | 26.5 | 25.0 | 25.5 | 23.5 | 21.0 | 22.0 |
| 24 | 23.0 | 21.5 | 22.0 | 26.0 | 25.5 | 25.5 | 26.5 | 24.5 | 25.5 | 22.5 | 21.5 | 22.0 |
| 25 | 23.5 | 21.0 | 22.0 | 28.0 | 26.0 | 27.0 | 27.5 | 25.0 | 25.5 | 22.0 | 21.0 | 21.0 |
| 26 | 24.0 | 22.0 | 23.0 | 28.0 | 26.5 | 27.5 | 25.0 | 24.0 | 24.5 | 21.0 | 20.0 | 20.5 |
| 27 | 26.0 | 22.5 | 24.0 | 26.5 | 25.5 | 26.0 | 25.0 | 24.0 | 24.5 | 20.0 | 19.5 | 19.5 |
| 28 | 26.5 | 23.5 | 25.0 | 26.0 | 25.0 | 25.5 | 25.0 | 24.5 | 25.0 | 19.5 | 19.0 | 19.0 |
| 29 | 25.5 | 24.5 | 25.0 | 25.5 | 24.5 | 25.0 | 26.5 | 24.0 | 25.5 | 19.0 | 18.0 | 18.5 |
| 30 | 26.0 | 24.5 | 25.5 | 25.5 | 24.0 | 24.5 | 26.0 | 24.5 | 25.5 | 18.0 | 17.0 | 17.5 |
| 31 | --- | --- | --- | 27.0 | 24.0 | 25.5 | 25.0 | 24.0 | 24.5 | --- | --- | --- |
| MONTH | 26.5 | 15.5 | 22.0 | 28.0 | 22.5 | 24.9 | 30.0 | 24.0 | 26.0 | 25.5 | 17.0 | 22.0 |
| YEAR | 30.0 | .5 | 12.9 | | | | | | | | | |

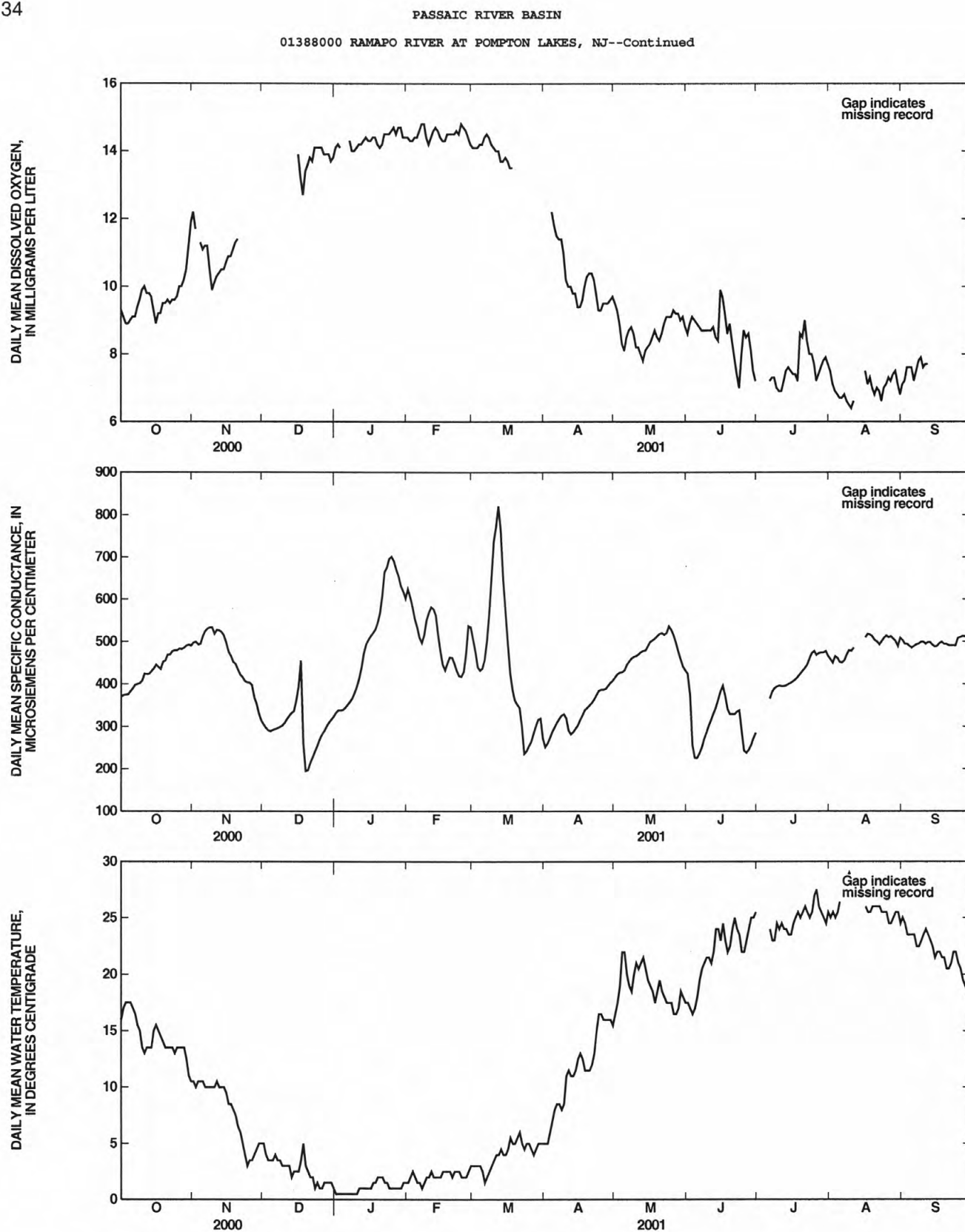


Figure 33. Physical characteristics and concentrations of constituents measured at 01388000 Ramapo River at Pompton Lakes, water year 2001.

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ--Continued

Cross section of specific conductance, water temperature, and dissolved oxygen concentration measurements (distance from left bank looking downstream); and recorded hourly specific conductance, water temperature, and dissolved oxygen measurements from the water-quality monitor at the station, Ramapo River at Pompton Lakes, NJ.

May 31, 2001

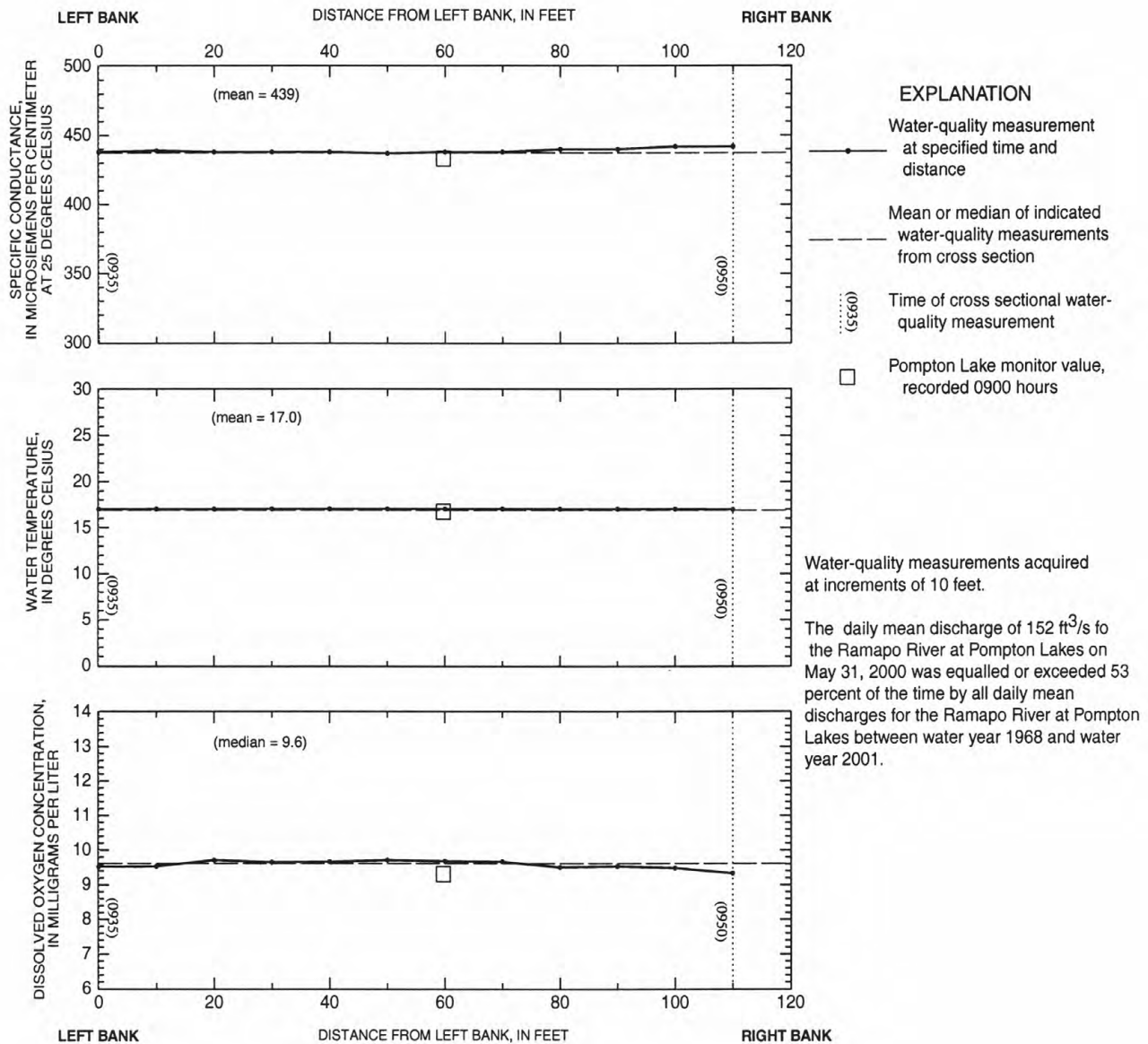


Figure 34. Cross sectional water-quality measurements with recorded monitor values, at Ramapo River at Pompton Lakes, May 31, 2001.

PASSAIC RIVER BASIN

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ

LOCATION.--Lat 40°58'09", long 74°16'56", Passaic County, Hydrologic Unit 02030103, at Passaic Valley Water Commission pumping station, 100 ft upstream from bridge on Jackson Avenue (Pompton Plains Cross Road), 800 ft below confluence of Pequannock and Ramapo Rivers, and 0.7 mi east of Pompton Plains.

DRAINAGE AREA.--355 mi².

PERIOD OF RECORD.--Water years 1962-69, 1971-75, 1979-80, 1992, 1994, 1998 to current year.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 21... | 1000 | 135 | -- | .076 | .059 | 757 | 90 | 11.1 | 7.7 | 417 | -- | 6.0 | 110 |
| FEB 14... | 1000 | 491 | -- | .070 | .053 | 766 | 99 | 13.8 | 7.8 | 495 | 7.0 | 2.0 | 82 |
| MAY 10... | 1000 | 146 | 4.0 | .066 | .050 | 763 | 93 | 8.7 | 8.0 | 431 | -- | 18.5 | 110 |
| SEP 06... | 1030 | 42 | 19 | .066 | .049 | 766 | 76 | 7.1 | 7.8 | 448 | 21.0 | 19.0 | 110 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|---|
| NOV 21... | 30.0 | 8.08 | 1.95 | 34.9 | 67 | 63.2 | E.1 | 8.0 | 22.3 | 218 | 216 | .080 | .31 |
| FEB 14... | 23.0 | 5.95 | 1.78 | 60.8 | 44 | 104 | <.2 | 6.7 | 14.9 | 269 | 248 | <.030 | .24 |
| MAY 10... | 29.3 | 8.10 | 1.82 | 40.2 | 67 | 78.5 | E.1 | 3.5 | 18.4 | 247 | 223 | <.030 | .34 |
| SEP 06... | 29.1 | 9.23 | 2.32 | 41.4 | 66 | 82.7 | E.1 | 6.4 | 19.9 | 246 | 234 | .030 | .28 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|--|---|---|--|-------------------------------------|--|--|---------------------------------------|---|---|--|--|
| NOV 21... | .07 | .47 | 1.73 | .011 | 2.0 | 2.2 | <.022 | .039 | .058 | .5 | <.1 | 2.6 | .4 |
| FEB 14... | <.03 | .26 | .971 | .006 | 1.2 | 1.2 | .070 | .041 | .025 | .4 | <.1 | 2.4 | .4 |
| MAY 10... | <.03 | .62 | .729 | .021 | 1.1 | 1.4 | .272 | .007 | .055 | 1.7 | E.00 | 3.0 | E1.7 |
| SEP 06... | <.03 | 1.0 | .722 | .003 | 1.0 | 1.7 | .364 | .009 | .088 | 2.0 | <.1 | 3.1 | 2.0 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|----|----|
| NOV 21... | E1.1 | -- | 64 | <1 |
| FEB 14... | E1.3 | -- | 27 | 4 |
| MAY 10... | 2.8 | 28.4 | 48 | 1 |
| SEP 06... | 3.3 | 102 | 75 | 17 |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | JUL | | | | |
| 02... | 1055 | 2800 | 900 | 740 | 16... | 1100 | 170 | 600 | 50 |
| 09... | 1040 | 700 | <100 | 290 | 23... | 1045 | 130 | 200 | 30 |
| | | | | | 30... | 1025 | 330 | 600 | 90 |

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01388720 BEAVER DAM BROOK AT RYERSON ROAD, AT LINCOLN PARK, NJ

LOCATION.--Lat 40°55'35", long 74°17'35", Morris County, Hydrologic Unit 02030103, at bridge on Ryerson Road in Lincoln Park, 643 ft north of intersection of Ryerson Road and Park Avenue, and 0.3 mi upstream of mouth.

DRAINAGE AREA.--13.1 mi².

PERIOD OF RECORD.--December 2000 to August 2001.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | |
|-----------|------|---|--|---|---|---|---|--|--|--|---|---|---|--|
| DEC 13... | 1150 | 4.0 | -- | .297 | .232 | 773 | 84 | 12.1 | 7.4 | 390 | -- | 1.0 | 120 | |
| FEB 21... | 1000 | 24 | -- | .202 | .155 | 757 | 85 | 11.4 | 7.3 | 377 | 7.0 | 3.0 | 100 | |
| MAY 03... | 1310 | 8.7 | -- | .221 | .171 | 762 | 105 | 9.9 | 7.6 | 411 | 34.0 | 18.0 | 120 | |
| AUG 23... | 1020 | 1.3 | 11 | .271 | .208 | 756 | 61 | 5.5 | 6.8 | 471 | 24.0 | 20.0 | 120 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| DEC 13... | 33.7 | 9.09 | 1.52 | 25.9 | 78 | 46.3 | E.1 | 14.0 | 35.9 | 233 | 215 | .180 | .47 | |
| FEB 21... | 28.6 | 7.58 | 1.22 | 26.2 | 57 | 55.8 | <.2 | 11.9 | 29.1 | 209 | 197 | .190 | .28 | |
| MAY 03... | 34.5 | 8.94 | 1.73 | 27.1 | 82 | 55.6 | E.1 | 10.2 | 27.1 | 247 | 216 | <.030 | .32 | |
| AUG 23... | 34.5 | 9.01 | 3.07 | 39.6 | 87 | 75.9 | E.1 | 12.2 | 26.2 | 280 | 257 | .080 | .44 | |
| DATE | | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-NO2+NO3 DIS-SOLVED (MG/L AS N) (00625) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| DEC 13... | .15 | .57 | .346 | .007 | .81 | .92 | .073 | .014 | .033 | .6 | <.1 | 6.0 | .6 | |
| FEB 21... | .14 | .35 | .627 | <.003 | .90 | .98 | <.022 | .009 | .024 | .4 | <.1 | 4.3 | .4 | |
| MAY 03... | .04 | .43 | .362 | .010 | .68 | .79 | .072 | .008 | .032 | E.7 | <.1 | 4.6 | E.7 | |
| AUG 23... | .12 | .51 | 1.02 | .013 | 1.5 | 1.5 | .088 | .010 | .046 | .6 | <.1 | 5.4 | .6 | |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|--|--|---------------------------------------|--|
| DEC 13... | E1.7 | -- | 46 | 4 |
| FEB 21... | <1.0 | -- | 40 | 5 |
| MAY 03... | E1.3 | 13.3 | 44 | 7 |
| AUG 23... | <1.0 | 2.20 | 53 | 5 |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

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01388720 BEAVER DAM BROOK AT RYERSON ROAD, AT LINCOLN PARK, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 0930 | 1300 | 1800 | 400 | 06... | 0910 | 1300 | 600 | 710 |
| 30... | 0900 | 790 | 700 | 1900 | 13... | 0924 | 1100 | 400 | 820 |
| | | | | | 19... | 0930 | 3500 | 1400 | 1400 |

PASSAIC RIVER BASIN

01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ

LOCATION.--Lat 40°53'47", long 74°16'10", Passaic County, Hydrologic Unit 02030103, on left bank, 400 ft downstream from the Pompton River in Two Bridges.

DRAINAGE AREA.--734 mi².

PERIOD OF RECORD.--Water years 1987 to current year.

NUTRIENT AND INORGANIC CHEMICAL DATA: Water years 1987-96.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: August 1989 to current year. Unpublished fragmentary water-quality records for the period March to July 1989 are available at the U.S. Geological Survey office in West Trenton, N.J.

SPECIFIC CONDUCTANCE: August 1989 to current year.

WATER TEMPERATURE: August 1989 to current year.

INSTRUMENTATION.--Water-quality monitor(s) since March 1989, pumping system, data recorded hourly. Multiple-point monitoring is necessary at this site because of poor mixing below the confluence with the Pompton River. Three intakes, left, middle, and right, are positioned at 70, 160, and 220 ft, respectively, from the edge of the monitor house on the left bank (looking downstream).

Three monitors, water pumped continuously.--Water years 1989-99.

One monitor, water pumped sequentially.--Water years 2000 to current year.

REMARKS.--The station is 400 ft downstream from the confluence of the Pompton River with the left bank of the Passaic River. One water-quality sensor (monitor) measures the characteristics of water pumped sequentially from three separate intakes. The station is impacted by occasional diversion of water from the Pompton River 750 ft upstream from its junction with the left bank of the Passaic River, which is 400 ft upstream from the station. Interruptions in the daily record were due to instrument or pumping-system malfunction. The calibration of water quality sensors is verified by regular inspections. Cleaning or recalibration is needed occasionally as a result of sensor fouling or drift. When a sensor is recalibrated, the continuous-record water-quality data for the period between inspections are adjusted to account for the difference between the sensor's response and a known value. The adjustment may be constant over the period or may be prorated. Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value does not exceed recalibration criteria are considered to be reliable and are not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection"). Data from the following period were adjusted:

DISSOLVED OXYGEN: Oct. 11 to Nov. 21, Feb. 27 to Mar. 19, Apr. 3 to Apr. 23, Jul 3 to Jul. 18.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: maximum, 20.0 mg/L (measuring limit of instrument) from left and right intakes, on many days during July-September, 1999, from right and middle on July 25, 2001; minimum, 1.3 mg/L from right intake, May 29, 1991.

SPECIFIC CONDUCTANCE: maximum, 2,910 uS/cm from middle intake, Jan. 16, 1999; minimum, 101 uS/cm from right intake, Sept. 19, 20, 1999.

WATER TEMPERATURE: maximum, 31.5°C from left intake, July 7, 1999; minimum, 0.0°C from left, middle, and right intakes, on many days during winters.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 20.0 mg/L from middle and right intakes, July 25; minimum, 3.8 mg/L from middle intake, Nov. 12, June 21.

SPECIFIC CONDUCTANCE: Maximum, 1,370 uS/cm from right intake, Jan. 11; minimum, 147 uS/cm from right intake, June 18.

WATER TEMPERATURE: Maximum, 30.1°C from middle intake, Aug. 9; minimum, 0.0°C from left intake, Dec. 30, 31.

OXYGEN DISSOLVED (MG/L), LEFT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---------|------|-----|----------|------|------|----------|------|------|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 10.4 | 9.3 | 9.9 | 10.9 | 9.2 | 9.7 | 12.3 | 11.6 | 12.0 | 14.4 | 13.8 | 14.1 |
| 2 | 10.7 | 9.0 | 9.9 | 11.2 | 9.4 | 10.0 | 12.8 | 12.1 | 12.4 | 14.8 | 12.4 | 13.9 |
| 3 | 11.0 | 8.7 | 9.8 | 11.0 | 9.2 | 10.0 | 13.3 | 12.8 | 13.0 | 14.9 | 14.7 | 14.8 |
| 4 | 11.3 | 8.4 | 9.6 | 11.2 | 9.2 | 10.1 | 13.6 | 13.3 | 13.4 | 14.7 | 14.5 | 14.6 |
| 5 | 10.0 | 7.5 | 8.8 | 11.3 | 9.2 | 10.1 | 13.5 | 13.1 | 13.3 | 14.5 | 14.3 | 14.4 |
| 6 | 8.6 | 7.4 | 8.0 | 10.8 | 9.0 | 9.7 | 13.3 | 13.0 | 13.2 | 14.3 | 14.1 | 14.1 |
| 7 | 9.4 | 7.9 | 8.6 | 10.2 | 8.9 | 9.6 | 13.5 | 11.7 | 12.9 | 14.2 | 14.0 | 14.1 |
| 8 | 10.4 | 8.4 | 9.2 | 10.8 | 9.3 | 9.9 | 12.4 | 11.7 | 11.9 | 14.2 | 13.9 | 14.0 |
| 9 | 10.6 | 8.8 | 9.6 | 10.9 | 9.7 | 10.2 | 12.9 | 11.6 | 12.1 | 14.0 | 13.8 | 13.9 |
| 10 | 11.6 | 9.4 | 10.3 | 10.5 | 8.4 | 9.3 | 13.0 | 11.5 | 12.1 | 14.1 | 13.9 | 14.0 |
| 11 | 12.2 | 9.8 | 10.8 | 9.5 | 8.4 | 9.0 | 12.9 | 11.4 | 12.0 | 14.2 | 14.0 | 14.1 |
| 12 | 11.9 | 9.7 | 10.7 | 9.9 | 9.3 | 9.6 | 12.9 | 11.2 | 11.8 | 14.1 | 13.9 | 14.0 |
| 13 | 11.5 | 9.4 | 10.3 | 10.1 | 9.8 | 10.0 | 11.9 | 10.9 | 11.3 | 14.1 | 13.9 | 14.0 |
| 14 | 11.2 | 9.0 | 10.0 | 9.9 | 9.1 | 9.6 | 13.7 | 11.1 | 12.5 | 14.3 | 14.0 | 14.1 |
| 15 | 11.2 | 8.7 | 9.9 | 10.4 | 9.0 | 9.7 | 13.6 | 13.0 | 13.3 | 14.1 | 13.4 | 13.8 |
| 16 | 9.6 | 8.5 | 9.1 | 10.9 | 10.3 | 10.6 | 13.1 | 12.3 | 12.6 | 13.6 | 13.3 | 13.4 |
| 17 | 8.8 | 7.5 | 7.9 | 10.8 | 10.5 | 10.7 | 12.6 | 11.0 | 11.9 | 13.6 | 13.2 | 13.4 |
| 18 | 8.2 | 7.4 | 7.7 | 11.0 | 10.6 | 10.8 | 13.1 | 11.9 | 12.5 | 13.9 | 13.3 | 13.6 |
| 19 | 8.4 | 7.3 | 7.9 | 11.5 | 10.7 | 11.1 | 13.3 | 13.1 | 13.3 | 13.9 | 13.2 | 13.5 |
| 20 | 9.5 | 8.0 | 8.6 | 12.2 | 11.1 | 11.6 | 13.5 | 13.1 | 13.3 | 13.7 | 13.1 | 13.3 |
| 21 | 9.9 | 8.2 | 8.9 | 12.6 | 11.3 | 11.8 | 14.4 | 13.5 | 14.0 | 14.3 | 13.5 | 13.9 |
| 22 | 9.9 | 8.3 | 8.9 | 12.8 | 11.4 | 12.0 | 14.3 | 14.0 | 14.1 | 14.6 | 13.9 | 14.2 |
| 23 | 10.2 | 8.1 | 8.9 | 13.2 | 11.6 | 12.3 | 14.8 | 14.1 | 14.6 | 14.6 | 14.0 | 14.3 |
| 24 | 9.9 | 8.4 | 9.1 | 13.6 | 12.0 | 12.6 | 14.9 | 14.6 | 14.7 | 14.5 | 13.9 | 14.2 |
| 25 | 10.0 | 8.2 | 9.1 | 13.9 | 12.3 | 12.9 | 14.9 | 14.5 | 14.7 | 14.5 | 13.7 | 14.1 |
| 26 | 9.8 | 8.3 | 8.9 | 13.1 | 11.5 | 12.3 | 14.9 | 12.8 | 14.0 | 14.6 | 13.8 | 14.3 |
| 27 | 9.7 | 8.2 | 9.0 | 12.4 | 11.6 | 12.1 | 14.5 | 13.7 | 14.2 | 14.6 | 13.9 | 14.3 |
| 28 | 10.6 | 8.2 | 9.2 | 12.2 | 12.0 | 12.0 | 14.3 | 13.9 | 14.2 | 14.6 | 13.8 | 14.3 |
| 29 | 10.5 | 8.4 | 9.3 | 12.1 | 11.8 | 12.0 | 14.2 | 13.4 | 13.9 | 14.8 | 14.1 | 14.5 |
| 30 | 10.5 | 8.3 | 9.2 | 12.1 | 11.7 | 11.8 | 13.8 | 12.7 | 13.2 | 14.9 | 13.2 | 13.9 |
| 31 | 10.3 | 8.5 | 9.2 | --- | --- | --- | 14.1 | 12.5 | 13.2 | 14.2 | 13.1 | 13.6 |
| MONTH | 12.2 | 7.3 | 9.2 | 13.9 | 8.4 | 10.8 | 14.9 | 10.9 | 13.1 | 14.9 | 12.4 | 14.0 |

OXYGEN DISSOLVED (MG/L), LEFT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|------|-------|------|------|--------|------|------|-----------|-----|------|
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 14.5 | 13.4 | 13.9 | 15.0 | 13.1 | 14.0 | 13.5 | 13.3 | 13.4 | 12.4 | 9.7 | 11.2 |
| 2 | 14.2 | 13.4 | 13.8 | 14.7 | 13.0 | 13.9 | 13.6 | 13.3 | 13.4 | 12.0 | 9.0 | 10.6 |
| 3 | 14.7 | 13.3 | 14.0 | 14.9 | 12.9 | 13.9 | 13.5 | 12.7 | 13.3 | 11.3 | 8.9 | 10.2 |
| 4 | 14.8 | 13.6 | 14.2 | 14.4 | 12.9 | 13.6 | 13.3 | 12.5 | 12.9 | 10.6 | 8.4 | 9.6 |
| 5 | 14.5 | 13.4 | 13.8 | 14.9 | 13.3 | 14.1 | 13.3 | 12.2 | 12.7 | 9.7 | 6.7 | 8.3 |
| 6 | 15.2 | 13.8 | 14.4 | 15.8 | 13.6 | 14.8 | 12.7 | 11.8 | 12.2 | 7.9 | 5.8 | 7.0 |
| 7 | 15.0 | 13.8 | 14.4 | 15.9 | 13.8 | 14.9 | 13.0 | 11.8 | 12.3 | 9.7 | 5.7 | 7.6 |
| 8 | 15.0 | 13.6 | 14.3 | 15.8 | 13.5 | 14.7 | 12.7 | 12.0 | 12.3 | 10.1 | 8.3 | 9.1 |
| 9 | 14.7 | 13.5 | 14.2 | 15.0 | 13.2 | 14.1 | 13.4 | 11.6 | 12.5 | 11.2 | 7.5 | 8.9 |
| 10 | 14.3 | 12.8 | 13.7 | 15.8 | 13.4 | 14.6 | 11.8 | 10.4 | 11.1 | 9.8 | 7.6 | 8.6 |
| 11 | 15.2 | 13.2 | 14.2 | 16.0 | 13.3 | 14.6 | 11.7 | 11.0 | 11.4 | 9.1 | 7.0 | 8.1 |
| 12 | 15.5 | 13.9 | 14.7 | 16.0 | 13.3 | 14.7 | 11.9 | 11.3 | 11.6 | 9.0 | 6.5 | 7.5 |
| 13 | 15.6 | 13.8 | 14.7 | 15.1 | 12.9 | 13.5 | 12.2 | 11.3 | 11.7 | 8.6 | 6.0 | 7.1 |
| 14 | 14.9 | 13.8 | 14.2 | 14.4 | 13.2 | 13.8 | 12.6 | 11.0 | 11.7 | 7.7 | 5.7 | 6.6 |
| 15 | 14.9 | 13.2 | 14.1 | 14.7 | 13.6 | 14.1 | 12.6 | 10.7 | 11.6 | 7.8 | 5.7 | 6.6 |
| 16 | 14.5 | 13.3 | 14.0 | 14.7 | 13.6 | 14.1 | 12.7 | 10.2 | 11.4 | 7.5 | 5.9 | 6.5 |
| 17 | 14.8 | 12.9 | 13.9 | 14.4 | 13.2 | 13.8 | 12.3 | 10.5 | 11.4 | 6.8 | 5.6 | 6.1 |
| 18 | 15.5 | 13.6 | 14.5 | 14.6 | 13.4 | 14.0 | 13.6 | 10.7 | 12.1 | 6.2 | 5.2 | 5.7 |
| 19 | 15.4 | 13.8 | 14.6 | 14.7 | 13.5 | 14.1 | 14.4 | 10.9 | 12.5 | 5.9 | 4.6 | 5.3 |
| 20 | 15.0 | 13.4 | 14.3 | 14.6 | 13.2 | 13.8 | 14.1 | 10.9 | 12.6 | 6.8 | 5.3 | 5.9 |
| 21 | 14.9 | 13.0 | 14.1 | 13.7 | 13.0 | 13.3 | 13.8 | 10.8 | 12.4 | 6.2 | 5.3 | 5.7 |
| 22 | 15.4 | 13.3 | 14.4 | 13.3 | 12.9 | 13.1 | 14.1 | 10.4 | 12.3 | 7.7 | 5.3 | 6.3 |
| 23 | 15.5 | 13.7 | 14.7 | 13.7 | 13.3 | 13.5 | 13.3 | 9.8 | 11.7 | 8.2 | 7.4 | 7.7 |
| 24 | 15.7 | 13.6 | 14.7 | 13.5 | 13.3 | 13.4 | 12.4 | 9.1 | 10.9 | 7.4 | 6.0 | 6.3 |
| 25 | 15.4 | 13.1 | 13.7 | 13.9 | 13.3 | 13.6 | 12.1 | 8.6 | 10.5 | 6.3 | 6.0 | 6.2 |
| 26 | 14.6 | 12.7 | 13.6 | 13.9 | 13.3 | 13.6 | 12.9 | 9.6 | 11.5 | 6.4 | 6.2 | 6.3 |
| 27 | 14.9 | 13.2 | 14.0 | 14.5 | 13.6 | 14.0 | 12.6 | 9.6 | 11.4 | 7.4 | 6.3 | 6.7 |
| 28 | 14.9 | 12.9 | 13.8 | 14.4 | 13.6 | 13.9 | 12.7 | 9.5 | 11.4 | 8.7 | 7.4 | 8.2 |
| 29 | --- | --- | --- | 14.2 | 13.3 | 13.7 | 12.5 | 9.6 | 11.3 | 8.8 | 7.6 | 8.3 |
| 30 | --- | --- | --- | 13.7 | 13.1 | 13.3 | 12.9 | 9.9 | 11.6 | 7.6 | 7.0 | 7.3 |
| 31 | --- | --- | --- | 13.7 | 13.3 | 13.5 | --- | --- | --- | 7.3 | 6.7 | 7.0 |
| MONTH | 15.7 | 12.7 | 14.2 | 16.0 | 12.9 | 13.9 | 14.4 | 8.6 | 12.0 | 12.4 | 4.6 | 7.5 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 7.3 | 6.6 | 6.9 | 9.3 | 7.4 | 8.2 | 14.9 | 9.3 | 11.5 | 8.3 | 5.7 | 6.8 |
| 2 | 9.1 | 7.3 | 8.7 | 9.3 | 6.4 | 7.8 | 14.8 | 9.3 | 11.6 | 8.0 | 6.1 | 6.9 |
| 3 | 9.2 | 8.7 | 9.0 | 10.2 | 7.2 | 8.8 | 13.1 | 9.2 | 10.7 | 7.8 | 5.9 | 6.6 |
| 4 | 9.4 | 8.8 | 9.1 | 10.3 | 8.4 | 9.2 | 11.0 | 7.1 | 9.6 | 8.0 | 5.9 | 6.8 |
| 5 | 9.4 | 8.6 | 9.0 | 8.7 | 7.7 | 8.0 | 9.4 | 6.0 | 7.7 | 8.6 | 6.9 | 7.6 |
| 6 | 9.2 | 8.1 | 8.7 | 7.8 | 6.7 | 7.3 | 10.7 | 6.4 | 8.2 | 8.6 | 6.6 | 7.6 |
| 7 | 9.2 | 8.0 | 8.6 | 7.8 | 7.1 | 7.4 | 12.1 | 6.6 | 8.7 | 8.9 | 6.8 | 7.7 |
| 8 | 9.7 | 7.7 | 8.6 | 7.5 | 6.9 | 7.2 | 12.8 | 7.1 | 9.5 | 9.2 | 7.1 | 8.0 |
| 9 | 9.3 | 7.3 | 8.1 | 8.1 | 7.2 | 7.6 | 13.1 | 7.5 | 9.9 | 10.5 | 7.4 | 8.7 |
| 10 | 7.8 | 6.3 | 6.9 | 7.9 | 7.1 | 7.5 | 11.6 | 4.7 | 8.6 | 10.4 | 7.1 | 8.8 |
| 11 | 8.6 | 6.0 | 7.6 | 8.1 | 7.1 | 7.5 | 6.0 | 4.2 | 5.1 | 8.6 | 6.6 | 7.7 |
| 12 | 10.0 | 7.1 | 8.6 | 7.8 | 7.0 | 7.4 | 5.2 | 4.2 | 4.5 | 7.3 | 5.6 | 6.4 |
| 13 | 7.1 | 5.3 | 5.9 | 8.0 | 7.3 | 7.6 | 5.7 | 4.5 | 5.1 | 7.1 | 5.6 | 6.2 |
| 14 | 6.0 | 5.0 | 5.4 | 8.8 | 7.3 | 8.0 | 5.9 | 5.0 | 5.4 | 7.9 | 5.8 | 6.9 |
| 15 | 6.1 | 5.3 | 5.6 | 9.8 | 7.7 | 8.5 | 7.3 | 5.2 | 6.3 | 7.5 | 6.4 | 6.9 |
| 16 | 6.4 | 5.1 | 5.5 | 10.5 | 7.3 | 8.6 | 7.3 | 5.7 | 6.4 | 7.6 | 6.6 | 7.1 |
| 17 | 7.3 | 5.3 | 6.8 | 10.8 | 7.3 | 8.7 | 8.6 | 5.6 | 6.9 | 7.7 | 6.8 | 7.2 |
| 18 | 7.7 | 6.8 | 7.2 | 10.4 | 7.1 | 8.5 | 9.1 | 6.5 | 7.7 | 8.8 | 6.9 | 7.7 |
| 19 | 7.8 | 7.0 | 7.4 | 10.2 | 6.5 | 8.1 | 9.3 | 5.4 | 7.4 | 9.1 | 6.6 | 7.6 |
| 20 | 7.4 | 6.1 | 6.7 | 9.7 | 6.4 | 7.9 | 11.4 | 5.7 | 7.5 | 8.0 | 6.6 | 7.1 |
| 21 | 6.6 | 6.0 | 6.2 | 10.3 | 6.4 | 8.0 | 8.3 | 5.9 | 7.0 | 7.9 | 6.6 | 7.1 |
| 22 | 6.9 | 6.2 | 6.5 | 11.4 | 6.8 | 8.8 | 8.9 | 6.0 | 7.3 | 7.0 | 6.1 | 6.5 |
| 23 | 7.2 | 5.8 | 6.3 | 11.3 | 7.4 | 9.2 | 9.0 | 5.8 | 7.4 | 7.1 | 6.0 | 6.4 |
| 24 | 8.2 | 7.2 | 7.8 | 13.4 | 8.2 | 10.2 | 8.1 | 6.0 | 6.9 | 7.6 | 5.8 | 6.4 |
| 25 | 8.5 | 7.8 | 8.1 | 14.0 | 8.7 | 10.9 | 8.8 | 6.3 | 7.4 | 8.0 | 5.8 | 6.6 |
| 26 | 8.7 | 7.6 | 8.1 | 10.8 | 8.1 | 9.3 | 10.1 | 6.6 | 8.0 | 9.0 | 6.0 | 7.1 |
| 27 | 8.6 | 7.5 | 8.0 | 10.1 | 6.7 | 8.3 | 9.2 | 6.3 | 7.8 | 11.4 | 6.1 | 8.9 |
| 28 | 8.9 | 6.9 | 7.9 | 11.7 | 7.1 | 9.1 | 9.2 | 6.0 | 7.5 | 11.1 | 7.5 | 9.0 |
| 29 | 9.6 | 6.9 | 8.1 | 15.4 | 8.3 | 11.2 | 9.8 | 6.5 | 8.0 | 9.8 | 7.7 | 8.7 |
| 30 | 9.4 | 7.1 | 8.4 | 14.0 | 9.1 | 11.4 | 8.0 | 6.2 | 7.1 | 9.8 | 7.1 | 8.3 |
| 31 | --- | --- | --- | 15.1 | 8.8 | 11.4 | 7.7 | 5.5 | 6.5 | --- | --- | --- |
| MONTH | 10.0 | 5.0 | 7.5 | 15.4 | 6.4 | 8.6 | 14.9 | 4.2 | 7.7 | 11.4 | 5.6 | 7.4 |
| YEAR | 16.0 | 4.2 | 10.5 | | | | | | | | | |

PASSAIC RIVER BASIN

01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), MIDDLE INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---------|------|-----|----------|------|------|----------|------|------|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 9.8 | 8.8 | 9.2 | 10.7 | 9.2 | 9.7 | 8.6 | 8.3 | 8.4 | 12.6 | 11.6 | 12.2 |
| 2 | 10.1 | 8.5 | 9.3 | 11.0 | 9.5 | 10.0 | 10.0 | 8.6 | 9.5 | 13.6 | 12.0 | 12.7 |
| 3 | 10.2 | 8.2 | 9.0 | 11.0 | 9.1 | 10.0 | 12.5 | 10.0 | 10.8 | 13.4 | 12.8 | 13.1 |
| 4 | 10.1 | 8.0 | 8.8 | 11.2 | 9.2 | 10.1 | 12.8 | 12.0 | 12.4 | 13.6 | 13.0 | 13.2 |
| 5 | 9.5 | 7.5 | 8.4 | 10.6 | 9.0 | 9.9 | 12.7 | 12.2 | 12.4 | 13.2 | 12.6 | 12.9 |
| 6 | 8.3 | 7.2 | 7.7 | 10.6 | 8.8 | 9.6 | 12.7 | 12.4 | 12.5 | 12.9 | 12.5 | 12.7 |
| 7 | 8.6 | 7.2 | 7.8 | 10.3 | 8.6 | 9.5 | 12.6 | 11.7 | 12.2 | 12.8 | 12.2 | 12.5 |
| 8 | 9.4 | 7.3 | 8.3 | 10.6 | 9.1 | 9.9 | 12.1 | 11.7 | 11.9 | 13.1 | 12.3 | 12.6 |
| 9 | 10.4 | 7.7 | 9.2 | 11.0 | 9.6 | 10.2 | 12.2 | 11.7 | 11.9 | 13.1 | 12.6 | 12.8 |
| 10 | 10.8 | 8.7 | 9.7 | 10.6 | 7.6 | 9.3 | 12.7 | 11.6 | 12.1 | 12.8 | 12.3 | 12.6 |
| 11 | 11.5 | 9.5 | 10.4 | 7.6 | 5.0 | 5.8 | 12.7 | 11.5 | 12.0 | 13.1 | 12.5 | 12.8 |
| 12 | 11.7 | 9.8 | 10.6 | 5.0 | 3.8 | 4.2 | 12.4 | 11.2 | 11.7 | 13.1 | 12.8 | 12.9 |
| 13 | 11.4 | 9.6 | 10.4 | 5.2 | 4.7 | 5.1 | 11.6 | 10.9 | 11.3 | 13.1 | 12.8 | 12.9 |
| 14 | 11.0 | 9.2 | 10.0 | 7.0 | 5.2 | 6.0 | 13.6 | 11.2 | 12.1 | 13.2 | 12.8 | 13.0 |
| 15 | 11.0 | 9.0 | 9.9 | 7.6 | 6.7 | 7.2 | 12.2 | 11.8 | 12.1 | 13.5 | 12.7 | 13.1 |
| 16 | 9.8 | 8.7 | 9.3 | 8.9 | 7.6 | 7.9 | 12.1 | 11.9 | 12.0 | 12.7 | 11.6 | 12.1 |
| 17 | 9.5 | 7.9 | 8.3 | 8.8 | 8.2 | 8.4 | 12.0 | 11.1 | 11.7 | 12.2 | 11.3 | 11.6 |
| 18 | 7.9 | 6.9 | 7.3 | 9.1 | 8.7 | 9.0 | 13.1 | 12.0 | 12.5 | 12.2 | 11.5 | 11.9 |
| 19 | 8.3 | 6.3 | 7.3 | 9.7 | 9.1 | 9.5 | 13.2 | 11.5 | 12.7 | 12.5 | 12.0 | 12.2 |
| 20 | 8.1 | 7.2 | 7.6 | 10.3 | 9.7 | 10.0 | 11.5 | 10.1 | 10.5 | 12.2 | 11.6 | 11.9 |
| 21 | 8.8 | 7.2 | 7.9 | 11.0 | 10.1 | 10.6 | 11.1 | 10.2 | 10.6 | 12.8 | 12.2 | 12.6 |
| 22 | 9.1 | 7.7 | 8.2 | 11.6 | 10.6 | 11.0 | 11.4 | 11.1 | 11.2 | 12.9 | 12.6 | 12.8 |
| 23 | 9.2 | 7.3 | 8.1 | 11.9 | 11.1 | 11.5 | 11.5 | 11.4 | 11.5 | 12.6 | 12.2 | 12.5 |
| 24 | 9.5 | 7.3 | 8.5 | 12.8 | 11.4 | 12.0 | 11.5 | 10.9 | 11.2 | 12.2 | 11.7 | 12.0 |
| 25 | 9.9 | 8.0 | 8.9 | 13.1 | 11.9 | 12.4 | 11.0 | 10.8 | 10.9 | 11.8 | 11.6 | 11.7 |
| 26 | 9.9 | 8.3 | 9.1 | 13.1 | 11.4 | 12.2 | 11.2 | 11.0 | 11.1 | 12.5 | 11.5 | 12.0 |
| 27 | 9.4 | 8.2 | 8.8 | 11.6 | 9.8 | 10.6 | 12.1 | 11.1 | 11.7 | 12.7 | 12.1 | 12.4 |
| 28 | 9.5 | 7.9 | 8.8 | 9.8 | 8.8 | 9.2 | 12.8 | 12.1 | 12.4 | 12.9 | 12.3 | 12.6 |
| 29 | 9.1 | 7.2 | 8.4 | 8.8 | 8.5 | 8.6 | 13.3 | 12.8 | 13.1 | 12.9 | 12.7 | 12.8 |
| 30 | 9.1 | 7.5 | 8.4 | 8.5 | 8.2 | 8.3 | 13.2 | 12.8 | 13.1 | 13.2 | 12.6 | 12.9 |
| 31 | 10.0 | 8.3 | 9.0 | --- | --- | --- | 12.9 | 12.2 | 12.6 | 12.7 | 11.9 | 12.2 |
| MONTH | 11.7 | 6.3 | 8.8 | 13.1 | 3.8 | 9.3 | 13.6 | 8.3 | 11.7 | 13.6 | 11.3 | 12.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|-------|------|------|-------|------|------|------|------|-----|------|
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 12.6 | 12.2 | 12.3 | 12.8 | 12.2 | 12.5 | 13.4 | 12.7 | 13.2 | 11.4 | 9.6 | 10.5 |
| 2 | 12.4 | 12.0 | 12.2 | 12.9 | 12.2 | 12.6 | 12.8 | 12.1 | 12.5 | 11.3 | 9.2 | 10.2 |
| 3 | 12.3 | 11.9 | 12.1 | 12.9 | 12.2 | 12.5 | 12.6 | 11.9 | 12.2 | 10.9 | 8.9 | 9.9 |
| 4 | 12.6 | 12.1 | 12.4 | 12.8 | 12.2 | 12.5 | 12.7 | 11.2 | 12.0 | 10.2 | 8.4 | 9.2 |
| 5 | 12.4 | 12.0 | 12.3 | 13.0 | 12.1 | 12.6 | 13.0 | 11.0 | 12.0 | 9.2 | 7.0 | 8.2 |
| 6 | 12.2 | 11.8 | 12.0 | 13.8 | 12.5 | 13.2 | 12.5 | 10.8 | 11.4 | 7.8 | 5.9 | 7.0 |
| 7 | 12.6 | 11.8 | 12.2 | 14.5 | 13.1 | 13.8 | 12.1 | 10.7 | 11.3 | 7.8 | 5.7 | 6.8 |
| 8 | 13.1 | 12.1 | 12.6 | 14.7 | 13.0 | 13.9 | 12.1 | 11.1 | 11.5 | 8.3 | 6.7 | 7.3 |
| 9 | 13.0 | 12.2 | 12.6 | 14.5 | 12.9 | 13.7 | 12.2 | 11.0 | 11.6 | 8.7 | 6.7 | 7.4 |
| 10 | 12.5 | 11.8 | 12.1 | 14.3 | 13.0 | 13.6 | 11.8 | 10.4 | 11.1 | 9.0 | 6.9 | 7.7 |
| 11 | 12.5 | 11.7 | 12.2 | 14.6 | 13.1 | 13.8 | 11.7 | 11.0 | 11.3 | 9.0 | 7.1 | 7.9 |
| 12 | 13.2 | 12.4 | 12.8 | 15.1 | 13.3 | 14.2 | 11.5 | 11.1 | 11.3 | 8.8 | 6.5 | 7.5 |
| 13 | 13.6 | 12.7 | 13.0 | 13.9 | 13.2 | 13.5 | 11.5 | 10.7 | 11.1 | 8.5 | 6.0 | 7.1 |
| 14 | 13.0 | 12.3 | 12.8 | 13.9 | 13.0 | 13.4 | 11.5 | 10.3 | 10.9 | 7.6 | 5.7 | 6.6 |
| 15 | 12.6 | 11.9 | 12.3 | 13.4 | 12.7 | 13.1 | 11.1 | 10.2 | 10.6 | 7.8 | 5.9 | 6.7 |
| 16 | 12.6 | 11.9 | 12.2 | 12.7 | 11.9 | 12.5 | 10.8 | 9.9 | 10.3 | 7.4 | 6.0 | 6.7 |
| 17 | 12.7 | 11.9 | 12.3 | 12.3 | 11.7 | 11.9 | 10.6 | 9.9 | 10.3 | 6.8 | 5.7 | 6.2 |
| 18 | 13.3 | 12.2 | 12.8 | 13.1 | 12.1 | 12.6 | 11.9 | 10.0 | 10.9 | 6.1 | 5.2 | 5.7 |
| 19 | 13.7 | 12.9 | 13.3 | 13.3 | 12.6 | 12.9 | 12.1 | 10.5 | 11.3 | 6.0 | 4.7 | 5.4 |
| 20 | 13.7 | 12.8 | 13.2 | 13.7 | 12.4 | 13.0 | 11.9 | 10.7 | 11.3 | 6.7 | 5.4 | 6.0 |
| 21 | 13.4 | 12.4 | 12.9 | 13.4 | 12.8 | 13.0 | 11.6 | 10.4 | 11.0 | 6.1 | 5.5 | 5.7 |
| 22 | 13.6 | 12.1 | 12.9 | 13.3 | 12.8 | 13.1 | 12.5 | 9.9 | 11.2 | 6.6 | 5.4 | 6.1 |
| 23 | 14.3 | 12.8 | 13.6 | 13.7 | 13.1 | 13.5 | 11.9 | 9.4 | 10.8 | 6.6 | 6.0 | 6.3 |
| 24 | 14.4 | 13.2 | 13.8 | 13.3 | 12.5 | 12.9 | 11.0 | 8.5 | 9.9 | 6.3 | 5.9 | 6.1 |
| 25 | 13.6 | 12.8 | 13.3 | 13.0 | 12.4 | 12.7 | 10.7 | 8.1 | 9.5 | 6.4 | 6.1 | 6.2 |
| 26 | 12.8 | 11.9 | 12.3 | 13.0 | 12.0 | 12.5 | 10.8 | 8.4 | 9.8 | 6.4 | 6.2 | 6.3 |
| 27 | 12.7 | 12.0 | 12.4 | 13.8 | 12.6 | 13.2 | 11.0 | 9.3 | 10.2 | 6.9 | 6.3 | 6.7 |
| 28 | 12.7 | 12.2 | 12.4 | 14.1 | 13.1 | 13.5 | 11.2 | 9.2 | 10.3 | 7.3 | 6.9 | 7.1 |
| 29 | --- | --- | --- | 13.9 | 13.2 | 13.6 | 11.5 | 9.3 | 10.2 | 7.8 | 7.3 | 7.6 |
| 30 | --- | --- | --- | 13.7 | 13.1 | 13.3 | 11.5 | 9.5 | 10.5 | 7.4 | 7.0 | 7.2 |
| 31 | --- | --- | --- | 13.7 | 13.3 | 13.5 | --- | --- | --- | 7.3 | 6.8 | 7.1 |
| MONTH | 14.4 | 11.7 | 12.6 | 15.1 | 11.7 | 13.1 | 13.4 | 8.1 | 11.1 | 11.4 | 4.7 | 7.2 |

PASSAIC RIVER BASIN

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01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), MIDDLE INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|------|------|--------|-----|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 7.3 | 6.7 | 7.0 | 6.6 | 5.4 | 6.1 | 18.0 | 9.7 | 12.5 | 8.4 | 5.9 | 6.9 |
| 2 | 9.1 | 7.3 | 8.4 | 7.5 | 5.7 | 6.6 | 17.9 | 9.7 | 12.8 | 8.4 | 6.2 | 7.0 |
| 3 | 9.2 | 8.5 | 8.9 | 7.6 | 5.6 | 6.6 | 13.7 | 9.6 | 11.3 | 7.9 | 6.0 | 6.7 |
| 4 | 8.5 | 5.9 | 7.0 | 7.1 | 5.8 | 6.5 | 11.4 | 8.9 | 10.0 | 8.1 | 6.1 | 7.0 |
| 5 | 5.9 | 5.3 | 5.5 | 7.0 | 6.1 | 6.4 | 11.0 | 8.0 | 9.0 | 8.8 | 7.0 | 7.7 |
| 6 | 5.5 | 5.0 | 5.2 | 7.0 | 5.9 | 6.4 | 12.8 | 6.8 | 9.1 | 8.6 | 7.0 | 7.7 |
| 7 | 5.6 | 4.9 | 5.2 | 7.2 | 6.1 | 6.6 | 14.6 | 7.1 | 9.9 | 9.0 | 7.0 | 7.8 |
| 8 | 5.8 | 5.1 | 5.4 | 6.9 | 6.2 | 6.6 | 15.9 | 7.6 | 10.8 | 9.5 | 7.3 | 8.2 |
| 9 | 5.9 | 5.3 | 5.6 | 7.5 | 6.7 | 7.1 | 15.9 | 8.0 | 11.1 | 10.6 | 7.6 | 8.8 |
| 10 | 5.9 | 5.5 | 5.7 | 7.4 | 6.3 | 6.7 | 12.2 | 5.7 | 9.3 | 10.3 | 7.8 | 9.0 |
| 11 | 5.8 | 5.5 | 5.6 | 7.8 | 6.3 | 6.9 | 7.4 | 5.3 | 6.6 | 8.3 | 6.7 | 7.5 |
| 12 | 5.9 | 5.2 | 5.5 | 7.8 | 6.5 | 7.0 | 5.3 | 4.1 | 4.8 | 6.9 | 5.8 | 6.4 |
| 13 | 5.8 | 4.7 | 5.3 | 7.9 | 6.4 | 7.1 | 5.6 | 4.2 | 4.9 | 7.1 | 5.7 | 6.2 |
| 14 | 5.9 | 5.1 | 5.4 | 8.5 | 6.4 | 7.4 | 5.4 | 5.1 | 5.2 | 7.7 | 5.9 | 6.6 |
| 15 | 6.1 | 5.3 | 5.6 | 10.1 | 6.8 | 8.2 | 5.6 | 5.1 | 5.3 | 6.8 | 6.3 | 6.6 |
| 16 | 6.3 | 5.1 | 5.5 | 10.9 | 7.1 | 8.8 | 6.1 | 5.2 | 5.6 | 6.9 | 6.6 | 6.8 |
| 17 | 7.2 | 5.4 | 6.7 | 10.8 | 7.4 | 8.8 | 6.6 | 5.3 | 5.8 | 7.4 | 6.8 | 7.0 |
| 18 | 6.8 | 4.6 | 5.8 | 10.4 | 7.0 | 8.4 | 7.2 | 5.4 | 6.1 | 8.7 | 6.8 | 7.6 |
| 19 | 4.6 | 4.3 | 4.4 | 10.0 | 6.8 | 8.2 | 8.2 | 5.2 | 6.5 | 9.0 | 6.7 | 7.6 |
| 20 | 4.3 | 3.9 | 4.1 | 10.0 | 6.8 | 8.3 | 9.3 | 5.7 | 6.8 | 7.4 | 6.7 | 7.1 |
| 21 | 4.2 | 3.8 | 3.9 | 11.9 | 6.3 | 8.8 | 7.6 | 5.8 | 6.6 | 7.3 | 6.5 | 6.8 |
| 22 | 4.3 | 3.9 | 4.1 | 12.2 | 7.9 | 9.6 | 7.7 | 5.6 | 6.4 | 6.9 | 6.2 | 6.5 |
| 23 | 7.1 | 4.2 | 4.8 | 13.6 | 7.1 | 9.7 | 8.4 | 5.9 | 7.1 | 6.8 | 6.0 | 6.3 |
| 24 | 8.1 | 7.1 | 7.8 | 18.6 | 8.6 | 12.4 | 6.9 | 5.8 | 6.5 | 6.9 | 5.9 | 6.2 |
| 25 | 8.0 | 7.1 | 7.7 | 20.0 | 11.8 | 14.8 | 6.8 | 5.2 | 5.8 | 6.7 | 5.9 | 6.3 |
| 26 | 7.1 | 5.3 | 6.1 | 13.7 | 10.1 | 11.5 | 8.7 | 5.6 | 6.8 | 6.2 | 5.9 | 6.0 |
| 27 | 5.3 | 4.9 | 5.0 | 12.9 | 7.5 | 9.9 | 8.8 | 6.1 | 7.3 | 6.9 | 6.0 | 6.4 |
| 28 | 5.3 | 4.7 | 4.9 | 12.4 | 7.8 | 9.8 | 10.0 | 6.1 | 7.5 | 8.1 | 6.6 | 7.4 |
| 29 | 5.5 | 4.5 | 5.0 | 16.0 | 9.1 | 12.1 | 9.9 | 6.6 | 8.0 | 8.5 | 7.1 | 7.6 |
| 30 | 6.8 | 4.6 | 5.5 | 14.6 | 9.7 | 12.0 | 8.1 | 6.4 | 7.1 | 8.8 | 7.1 | 7.9 |
| 31 | --- | --- | --- | 15.4 | 9.1 | 11.7 | 7.8 | 5.6 | 6.6 | --- | --- | --- |
| MONTH | 9.2 | 3.8 | 5.8 | 20.0 | 5.4 | 8.6 | 18.0 | 4.1 | 7.7 | 10.6 | 5.7 | 7.1 |
| YEAR | 20.0 | 3.8 | 9.6 | | | | | | | | | |

OXYGEN DISSOLVED (MG/L), RIGHT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|------|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 9.5 | 8.5 | 8.9 | 10.2 | 9.0 | 9.5 | 8.7 | 8.4 | 8.5 | 12.7 | 11.8 | 12.3 |
| 2 | 9.9 | 8.2 | 9.0 | 10.5 | 9.3 | 9.9 | 9.9 | 8.7 | 9.4 | 12.5 | 12.1 | 12.4 |
| 3 | 9.5 | 7.9 | 8.6 | 10.7 | 9.2 | 10.0 | 10.9 | 9.9 | 10.5 | 12.9 | 12.4 | 12.7 |
| 4 | 9.6 | 7.8 | 8.4 | 10.9 | 9.1 | 10.0 | 11.8 | 10.9 | 11.4 | 12.9 | 12.6 | 12.8 |
| 5 | 8.8 | 7.6 | 8.2 | 10.6 | 9.1 | 9.9 | 12.2 | 11.7 | 11.9 | 12.7 | 12.3 | 12.5 |
| 6 | 8.3 | 7.1 | 7.7 | 10.2 | 8.9 | 9.6 | 12.2 | 11.8 | 12.0 | 12.4 | 12.1 | 12.2 |
| 7 | 8.2 | 7.1 | 7.5 | 10.1 | 8.7 | 9.5 | 12.1 | 11.8 | 11.9 | 12.3 | 11.9 | 12.0 |
| 8 | 8.8 | 7.3 | 8.0 | 10.5 | 9.2 | 9.9 | 12.2 | 11.8 | 12.0 | 12.1 | 11.8 | 11.9 |
| 9 | 9.3 | 7.8 | 8.6 | 11.1 | 9.7 | 10.3 | 12.3 | 11.8 | 12.0 | 11.9 | 11.6 | 11.7 |
| 10 | 10.6 | 8.5 | 9.5 | 10.7 | 7.6 | 9.5 | 13.0 | 11.7 | 12.3 | 11.9 | 11.6 | 11.8 |
| 11 | 11.3 | 9.5 | 10.4 | 7.6 | 5.1 | 5.9 | 12.8 | 11.6 | 12.1 | 12.2 | 11.5 | 11.9 |
| 12 | 11.5 | 9.9 | 10.8 | 5.1 | 3.9 | 4.3 | 12.5 | 11.4 | 11.8 | 12.2 | 11.9 | 12.1 |
| 13 | 11.6 | 10.0 | 10.8 | 5.3 | 4.8 | 5.2 | 11.6 | 11.0 | 11.3 | 12.3 | 11.8 | 12.0 |
| 14 | 11.2 | 9.6 | 10.4 | 6.6 | 5.3 | 5.9 | 12.4 | 11.2 | 11.8 | 12.3 | 11.9 | 12.1 |
| 15 | 11.2 | 9.4 | 10.3 | 7.6 | 6.6 | 7.2 | 12.3 | 11.9 | 12.2 | 12.3 | 11.8 | 12.1 |
| 16 | 10.3 | 8.9 | 9.7 | 8.2 | 7.6 | 7.8 | 12.2 | 12.0 | 12.1 | 12.2 | 11.1 | 11.6 |
| 17 | 10.1 | 8.1 | 8.6 | 8.6 | 8.2 | 8.3 | 12.0 | 10.6 | 11.4 | 11.4 | 11.0 | 11.2 |
| 18 | 8.1 | 6.8 | 7.2 | 9.1 | 8.6 | 8.9 | 11.3 | 9.9 | 10.6 | 12.2 | 11.4 | 11.8 |
| 19 | 8.4 | 6.4 | 7.3 | 9.7 | 9.1 | 9.5 | 10.4 | 9.6 | 9.9 | 12.5 | 11.8 | 12.1 |
| 20 | 7.8 | 6.7 | 7.3 | 10.3 | 9.7 | 10.1 | 10.3 | 9.9 | 10.1 | 12.4 | 11.6 | 12.0 |
| 21 | 7.8 | 6.8 | 7.2 | 11.0 | 10.3 | 10.7 | 11.3 | 10.3 | 10.7 | 12.9 | 12.4 | 12.8 |
| 22 | 8.4 | 6.9 | 7.5 | 11.6 | 10.8 | 11.2 | 11.5 | 11.0 | 11.2 | 13.0 | 12.7 | 12.9 |
| 23 | 8.4 | 7.1 | 7.7 | 12.0 | 11.2 | 11.6 | 11.6 | 11.5 | 11.6 | 12.7 | 12.3 | 12.6 |
| 24 | 8.8 | 7.2 | 8.1 | 12.7 | 11.6 | 12.1 | 11.6 | 10.9 | 11.3 | 12.4 | 11.7 | 12.1 |
| 25 | 9.3 | 7.7 | 8.4 | 13.2 | 12.0 | 12.5 | 11.2 | 10.9 | 11.0 | 12.0 | 11.7 | 11.8 |
| 26 | 9.2 | 8.0 | 8.6 | 13.1 | 11.5 | 12.2 | 11.4 | 11.1 | 11.3 | 12.5 | 11.7 | 12.1 |
| 27 | 9.0 | 8.0 | 8.6 | 11.7 | 9.8 | 10.3 | 12.2 | 11.2 | 11.8 | 12.7 | 12.2 | 12.4 |
| 28 | 9.0 | 7.9 | 8.6 | 9.8 | 8.9 | 9.2 | 12.8 | 12.2 | 12.5 | 12.8 | 12.3 | 12.5 |
| 29 | 9.1 | 7.3 | 8.4 | 8.9 | 8.6 | 8.7 | 13.3 | 12.8 | 13.1 | 12.9 | 12.5 | 12.7 |
| 30 | 9.0 | 7.5 | 8.2 | 8.7 | 8.3 | 8.5 | 13.4 | 13.0 | 13.2 | 13.0 | 12.3 | 12.7 |
| 31 | 9.4 | 8.1 | 8.7 | --- | --- | --- | 13.0 | 12.3 | 12.7 | 12.7 | 11.9 | 12.2 |
| MONTH | 11.6 | 6.4 | 8.6 | 13.2 | 3.9 | 9.3 | 13.4 | 8.4 | 11.5 | 13.0 | 11.0 | 12.2 |

01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

OXYGEN DISSOLVED (MG/L), RIGHT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|-----|------|
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 12.6 | 12.2 | 12.4 | 12.9 | 12.3 | 12.6 | 12.7 | 10.9 | 11.6 | 10.2 | 9.3 | 9.7 |
| 2 | 12.5 | 12.1 | 12.4 | 13.0 | 12.4 | 12.7 | 11.5 | 10.4 | 10.9 | 10.6 | 9.0 | 9.7 |
| 3 | 12.4 | 12.1 | 12.3 | 13.1 | 12.4 | 12.7 | 12.2 | 10.9 | 11.5 | 10.7 | 8.6 | 9.4 |
| 4 | 12.8 | 12.3 | 12.5 | 13.0 | 12.3 | 12.7 | 12.7 | 10.7 | 11.6 | 10.2 | 8.2 | 8.9 |
| 5 | 12.6 | 12.2 | 12.4 | 13.2 | 12.2 | 12.7 | 13.2 | 10.6 | 11.8 | 9.5 | 7.1 | 8.3 |
| 6 | 12.4 | 11.9 | 12.2 | 13.9 | 12.6 | 13.3 | 12.7 | 10.4 | 11.2 | 7.8 | 6.1 | 7.1 |
| 7 | 12.8 | 12.0 | 12.4 | 14.6 | 13.2 | 13.9 | 11.9 | 9.9 | 10.7 | 7.1 | 5.9 | 6.4 |
| 8 | 13.3 | 12.3 | 12.8 | 14.9 | 13.3 | 14.0 | 11.9 | 10.7 | 11.1 | 7.5 | 6.4 | 6.9 |
| 9 | 13.1 | 12.4 | 12.7 | 14.6 | 13.0 | 13.8 | 11.3 | 10.6 | 10.9 | 8.5 | 6.8 | 7.5 |
| 10 | 12.6 | 11.9 | 12.3 | 14.5 | 13.1 | 13.7 | 11.2 | 9.3 | 10.2 | 8.7 | 7.0 | 7.7 |
| 11 | 12.6 | 11.8 | 12.3 | 14.7 | 13.2 | 14.0 | 9.4 | 9.2 | 9.3 | 9.1 | 7.2 | 8.0 |
| 12 | 13.3 | 12.5 | 13.0 | 15.1 | 13.4 | 14.3 | 9.3 | 8.3 | 8.7 | 9.1 | 6.8 | 7.8 |
| 13 | 13.7 | 12.8 | 13.1 | 14.2 | 12.8 | 13.8 | 9.9 | 8.6 | 9.0 | 9.0 | 6.3 | 7.5 |
| 14 | 13.1 | 12.3 | 12.8 | 12.8 | 12.6 | 12.7 | 10.5 | 9.1 | 9.6 | 8.0 | 5.9 | 6.8 |
| 15 | 12.6 | 12.0 | 12.3 | 12.7 | 12.4 | 12.6 | 10.6 | 9.6 | 10.1 | 8.0 | 6.0 | 6.9 |
| 16 | 12.6 | 11.9 | 12.2 | 12.5 | 11.9 | 12.2 | 10.5 | 9.6 | 9.9 | 7.7 | 6.1 | 6.8 |
| 17 | 12.7 | 12.0 | 12.3 | 11.9 | 11.6 | 11.7 | 10.0 | 9.7 | 9.8 | 7.0 | 5.8 | 6.3 |
| 18 | 13.3 | 12.2 | 12.9 | 12.3 | 11.6 | 11.8 | 10.4 | 9.7 | 10.1 | 6.2 | 5.3 | 5.8 |
| 19 | 13.8 | 13.0 | 13.4 | 12.7 | 12.1 | 12.4 | 11.3 | 10.3 | 10.8 | 6.1 | 4.8 | 5.5 |
| 20 | 13.7 | 12.8 | 13.3 | 13.0 | 12.3 | 12.6 | 11.5 | 10.7 | 11.1 | 7.0 | 5.5 | 6.1 |
| 21 | 13.5 | 12.5 | 13.0 | 12.8 | 12.3 | 12.6 | 11.3 | 10.4 | 10.8 | 6.2 | 5.5 | 5.8 |
| 22 | 13.6 | 12.2 | 13.0 | 12.6 | 11.9 | 12.2 | 10.9 | 9.6 | 10.3 | 6.7 | 5.6 | 6.1 |
| 23 | 14.4 | 12.9 | 13.6 | 12.7 | 11.3 | 12.1 | 10.3 | 8.9 | 9.7 | 6.7 | 6.1 | 6.4 |
| 24 | 14.5 | 13.3 | 13.9 | 11.3 | 10.6 | 10.9 | 9.6 | 8.0 | 8.9 | 6.4 | 6.0 | 6.1 |
| 25 | 13.7 | 12.9 | 13.4 | 11.8 | 10.8 | 11.2 | 8.8 | 7.2 | 8.1 | 6.4 | 6.2 | 6.3 |
| 26 | 12.9 | 11.7 | 12.2 | 12.5 | 11.3 | 11.8 | 9.9 | 7.6 | 8.8 | 6.5 | 6.3 | 6.4 |
| 27 | 12.8 | 12.0 | 12.4 | 13.7 | 12.2 | 12.8 | 10.4 | 9.1 | 9.8 | 7.0 | 6.5 | 6.8 |
| 28 | 12.8 | 12.3 | 12.6 | 14.3 | 13.0 | 13.6 | 10.4 | 9.0 | 9.8 | 7.4 | 6.9 | 7.2 |
| 29 | --- | --- | --- | 14.1 | 13.3 | 13.7 | 10.1 | 9.0 | 9.6 | 7.9 | 7.4 | 7.6 |
| 30 | --- | --- | --- | 13.9 | 13.0 | 13.3 | 10.1 | 9.3 | 9.8 | 7.5 | 7.1 | 7.3 |
| 31 | --- | --- | --- | 13.2 | 12.6 | 12.9 | --- | --- | --- | 7.5 | 6.8 | 7.1 |
| MONTH | 14.5 | 11.7 | 12.7 | 15.1 | 10.6 | 12.8 | 13.2 | 7.2 | 10.2 | 10.7 | 4.8 | 7.2 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 7.3 | 6.7 | 7.0 | 5.4 | 4.5 | 4.8 | 17.0 | 9.6 | 12.8 | 8.3 | 5.9 | 6.9 |
| 2 | 7.5 | 7.3 | 7.4 | 5.9 | 4.5 | 5.1 | 16.8 | 9.9 | 13.0 | 8.2 | 6.2 | 7.1 |
| 3 | 7.4 | 6.2 | 6.8 | 6.8 | 4.8 | 5.8 | 14.6 | 9.6 | 11.9 | 7.8 | 5.9 | 6.7 |
| 4 | 6.2 | 5.7 | 6.0 | 6.7 | 5.6 | 6.1 | 12.2 | 9.2 | 10.3 | 8.2 | 6.1 | 7.0 |
| 5 | 5.7 | 5.3 | 5.5 | 6.5 | 5.9 | 6.2 | 10.8 | 8.0 | 9.3 | 8.4 | 7.0 | 7.7 |
| 6 | 5.5 | 5.0 | 5.2 | 6.6 | 5.9 | 6.2 | 12.9 | 6.8 | 9.4 | 8.3 | 7.2 | 7.6 |
| 7 | 5.6 | 5.0 | 5.3 | 7.2 | 6.0 | 6.6 | 14.9 | 7.0 | 10.2 | 8.7 | 7.0 | 7.7 |
| 8 | 5.8 | 5.1 | 5.4 | 6.6 | 5.9 | 6.2 | 14.9 | 7.5 | 10.9 | 9.3 | 7.2 | 8.1 |
| 9 | 5.9 | 5.3 | 5.6 | 6.6 | 5.8 | 6.1 | 14.9 | 7.7 | 11.0 | 10.5 | 7.7 | 8.9 |
| 10 | 5.9 | 5.6 | 5.7 | 7.2 | 5.7 | 6.2 | 12.8 | 8.5 | 10.2 | 10.4 | 8.0 | 9.2 |
| 11 | 5.8 | 5.5 | 5.6 | 7.5 | 5.8 | 6.4 | 9.4 | 5.3 | 7.1 | 8.2 | 6.7 | 7.5 |
| 12 | 6.0 | 5.2 | 5.5 | 7.6 | 5.8 | 6.5 | 5.3 | 4.1 | 4.7 | 6.8 | 5.8 | 6.3 |
| 13 | 5.8 | 4.7 | 5.3 | 8.0 | 5.9 | 6.9 | 5.6 | 4.2 | 4.9 | 6.9 | 5.7 | 6.2 |
| 14 | 6.0 | 5.1 | 5.5 | 8.7 | 6.1 | 7.3 | 5.4 | 5.1 | 5.3 | 7.7 | 6.0 | 6.6 |
| 15 | 6.3 | 5.4 | 5.7 | 10.6 | 6.6 | 8.2 | 5.6 | 5.1 | 5.3 | 6.9 | 6.4 | 6.7 |
| 16 | 6.6 | 5.1 | 5.6 | 11.9 | 7.0 | 9.0 | 6.2 | 5.2 | 5.6 | 7.0 | 6.6 | 6.8 |
| 17 | 6.7 | 5.4 | 6.0 | 11.2 | 7.3 | 8.8 | 6.7 | 5.3 | 5.8 | 7.3 | 6.8 | 7.1 |
| 18 | 5.4 | 4.6 | 4.9 | 10.6 | 7.0 | 8.5 | 7.4 | 5.4 | 6.2 | 8.4 | 6.9 | 7.6 |
| 19 | 4.6 | 4.3 | 4.5 | 10.4 | 6.8 | 8.2 | 8.8 | 5.2 | 6.7 | 8.5 | 6.7 | 7.5 |
| 20 | 4.4 | 4.0 | 4.1 | 10.2 | 6.8 | 8.4 | 8.7 | 5.8 | 6.9 | 7.4 | 6.7 | 7.1 |
| 21 | 4.3 | 3.9 | 4.0 | 13.3 | 6.2 | 9.1 | 7.9 | 5.7 | 6.7 | 7.2 | 6.5 | 6.8 |
| 22 | 4.4 | 3.9 | 4.1 | 12.5 | 7.8 | 9.8 | 8.1 | 5.6 | 6.5 | 6.8 | 6.2 | 6.5 |
| 23 | 4.9 | 4.3 | 4.5 | 14.0 | 7.1 | 10.0 | 8.7 | 5.8 | 7.1 | 6.8 | 6.1 | 6.4 |
| 24 | 5.5 | 4.8 | 5.1 | 19.0 | 8.5 | 13.0 | 7.0 | 5.8 | 6.5 | 6.8 | 5.9 | 6.3 |
| 25 | 5.4 | 5.1 | 5.2 | 20.0 | 11.7 | 15.6 | 6.4 | 5.2 | 5.8 | 6.6 | 5.9 | 6.2 |
| 26 | 5.3 | 5.0 | 5.1 | 14.4 | 10.3 | 11.8 | 8.7 | 5.6 | 6.9 | 6.2 | 5.9 | 6.1 |
| 27 | 5.2 | 4.8 | 5.0 | 13.9 | 7.5 | 10.3 | 9.2 | 6.1 | 7.4 | 6.8 | 6.1 | 6.4 |
| 28 | 5.3 | 4.8 | 5.0 | 13.6 | 7.8 | 10.2 | 9.5 | 6.0 | 7.6 | 8.1 | 6.6 | 7.3 |
| 29 | 5.3 | 4.6 | 4.9 | 17.5 | 9.0 | 12.7 | 10.1 | 6.6 | 8.1 | 8.4 | 7.1 | 7.6 |
| 30 | 5.5 | 4.3 | 4.9 | 15.8 | 9.7 | 12.4 | 8.2 | 6.4 | 7.2 | 8.6 | 7.2 | 7.9 |
| 31 | --- | --- | --- | 15.9 | 9.1 | 12.1 | 7.9 | 5.6 | 6.7 | --- | --- | --- |
| MONTH | 7.5 | 3.9 | 5.3 | 20.0 | 4.5 | 8.5 | 17.0 | 4.1 | 7.9 | 10.5 | 5.7 | 7.1 |
| YEAR | 20.0 | 3.9 | 9.4 | | | | | | | | | |

PASSAIC RIVER BASIN

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01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), LEFT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|-----|-----|----------|-----|-----|----------|-----|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 347 | 329 | 339 | 716 | 627 | 682 | 323 | 315 | 319 | 395 | 354 | 370 |
| 2 | 345 | 336 | 341 | 725 | 623 | 702 | 323 | 312 | 317 | 553 | 347 | 411 |
| 3 | 354 | 337 | 344 | 731 | 594 | 711 | 320 | 309 | 315 | 356 | 346 | 352 |
| 4 | 373 | 346 | 359 | 739 | 678 | 713 | 315 | 300 | 308 | 353 | 345 | 350 |
| 5 | 381 | 360 | 374 | 724 | 648 | 686 | 319 | 305 | 313 | 358 | 344 | 353 |
| 6 | 376 | 357 | 363 | 721 | 478 | 684 | 319 | 307 | 313 | 400 | 357 | 377 |
| 7 | 369 | 350 | 360 | 750 | 688 | 719 | 561 | 303 | 375 | 430 | 400 | 412 |
| 8 | 379 | 354 | 367 | 743 | 688 | 714 | 588 | 549 | 575 | 402 | 390 | 396 |
| 9 | 380 | 366 | 375 | 746 | 671 | 717 | 616 | 473 | 568 | 500 | 394 | 459 |
| 10 | 385 | 368 | 378 | 726 | 304 | 416 | 620 | 585 | 605 | 519 | 476 | 500 |
| 11 | 521 | 369 | 410 | 432 | 300 | 374 | 636 | 588 | 617 | 476 | 438 | 452 |
| 12 | 569 | 436 | 501 | 448 | 431 | 440 | 644 | 601 | 627 | 439 | 426 | 435 |
| 13 | 580 | 423 | 528 | 455 | 444 | 450 | 650 | 610 | 633 | 450 | 428 | 440 |
| 14 | 575 | 453 | 523 | 455 | 434 | 449 | 710 | 494 | 609 | 461 | 441 | 452 |
| 15 | 561 | 463 | 523 | 434 | 406 | 418 | 647 | 467 | 566 | 579 | 457 | 501 |
| 16 | 587 | 423 | 497 | 444 | 424 | 438 | 720 | 532 | 627 | 581 | 526 | 555 |
| 17 | 433 | 383 | 405 | 441 | 431 | 436 | 532 | 283 | 382 | 571 | 518 | 537 |
| 18 | 423 | 391 | 402 | 437 | 424 | 431 | 396 | 223 | 297 | 518 | 505 | 511 |
| 19 | 685 | 385 | 453 | 430 | 422 | 426 | 232 | 219 | 227 | 560 | 499 | 520 |
| 20 | 398 | 380 | 389 | 428 | 418 | 424 | 251 | 231 | 240 | 600 | 515 | 555 |
| 21 | 422 | 395 | 407 | 426 | 416 | 421 | 249 | 240 | 244 | 632 | 599 | 621 |
| 22 | 434 | 408 | 418 | 418 | 406 | 412 | 258 | 246 | 253 | 637 | 610 | 619 |
| 23 | 445 | 414 | 424 | 418 | 398 | 409 | 273 | 256 | 266 | 617 | 593 | 602 |
| 24 | 550 | 416 | 472 | 417 | 401 | 410 | 278 | 265 | 272 | 600 | 580 | 588 |
| 25 | 601 | 418 | 528 | 416 | 399 | 409 | 290 | 275 | 283 | 592 | 588 | 590 |
| 26 | 617 | 503 | 575 | 577 | 255 | 388 | 361 | 290 | 324 | 594 | 585 | 590 |
| 27 | 609 | 486 | 551 | 345 | 281 | 328 | 344 | 313 | 324 | 599 | 581 | 589 |
| 28 | 630 | 411 | 508 | 346 | 342 | 344 | 364 | 317 | 329 | 594 | 579 | 588 |
| 29 | 603 | 445 | 526 | 346 | 337 | 342 | 471 | 339 | 397 | 579 | 556 | 567 |
| 30 | 592 | 473 | 548 | 338 | 323 | 330 | 529 | 378 | 484 | 673 | 547 | 586 |
| 31 | 674 | 543 | 620 | --- | --- | --- | 543 | 349 | 456 | 628 | 567 | 591 |
| MONTH | 685 | 329 | 445 | 750 | 255 | 494 | 720 | 219 | 402 | 673 | 344 | 499 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 567 | 535 | 546 | 493 | 478 | 485 | 243 | 234 | 238 | 417 | 402 | 409 |
| 2 | 558 | 540 | 552 | 478 | 458 | 464 | 249 | 240 | 244 | 428 | 411 | 421 |
| 3 | 541 | 530 | 534 | 462 | 433 | 450 | 255 | 244 | 251 | 439 | 424 | 432 |
| 4 | 530 | 513 | 519 | 433 | 422 | 428 | 261 | 253 | 257 | 446 | 432 | 441 |
| 5 | 513 | 490 | 500 | 547 | 432 | 487 | 269 | 260 | 266 | 666 | 446 | 624 |
| 6 | 647 | 494 | 583 | 581 | 537 | 547 | 278 | 268 | 273 | 680 | 639 | 664 |
| 7 | 618 | 536 | 565 | 584 | 559 | 571 | 278 | 276 | 277 | 669 | 456 | 548 |
| 8 | 536 | 507 | 517 | 582 | 545 | 566 | 287 | 278 | 283 | 479 | 452 | 458 |
| 9 | 548 | 505 | 517 | 784 | 548 | 635 | 290 | 282 | 287 | 602 | 472 | 535 |
| 10 | 588 | 536 | 558 | 755 | 671 | 711 | 282 | 257 | 269 | 655 | 487 | 592 |
| 11 | 547 | 535 | 541 | 672 | 649 | 656 | 275 | 257 | 265 | 710 | 612 | 667 |
| 12 | 543 | 537 | 541 | 659 | 651 | 655 | 262 | 254 | 258 | 704 | 676 | 695 |
| 13 | 537 | 526 | 531 | 682 | 584 | 625 | 264 | 259 | 261 | 742 | 678 | 715 |
| 14 | 533 | 499 | 516 | 591 | 518 | 549 | 270 | 264 | 266 | 743 | 715 | 732 |
| 15 | 499 | 473 | 486 | 518 | 471 | 495 | 283 | 269 | 277 | 742 | 696 | 720 |
| 16 | 473 | 450 | 457 | 471 | 425 | 449 | 290 | 282 | 287 | 749 | 701 | 728 |
| 17 | 460 | 435 | 447 | 425 | 372 | 401 | 298 | 289 | 295 | 751 | 702 | 731 |
| 18 | 443 | 427 | 434 | 372 | 340 | 355 | 301 | 292 | 297 | 747 | 715 | 734 |
| 19 | 455 | 440 | 448 | 344 | 326 | 334 | 312 | 293 | 303 | 744 | 706 | 731 |
| 20 | 458 | 451 | 454 | 328 | 321 | 324 | 329 | 312 | 322 | 744 | 720 | 736 |
| 21 | 457 | 445 | 449 | 322 | 292 | 313 | 339 | 328 | 334 | 756 | 715 | 736 |
| 22 | 445 | 430 | 436 | 292 | 260 | 276 | 342 | 335 | 337 | 748 | 420 | 645 |
| 23 | 510 | 422 | 458 | 261 | 226 | 235 | 344 | 335 | 340 | 472 | 420 | 451 |
| 24 | 510 | 462 | 487 | 242 | 234 | 238 | 358 | 344 | 349 | 490 | 465 | 478 |
| 25 | 591 | 446 | 496 | 250 | 240 | 246 | 360 | 351 | 356 | 528 | 490 | 510 |
| 26 | 545 | 470 | 505 | 258 | 249 | 253 | 372 | 347 | 357 | 547 | 517 | 528 |
| 27 | 502 | 462 | 479 | 274 | 257 | 263 | 386 | 372 | 379 | 586 | 509 | 560 |
| 28 | 504 | 491 | 499 | 288 | 272 | 277 | 394 | 385 | 389 | 509 | 426 | 443 |
| 29 | --- | --- | --- | 298 | 285 | 290 | 394 | 386 | 391 | 433 | 382 | 413 |
| 30 | --- | --- | --- | 299 | 261 | 280 | 406 | 391 | 399 | 390 | 377 | 383 |
| 31 | --- | --- | --- | 268 | 238 | 251 | --- | --- | --- | 390 | 380 | 386 |
| MONTH | 647 | 422 | 502 | 784 | 226 | 423 | 406 | 234 | 304 | 756 | 377 | 576 |

PASSAIC RIVER BASIN

01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), LEFT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|--------|-----|-----|-----------|-----|-----|------|
| JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | | |
| 1 | 422 | 390 | 406 | 350 | 333 | 342 | 778 | 675 | 742 | 778 | 736 | 763 |
| 2 | 415 | 252 | 312 | 345 | 324 | 334 | 773 | 722 | 759 | 791 | 753 | 775 |
| 3 | 319 | 260 | 282 | 353 | 332 | 341 | 797 | 765 | 785 | 802 | 755 | 785 |
| 4 | 265 | 253 | 260 | 370 | 350 | 360 | 815 | 514 | 744 | 788 | 755 | 773 |
| 5 | 258 | 250 | 255 | 375 | 352 | 364 | 796 | 480 | 638 | 800 | 754 | 778 |
| 6 | 268 | 251 | 260 | 376 | 364 | 371 | 771 | 588 | 698 | 810 | 768 | 792 |
| 7 | 285 | 263 | 274 | 391 | 370 | 380 | 723 | 624 | 693 | 818 | 783 | 802 |
| 8 | 307 | 279 | 294 | 391 | 368 | 382 | 737 | 687 | 710 | 819 | 784 | 802 |
| 9 | 323 | 304 | 314 | 392 | 352 | 374 | 766 | 709 | 748 | 833 | 802 | 818 |
| 10 | 344 | 323 | 333 | 406 | 388 | 398 | 751 | 457 | 685 | 837 | 816 | 825 |
| 11 | 353 | 337 | 346 | 409 | 394 | 403 | 617 | 450 | 550 | 830 | 762 | 800 |
| 12 | 391 | 347 | 360 | 411 | 396 | 404 | 642 | 390 | 551 | 830 | 580 | 722 |
| 13 | 470 | 391 | 429 | 418 | 399 | 412 | 515 | 386 | 431 | 664 | 600 | 629 |
| 14 | 525 | 470 | 492 | 424 | 408 | 417 | 462 | 393 | 417 | 660 | 425 | 548 |
| 15 | 526 | 493 | 509 | 426 | 413 | 420 | 460 | 398 | 440 | 696 | 438 | 521 |
| 16 | 547 | 514 | 522 | 431 | 421 | 427 | 462 | 450 | 457 | 444 | 399 | 418 |
| 17 | 554 | 157 | 291 | 435 | 421 | 430 | 500 | 458 | 479 | 489 | 422 | 469 |
| 18 | 305 | 261 | 290 | 445 | 431 | 439 | 548 | 493 | 519 | 545 | 485 | 523 |
| 19 | 321 | 305 | 313 | 460 | 437 | 445 | 620 | 540 | 574 | 587 | 527 | 549 |
| 20 | 331 | 294 | 314 | 478 | 446 | 453 | 640 | 473 | 562 | 611 | 480 | 587 |
| 21 | 349 | 322 | 336 | 485 | 447 | 460 | 533 | 435 | 492 | 677 | 408 | 518 |
| 22 | 354 | 347 | 351 | 555 | 456 | 483 | 575 | 455 | 513 | 677 | 474 | 550 |
| 23 | 363 | 259 | 343 | 585 | 458 | 516 | 596 | 441 | 552 | 509 | 448 | 474 |
| 24 | 283 | 240 | 270 | 604 | 485 | 539 | 441 | 391 | 418 | 541 | 455 | 489 |
| 25 | 260 | 258 | 259 | 599 | 470 | 539 | 482 | 426 | 452 | 565 | 410 | 501 |
| 26 | 266 | 257 | 261 | 640 | 500 | 550 | 544 | 452 | 497 | 552 | 416 | 456 |
| 27 | 283 | 266 | 273 | 666 | 474 | 590 | 641 | 535 | 590 | 552 | 466 | 486 |
| 28 | 300 | 280 | 291 | 684 | 602 | 638 | 681 | 623 | 660 | 519 | 478 | 493 |
| 29 | 319 | 293 | 308 | 684 | 596 | 643 | 714 | 628 | 691 | 592 | 475 | 510 |
| 30 | 339 | 313 | 328 | 730 | 608 | 689 | 744 | 714 | 734 | 661 | 497 | 577 |
| 31 | --- | --- | --- | 762 | 654 | 725 | 750 | 723 | 739 | --- | --- | --- |
| MONTH | 554 | 157 | 329 | 762 | 324 | 460 | 815 | 386 | 597 | 837 | 399 | 624 |
| YEAR | 837 | 157 | 471 | | | | | | | | | |

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), MIDDLE INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---------|-----|-----|----------|-----|-----|----------|------|-----|---------|------|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 500 | 462 | 483 | 732 | 669 | 703 | 349 | 307 | 329 | 596 | 519 | 554 |
| 2 | 520 | 476 | 494 | 756 | 692 | 709 | 384 | 349 | 364 | 587 | 447 | 539 |
| 3 | 547 | 448 | 515 | 752 | 677 | 713 | 407 | 356 | 385 | 603 | 529 | 569 |
| 4 | 561 | 512 | 538 | 775 | 680 | 719 | 406 | 343 | 374 | 570 | 540 | 554 |
| 5 | 586 | 446 | 533 | 784 | 727 | 771 | 430 | 373 | 409 | 599 | 536 | 571 |
| 6 | 609 | 543 | 583 | 775 | 674 | 752 | 430 | 383 | 410 | 588 | 536 | 563 |
| 7 | 659 | 543 | 592 | 803 | 715 | 759 | 565 | 408 | 480 | 605 | 546 | 580 |
| 8 | 689 | 549 | 616 | 788 | 717 | 753 | 588 | 549 | 576 | 643 | 549 | 598 |
| 9 | 688 | 393 | 501 | 768 | 650 | 740 | 615 | 558 | 589 | 731 | 570 | 670 |
| 10 | 605 | 546 | 577 | 741 | 381 | 554 | 621 | 582 | 605 | 806 | 708 | 739 |
| 11 | 589 | 537 | 568 | 673 | 387 | 446 | 636 | 588 | 617 | 1030 | 806 | 935 |
| 12 | 585 | 542 | 566 | 397 | 328 | 369 | 645 | 600 | 627 | 960 | 845 | 896 |
| 13 | 586 | 555 | 570 | 415 | 388 | 398 | 650 | 608 | 634 | 907 | 810 | 855 |
| 14 | 595 | 551 | 579 | 453 | 415 | 426 | 650 | 464 | 578 | 836 | 745 | 795 |
| 15 | 632 | 566 | 600 | 499 | 453 | 475 | 1160 | 581 | 923 | 785 | 612 | 710 |
| 16 | 643 | 586 | 619 | 475 | 424 | 443 | 909 | 647 | 802 | 880 | 778 | 842 |
| 17 | 692 | 611 | 641 | 496 | 454 | 469 | 647 | 290 | 472 | 1170 | 832 | 1040 |
| 18 | 681 | 591 | 638 | 519 | 494 | 509 | 398 | 228 | 298 | 1050 | 995 | 1030 |
| 19 | 753 | 629 | 699 | 540 | 514 | 530 | 253 | 221 | 235 | 995 | 823 | 905 |
| 20 | 731 | 565 | 652 | 586 | 520 | 564 | 268 | 249 | 261 | 968 | 806 | 888 |
| 21 | 669 | 541 | 582 | 607 | 553 | 585 | 290 | 268 | 278 | 806 | 728 | 754 |
| 22 | 601 | 533 | 561 | 620 | 584 | 604 | 317 | 290 | 305 | 750 | 715 | 729 |
| 23 | 652 | 548 | 610 | 624 | 592 | 608 | 348 | 317 | 332 | 776 | 747 | 762 |
| 24 | 717 | 588 | 627 | 629 | 506 | 604 | 378 | 348 | 364 | 769 | 755 | 764 |
| 25 | 636 | 574 | 606 | 644 | 589 | 616 | 398 | 374 | 383 | 760 | 724 | 738 |
| 26 | 608 | 521 | 562 | 627 | 330 | 490 | 428 | 398 | 411 | 724 | 693 | 706 |
| 27 | 648 | 583 | 614 | 447 | 274 | 339 | 481 | 428 | 452 | 703 | 679 | 688 |
| 28 | 760 | 604 | 670 | 274 | 230 | 241 | 513 | 481 | 499 | 691 | 651 | 670 |
| 29 | 760 | 625 | 720 | 273 | 241 | 257 | 514 | 498 | 506 | 694 | 652 | 677 |
| 30 | 749 | 627 | 695 | 307 | 273 | 289 | 530 | 509 | 519 | 693 | 641 | 672 |
| 31 | 716 | 653 | 672 | --- | --- | --- | 564 | 526 | 546 | 869 | 643 | 758 |
| MONTH | 760 | 393 | 596 | 803 | 230 | 548 | 1160 | 221 | 470 | 1170 | 447 | 734 |

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C). MIDDLE INTAKE. WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C). MIDDLE INTAKE. WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|-----|------|-------|------|------|--------|-----|------|-----------|-----|------|
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 763 | 633 | 706 | 579 | 546 | 561 | 264 | 239 | 251 | 511 | 444 | 489 |
| 2 | 636 | 587 | 617 | 546 | 529 | 537 | 287 | 257 | 273 | 523 | 486 | 502 |
| 3 | 588 | 561 | 577 | 529 | 518 | 522 | 306 | 279 | 292 | 546 | 514 | 529 |
| 4 | 561 | 543 | 554 | 519 | 509 | 514 | 318 | 294 | 307 | 557 | 520 | 543 |
| 5 | 543 | 523 | 532 | 534 | 509 | 515 | 331 | 313 | 322 | 673 | 554 | 658 |
| 6 | 531 | 518 | 521 | 730 | 534 | 619 | 338 | 327 | 333 | 686 | 643 | 670 |
| 7 | 1050 | 531 | 742 | 982 | 730 | 846 | 340 | 327 | 334 | 676 | 589 | 627 |
| 8 | 1050 | 928 | 972 | 1140 | 982 | 1080 | 349 | 331 | 340 | 665 | 546 | 627 |
| 9 | 958 | 921 | 938 | 1140 | 1040 | 1070 | 357 | 300 | 345 | 708 | 655 | 685 |
| 10 | 921 | 778 | 845 | 1160 | 1020 | 1070 | 300 | 264 | 277 | 711 | 677 | 694 |
| 11 | 797 | 678 | 751 | 1120 | 880 | 970 | 280 | 265 | 271 | 717 | 677 | 703 |
| 12 | 678 | 574 | 613 | 880 | 769 | 817 | 284 | 265 | 273 | 713 | 680 | 700 |
| 13 | 574 | 539 | 553 | 769 | 608 | 667 | 310 | 276 | 289 | 746 | 681 | 720 |
| 14 | 539 | 529 | 533 | 608 | 534 | 560 | 327 | 298 | 309 | 747 | 719 | 736 |
| 15 | 543 | 538 | 540 | 534 | 505 | 516 | 352 | 318 | 339 | 744 | 697 | 722 |
| 16 | 567 | 541 | 552 | 507 | 497 | 504 | 362 | 348 | 354 | 752 | 703 | 730 |
| 17 | 554 | 539 | 545 | 500 | 463 | 484 | 370 | 356 | 364 | 753 | 703 | 732 |
| 18 | 555 | 525 | 542 | 463 | 425 | 443 | 367 | 344 | 357 | 747 | 715 | 735 |
| 19 | 525 | 502 | 509 | 450 | 415 | 433 | 399 | 350 | 380 | 746 | 706 | 732 |
| 20 | 504 | 489 | 495 | 456 | 402 | 429 | 415 | 396 | 406 | 746 | 722 | 738 |
| 21 | 497 | 483 | 489 | 406 | 310 | 382 | 426 | 407 | 416 | 758 | 717 | 739 |
| 22 | 501 | 494 | 498 | 310 | 262 | 282 | 414 | 396 | 403 | 752 | 682 | 721 |
| 23 | 497 | 484 | 491 | 264 | 228 | 240 | 405 | 388 | 397 | 684 | 475 | 530 |
| 24 | 604 | 485 | 518 | 296 | 240 | 264 | 418 | 400 | 409 | 491 | 463 | 479 |
| 25 | 683 | 604 | 660 | 334 | 272 | 297 | 419 | 403 | 410 | 530 | 491 | 512 |
| 26 | 857 | 637 | 733 | 351 | 313 | 330 | 452 | 419 | 437 | 549 | 518 | 530 |
| 27 | 757 | 647 | 697 | 371 | 336 | 352 | 473 | 448 | 458 | 589 | 549 | 566 |
| 28 | 647 | 579 | 609 | 387 | 360 | 373 | 482 | 466 | 475 | 550 | 413 | 465 |
| 29 | --- | --- | --- | 396 | 366 | 385 | 488 | 439 | 480 | 413 | 375 | 392 |
| 30 | --- | --- | --- | 393 | 267 | 307 | 511 | 439 | 494 | 389 | 373 | 384 |
| 31 | --- | --- | --- | 270 | 242 | 254 | --- | --- | --- | 392 | 382 | 387 |
| MONTH | 1050 | 483 | 619 | 1160 | 228 | 536 | 511 | 239 | 360 | 758 | 373 | 612 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 424 | 390 | 407 | 443 | 400 | 424 | 785 | 733 | 765 | 785 | 748 | 771 |
| 2 | 418 | 263 | 332 | 464 | 398 | 415 | 778 | 759 | 769 | 792 | 753 | 777 |
| 3 | 320 | 263 | 285 | 492 | 446 | 461 | 803 | 768 | 790 | 804 | 754 | 785 |
| 4 | 265 | 257 | 262 | 468 | 432 | 446 | 828 | 766 | 810 | 791 | 754 | 773 |
| 5 | 258 | 255 | 257 | 474 | 419 | 438 | 831 | 721 | 797 | 802 | 753 | 779 |
| 6 | 265 | 257 | 261 | 475 | 401 | 429 | 828 | 721 | 807 | 812 | 767 | 791 |
| 7 | 279 | 265 | 272 | 444 | 410 | 430 | 811 | 708 | 764 | 820 | 782 | 801 |
| 8 | 301 | 279 | 290 | 435 | 390 | 409 | 759 | 703 | 743 | 821 | 784 | 803 |
| 9 | 324 | 301 | 313 | 453 | 390 | 415 | 772 | 736 | 757 | 833 | 802 | 819 |
| 10 | 349 | 324 | 338 | 499 | 442 | 460 | 757 | 497 | 702 | 838 | 816 | 827 |
| 11 | 376 | 348 | 362 | 505 | 454 | 472 | 771 | 582 | 716 | 840 | 794 | 818 |
| 12 | 428 | 376 | 397 | 497 | 464 | 478 | 771 | 501 | 686 | 831 | 574 | 719 |
| 13 | 476 | 424 | 445 | 530 | 497 | 516 | 637 | 528 | 593 | 665 | 602 | 630 |
| 14 | 534 | 476 | 498 | 597 | 526 | 563 | 539 | 396 | 436 | 729 | 614 | 657 |
| 15 | 534 | 500 | 515 | 643 | 581 | 617 | 430 | 394 | 408 | 748 | 452 | 540 |
| 16 | 555 | 513 | 525 | 683 | 608 | 642 | 498 | 418 | 468 | 452 | 389 | 415 |
| 17 | 563 | 175 | 300 | 681 | 637 | 667 | 539 | 498 | 525 | 492 | 421 | 475 |
| 18 | 262 | 211 | 236 | 698 | 655 | 684 | 598 | 527 | 559 | 549 | 486 | 526 |
| 19 | 224 | 210 | 217 | 736 | 690 | 713 | 652 | 589 | 612 | 588 | 525 | 550 |
| 20 | 244 | 224 | 233 | 746 | 706 | 728 | 687 | 517 | 640 | 615 | 583 | 600 |
| 21 | 279 | 244 | 262 | 706 | 658 | 688 | 709 | 659 | 688 | 690 | 531 | 637 |
| 22 | 315 | 279 | 298 | 701 | 623 | 653 | 690 | 598 | 630 | 690 | 476 | 551 |
| 23 | 347 | 269 | 325 | 703 | 629 | 671 | 619 | 542 | 594 | 511 | 451 | 476 |
| 24 | 288 | 245 | 274 | 723 | 665 | 711 | 699 | 579 | 664 | 546 | 458 | 501 |
| 25 | 273 | 261 | 266 | 738 | 676 | 718 | 592 | 499 | 534 | 589 | 515 | 557 |
| 26 | 306 | 272 | 289 | 759 | 697 | 728 | 616 | 523 | 560 | 618 | 465 | 556 |
| 27 | 335 | 306 | 321 | 796 | 638 | 753 | 675 | 613 | 633 | 559 | 508 | 530 |
| 28 | 358 | 335 | 347 | 792 | 717 | 760 | 700 | 657 | 678 | 563 | 508 | 541 |
| 29 | 391 | 357 | 372 | 756 | 689 | 728 | 724 | 683 | 705 | 653 | 529 | 580 |
| 30 | 416 | 390 | 401 | 758 | 735 | 746 | 748 | 724 | 737 | 693 | 621 | 658 |
| 31 | --- | --- | --- | 777 | 738 | 757 | 751 | 723 | 742 | --- | --- | --- |
| MONTH | 563 | 175 | 330 | 796 | 390 | 591 | 831 | 394 | 662 | 840 | 389 | 648 |
| YEAR | 1170 | 175 | 559 | | | | | | | | | |

PASSAIC RIVER BASIN

01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), RIGHT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|-----|----------|------|------|----------|------|-----|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 631 | 579 | 607 | 784 | 733 | 767 | 351 | 309 | 331 | 595 | 519 | 554 |
| 2 | 642 | 595 | 622 | 776 | 755 | 768 | 391 | 350 | 368 | 625 | 535 | 590 |
| 3 | 672 | 613 | 641 | 781 | 760 | 773 | 436 | 390 | 401 | 640 | 625 | 632 |
| 4 | 672 | 645 | 661 | 789 | 759 | 776 | 465 | 436 | 448 | 645 | 621 | 631 |
| 5 | 691 | 617 | 650 | 783 | 757 | 774 | 498 | 465 | 485 | 647 | 623 | 636 |
| 6 | 716 | 674 | 698 | 775 | 738 | 758 | 521 | 484 | 507 | 648 | 619 | 634 |
| 7 | 718 | 677 | 700 | 803 | 752 | 782 | 565 | 503 | 545 | 643 | 619 | 636 |
| 8 | 716 | 685 | 703 | 788 | 724 | 761 | 588 | 549 | 575 | 809 | 643 | 722 |
| 9 | 721 | 674 | 696 | 767 | 727 | 755 | 616 | 558 | 589 | 917 | 809 | 875 |
| 10 | 720 | 679 | 702 | 753 | 667 | 726 | 621 | 583 | 604 | 1050 | 856 | 900 |
| 11 | 727 | 682 | 702 | 692 | 385 | 447 | 636 | 589 | 616 | 1370 | 1050 | 1290 |
| 12 | 739 | 715 | 730 | 396 | 328 | 368 | 644 | 600 | 627 | 1360 | 1230 | 1290 |
| 13 | 746 | 722 | 738 | 413 | 388 | 397 | 650 | 608 | 634 | 1230 | 1130 | 1190 |
| 14 | 757 | 722 | 734 | 455 | 413 | 425 | 763 | 509 | 610 | 1130 | 1030 | 1070 |
| 15 | 772 | 732 | 755 | 502 | 455 | 477 | 1160 | 580 | 925 | 1050 | 1000 | 1040 |
| 16 | 783 | 763 | 776 | 475 | 422 | 442 | 910 | 648 | 802 | 1000 | 936 | 978 |
| 17 | 794 | 747 | 773 | 505 | 455 | 473 | 648 | 454 | 566 | 1320 | 989 | 1180 |
| 18 | 790 | 746 | 772 | 527 | 505 | 517 | 475 | 277 | 326 | 1100 | 1040 | 1090 |
| 19 | 772 | 685 | 743 | 550 | 525 | 539 | 288 | 265 | 272 | 1040 | 913 | 981 |
| 20 | 748 | 686 | 716 | 589 | 529 | 573 | 268 | 264 | 265 | 1010 | 811 | 912 |
| 21 | 714 | 687 | 700 | 614 | 560 | 593 | 290 | 268 | 278 | 811 | 730 | 758 |
| 22 | 713 | 677 | 696 | 623 | 587 | 607 | 316 | 290 | 305 | 752 | 717 | 731 |
| 23 | 740 | 696 | 708 | 627 | 591 | 612 | 347 | 316 | 332 | 778 | 749 | 764 |
| 24 | 742 | 681 | 712 | 650 | 599 | 627 | 377 | 347 | 363 | 771 | 757 | 766 |
| 25 | 725 | 681 | 705 | 684 | 644 | 660 | 398 | 374 | 383 | 763 | 727 | 741 |
| 26 | 695 | 680 | 689 | 680 | 445 | 616 | 427 | 397 | 410 | 727 | 697 | 710 |
| 27 | 744 | 691 | 725 | 577 | 268 | 367 | 481 | 427 | 451 | 710 | 687 | 695 |
| 28 | 760 | 744 | 754 | 268 | 228 | 240 | 513 | 481 | 498 | 700 | 660 | 679 |
| 29 | 760 | 721 | 738 | 275 | 242 | 258 | 512 | 497 | 506 | 714 | 662 | 693 |
| 30 | 752 | 697 | 731 | 309 | 275 | 291 | 529 | 510 | 518 | 716 | 678 | 702 |
| 31 | 753 | 701 | 737 | --- | --- | --- | 564 | 526 | 546 | 902 | 661 | 782 |
| MONTH | 794 | 579 | 710 | 803 | 228 | 572 | 1160 | 264 | 487 | 1370 | 519 | 834 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 779 | 639 | 720 | 582 | 548 | 563 | 337 | 308 | 326 | 580 | 559 | 564 |
| 2 | 642 | 591 | 621 | 548 | 531 | 539 | 330 | 324 | 326 | 619 | 580 | 594 |
| 3 | 591 | 564 | 579 | 531 | 520 | 525 | 330 | 324 | 327 | 636 | 609 | 626 |
| 4 | 564 | 544 | 556 | 522 | 512 | 516 | 340 | 330 | 335 | 645 | 620 | 638 |
| 5 | 544 | 525 | 534 | 537 | 512 | 517 | 349 | 340 | 344 | 667 | 636 | 656 |
| 6 | 533 | 519 | 523 | 735 | 537 | 622 | 357 | 349 | 353 | 683 | 641 | 667 |
| 7 | 1050 | 533 | 745 | 987 | 735 | 850 | 371 | 357 | 364 | 675 | 641 | 661 |
| 8 | 1060 | 931 | 974 | 1150 | 987 | 1080 | 387 | 371 | 379 | 693 | 648 | 674 |
| 9 | 960 | 923 | 940 | 1150 | 1040 | 1080 | 398 | 387 | 391 | 705 | 654 | 688 |
| 10 | 923 | 781 | 848 | 1160 | 1030 | 1080 | 389 | 338 | 367 | 708 | 675 | 697 |
| 11 | 801 | 680 | 755 | 1120 | 883 | 972 | 362 | 337 | 353 | 712 | 675 | 700 |
| 12 | 680 | 575 | 615 | 883 | 771 | 819 | 359 | 354 | 355 | 705 | 677 | 696 |
| 13 | 575 | 541 | 555 | 771 | 654 | 691 | 366 | 356 | 362 | 743 | 679 | 715 |
| 14 | 541 | 530 | 535 | 654 | 555 | 580 | 370 | 366 | 368 | 744 | 716 | 733 |
| 15 | 546 | 540 | 543 | 555 | 517 | 530 | 379 | 369 | 375 | 748 | 696 | 721 |
| 16 | 570 | 543 | 555 | 517 | 504 | 512 | 385 | 379 | 382 | 751 | 703 | 730 |
| 17 | 557 | 543 | 548 | 504 | 494 | 499 | 395 | 385 | 390 | 752 | 704 | 732 |
| 18 | 558 | 527 | 544 | 496 | 491 | 493 | 408 | 394 | 400 | 748 | 716 | 735 |
| 19 | 527 | 504 | 510 | 492 | 480 | 485 | 422 | 405 | 414 | 745 | 707 | 732 |
| 20 | 506 | 491 | 497 | 485 | 482 | 484 | 430 | 417 | 424 | 745 | 720 | 737 |
| 21 | 500 | 485 | 491 | 488 | 450 | 482 | 442 | 424 | 434 | 753 | 716 | 736 |
| 22 | 503 | 496 | 500 | 450 | 317 | 379 | 454 | 434 | 444 | 752 | 680 | 720 |
| 23 | 499 | 486 | 492 | 384 | 291 | 328 | 465 | 448 | 455 | 686 | 476 | 531 |
| 24 | 607 | 486 | 520 | 395 | 371 | 390 | 478 | 457 | 466 | 491 | 464 | 479 |
| 25 | 689 | 607 | 663 | 400 | 394 | 397 | 484 | 470 | 476 | 529 | 491 | 511 |
| 26 | 934 | 664 | 778 | 405 | 400 | 403 | 490 | 469 | 477 | 548 | 518 | 530 |
| 27 | 784 | 651 | 711 | 414 | 405 | 409 | 501 | 473 | 485 | 589 | 548 | 566 |
| 28 | 651 | 582 | 613 | 422 | 413 | 418 | 526 | 498 | 511 | 551 | 413 | 465 |
| 29 | --- | --- | --- | 431 | 422 | 427 | 540 | 517 | 526 | 413 | 372 | 392 |
| 30 | --- | --- | --- | 430 | 332 | 386 | 565 | 538 | 547 | 386 | 372 | 382 |
| 31 | --- | --- | --- | 351 | 284 | 308 | --- | --- | --- | 390 | 381 | 387 |
| MONTH | 1060 | 485 | 624 | 1160 | 284 | 573 | 565 | 308 | 405 | 753 | 372 | 626 |

PASSAIC RIVER BASIN

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01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), RIGHT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|-----|-----|--------|-----|-----|-----------|-----|-----|------|
| JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | | |
| 1 | 425 | 390 | 407 | 522 | 451 | 477 | 785 | 752 | 768 | 781 | 749 | 769 |
| 2 | 418 | 237 | 350 | 549 | 520 | 531 | 777 | 759 | 770 | 794 | 754 | 777 |
| 3 | 260 | 234 | 251 | 547 | 484 | 505 | 799 | 769 | 789 | 805 | 755 | 786 |
| 4 | 262 | 256 | 260 | 493 | 443 | 459 | 827 | 786 | 810 | 790 | 755 | 774 |
| 5 | 256 | 255 | 256 | 482 | 422 | 447 | 830 | 786 | 811 | 802 | 755 | 780 |
| 6 | 264 | 255 | 259 | 484 | 405 | 438 | 826 | 782 | 808 | 812 | 770 | 792 |
| 7 | 277 | 264 | 270 | 458 | 413 | 436 | 807 | 733 | 764 | 821 | 784 | 802 |
| 8 | 299 | 277 | 288 | 445 | 407 | 423 | 759 | 726 | 741 | 821 | 785 | 803 |
| 9 | 321 | 298 | 310 | 497 | 445 | 465 | 771 | 734 | 756 | 832 | 802 | 818 |
| 10 | 347 | 321 | 336 | 528 | 484 | 494 | 752 | 726 | 742 | 835 | 814 | 824 |
| 11 | 374 | 346 | 360 | 543 | 527 | 530 | 769 | 726 | 749 | 837 | 791 | 816 |
| 12 | 424 | 374 | 394 | 567 | 543 | 561 | 769 | 542 | 696 | 832 | 575 | 720 |
| 13 | 471 | 423 | 441 | 581 | 555 | 575 | 636 | 523 | 592 | 666 | 601 | 631 |
| 14 | 527 | 471 | 493 | 643 | 574 | 616 | 544 | 395 | 435 | 730 | 613 | 659 |
| 15 | 527 | 492 | 509 | 677 | 622 | 651 | 429 | 392 | 407 | 748 | 455 | 543 |
| 16 | 547 | 512 | 522 | 700 | 646 | 673 | 496 | 416 | 466 | 455 | 392 | 417 |
| 17 | 555 | 172 | 331 | 714 | 669 | 692 | 537 | 496 | 524 | 494 | 423 | 476 |
| 18 | 205 | 147 | 179 | 722 | 687 | 707 | 596 | 527 | 557 | 549 | 487 | 527 |
| 19 | 222 | 205 | 215 | 737 | 692 | 719 | 650 | 587 | 611 | 594 | 526 | 552 |
| 20 | 241 | 222 | 230 | 746 | 708 | 729 | 686 | 641 | 655 | 637 | 586 | 605 |
| 21 | 276 | 241 | 259 | 708 | 678 | 693 | 707 | 657 | 687 | 689 | 637 | 664 |
| 22 | 311 | 276 | 295 | 702 | 620 | 654 | 689 | 595 | 630 | 688 | 475 | 551 |
| 23 | 334 | 309 | 324 | 706 | 658 | 673 | 643 | 592 | 607 | 508 | 449 | 474 |
| 24 | 325 | 280 | 304 | 720 | 689 | 709 | 698 | 588 | 668 | 542 | 456 | 497 |
| 25 | 289 | 281 | 286 | 735 | 700 | 720 | 592 | 498 | 534 | 598 | 519 | 562 |
| 26 | 308 | 287 | 298 | 762 | 728 | 747 | 614 | 523 | 559 | 620 | 465 | 557 |
| 27 | 333 | 308 | 320 | 796 | 745 | 766 | 673 | 614 | 632 | 558 | 508 | 530 |
| 28 | 358 | 333 | 346 | 793 | 738 | 762 | 700 | 670 | 678 | 571 | 508 | 544 |
| 29 | 394 | 358 | 374 | 756 | 708 | 729 | 721 | 690 | 706 | 652 | 528 | 580 |
| 30 | 451 | 394 | 418 | 761 | 737 | 750 | 746 | 721 | 735 | 693 | 642 | 663 |
| 31 | --- | --- | --- | 777 | 739 | 759 | 751 | 722 | 741 | --- | --- | --- |
| MONTH | 555 | 147 | 330 | 796 | 405 | 616 | 830 | 392 | 665 | 837 | 392 | 650 |
| YEAR | 1370 | 147 | 592 | | | | | | | | | |

TEMPERATURE, WATER (DEG. C), LEFT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---------|------|------|----------|------|------|----------|-----|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 16.5 | 15.0 | 15.5 | 11.0 | 9.5 | 10.0 | 5.5 | 5.0 | 5.5 | 1.0 | .5 | .5 |
| 2 | 17.5 | 15.5 | 16.5 | 11.0 | 9.0 | 10.0 | 5.0 | 3.5 | 4.5 | 1.0 | .0 | .5 |
| 3 | 18.0 | 16.0 | 17.0 | 11.0 | 9.5 | 10.0 | 3.5 | 2.5 | 3.0 | 1.0 | .0 | .5 |
| 4 | 18.5 | 16.5 | 17.5 | 11.5 | 10.5 | 11.0 | 3.0 | 2.0 | 2.5 | 1.0 | .5 | .5 |
| 5 | 18.0 | 17.0 | 17.5 | 11.0 | 10.5 | 10.5 | 3.5 | 2.5 | 3.0 | .5 | .5 | .5 |
| 6 | 17.5 | 16.5 | 17.0 | 11.5 | 10.0 | 10.5 | 3.5 | 2.5 | 3.0 | 1.0 | .5 | .5 |
| 7 | 17.0 | 15.5 | 16.5 | 10.5 | 9.5 | 10.0 | 3.5 | 1.5 | 2.5 | 1.0 | .5 | 1.0 |
| 8 | 16.0 | 14.0 | 15.0 | 10.0 | 9.0 | 9.5 | 2.0 | 1.5 | 2.0 | 1.0 | .5 | 1.0 |
| 9 | 14.0 | 12.5 | 13.5 | 10.0 | 9.5 | 10.0 | 3.0 | 1.5 | 2.0 | 1.5 | 1.0 | 1.0 |
| 10 | 12.5 | 11.5 | 12.0 | 11.5 | 10.0 | 11.0 | 3.0 | 1.0 | 2.0 | 1.5 | .5 | 1.0 |
| 11 | 13.5 | 11.0 | 12.0 | 11.5 | 11.0 | 11.0 | 3.0 | 1.5 | 2.5 | 1.5 | .5 | 1.0 |
| 12 | 13.5 | 11.5 | 12.5 | 11.0 | 10.5 | 11.0 | 4.5 | 3.0 | 3.5 | 2.0 | 1.0 | 1.5 |
| 13 | 14.5 | 12.0 | 13.0 | 10.5 | 10.0 | 10.0 | 4.0 | 3.0 | 3.5 | 2.0 | 1.0 | 1.5 |
| 14 | 15.0 | 13.0 | 14.0 | 10.5 | 10.0 | 10.0 | 3.0 | 3.0 | 3.0 | 1.5 | 1.0 | 1.5 |
| 15 | 15.5 | 14.0 | 15.0 | 10.0 | 8.5 | 9.0 | 3.5 | 2.5 | 3.0 | 2.0 | 1.5 | 2.0 |
| 16 | 15.5 | 15.0 | 15.0 | 8.5 | 8.0 | 8.5 | 3.5 | 3.0 | 3.0 | 3.0 | 2.0 | 2.5 |
| 17 | 15.0 | 14.5 | 14.5 | 9.0 | 8.0 | 8.5 | 7.5 | 3.5 | 5.5 | 3.0 | 2.0 | 2.5 |
| 18 | 14.5 | 14.0 | 14.5 | 8.0 | 7.5 | 8.0 | 5.0 | 4.0 | 4.5 | 2.5 | 2.5 | 2.5 |
| 19 | 14.5 | 13.5 | 14.0 | 7.5 | 6.5 | 7.0 | 4.0 | 3.0 | 3.5 | 2.5 | 2.5 | 2.5 |
| 20 | 15.0 | 13.0 | 13.5 | 7.0 | 6.0 | 6.5 | 3.0 | 2.5 | 3.0 | 2.5 | 2.0 | 2.0 |
| 21 | 15.0 | 13.0 | 14.0 | 6.5 | 5.5 | 6.0 | 2.5 | 2.0 | 2.0 | 2.0 | 1.0 | 1.5 |
| 22 | 15.0 | 13.0 | 14.0 | 6.0 | 4.5 | 5.0 | 2.5 | 2.0 | 2.5 | 1.5 | 1.0 | 1.0 |
| 23 | 14.0 | 12.5 | 13.0 | 5.0 | 4.0 | 4.5 | 2.0 | 1.0 | 1.5 | 1.5 | .5 | 1.0 |
| 24 | 13.5 | 12.0 | 13.0 | 4.5 | 3.0 | 4.0 | 1.5 | 1.0 | 1.0 | 1.5 | 1.0 | 1.5 |
| 25 | 14.0 | 12.5 | 13.0 | 4.0 | 3.0 | 3.5 | 1.5 | .5 | 1.0 | 2.0 | 1.5 | 1.5 |
| 26 | 14.5 | 13.0 | 13.5 | 5.5 | 3.0 | 4.0 | 1.0 | .0 | .5 | 2.0 | 1.0 | 1.5 |
| 27 | 14.5 | 13.5 | 13.5 | 5.5 | 5.0 | 5.0 | 1.5 | .5 | 1.0 | 2.0 | 1.0 | 2.0 |
| 28 | 14.5 | 13.0 | 13.5 | 5.5 | 5.0 | 5.5 | 1.5 | 1.0 | 1.0 | 2.5 | 1.5 | 2.0 |
| 29 | 13.0 | 11.0 | 12.0 | 5.5 | 5.0 | 5.5 | 1.5 | .5 | 1.0 | 2.0 | 1.5 | 2.0 |
| 30 | 11.5 | 10.0 | 11.0 | 6.0 | 5.5 | 5.5 | 1.0 | .0 | .5 | 2.0 | 2.0 | 2.0 |
| 31 | 11.0 | 9.5 | 10.0 | --- | --- | --- | .5 | .0 | .5 | 2.5 | 2.0 | 2.0 |
| MONTH | 18.5 | 9.5 | 14.1 | 11.5 | 3.0 | 8.0 | 7.5 | .0 | 2.5 | 3.0 | .0 | 1.4 |

01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

TEMPERATURE, WATER (DEG. C), LEFT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|------|
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 3.0 | 2.0 | 2.5 | 3.5 | 2.5 | 3.0 | 5.0 | 4.5 | 4.5 | 18.0 | 16.0 | 17.0 |
| 2 | 3.0 | 2.5 | 2.5 | 3.5 | 3.0 | 3.5 | 5.5 | 4.5 | 5.0 | 19.0 | 17.5 | 18.5 |
| 3 | 2.5 | 2.0 | 2.5 | 4.5 | 3.5 | 4.0 | 6.5 | 5.0 | 5.5 | 20.0 | 18.5 | 19.0 |
| 4 | 2.5 | 1.5 | 2.0 | 4.0 | 3.0 | 3.5 | 7.5 | 5.5 | 6.5 | 21.5 | 19.5 | 20.5 |
| 5 | 2.5 | .5 | 1.5 | 3.0 | 2.0 | 2.5 | 8.5 | 6.5 | 7.5 | 23.0 | 21.0 | 22.0 |
| 6 | 2.5 | .5 | 1.5 | 2.5 | 1.5 | 2.0 | 8.5 | 7.5 | 7.5 | 22.0 | 20.0 | 21.0 |
| 7 | 3.0 | 1.5 | 2.0 | 4.0 | 2.0 | 3.0 | 8.0 | 7.5 | 7.5 | 20.0 | 17.0 | 18.5 |
| 8 | 2.5 | 2.0 | 2.0 | 4.0 | 3.0 | 3.5 | 8.0 | 7.0 | 7.5 | 18.5 | 17.0 | 17.5 |
| 9 | 3.0 | 2.5 | 3.0 | 4.0 | 3.5 | 3.5 | 10.5 | 7.5 | 8.5 | 20.0 | 16.5 | 18.0 |
| 10 | 4.5 | 3.0 | 3.5 | 4.5 | 3.0 | 4.0 | 11.5 | 10.0 | 10.5 | 20.5 | 17.0 | 18.5 |
| 11 | 3.5 | 2.0 | 2.5 | 5.0 | 3.5 | 4.5 | 10.5 | 10.0 | 10.0 | 21.5 | 18.0 | 20.0 |
| 12 | 2.5 | 1.5 | 2.0 | 5.5 | 4.0 | 4.5 | 10.0 | 9.0 | 9.5 | 23.0 | 19.5 | 21.0 |
| 13 | 3.5 | 2.0 | 2.5 | 5.0 | 4.0 | 4.5 | 11.0 | 9.5 | 10.0 | 23.0 | 19.5 | 21.0 |
| 14 | 3.0 | 2.5 | 2.5 | 4.5 | 4.0 | 4.5 | 11.5 | 10.0 | 11.0 | 21.0 | 19.0 | 20.0 |
| 15 | 3.5 | 3.0 | 3.5 | 4.5 | 3.5 | 4.0 | 12.5 | 10.5 | 11.5 | 20.5 | 18.0 | 19.0 |
| 16 | 3.5 | 2.5 | 3.0 | 5.5 | 4.5 | 5.0 | 12.5 | 11.5 | 12.0 | 19.0 | 17.5 | 18.0 |
| 17 | 3.5 | 3.0 | 3.0 | 5.5 | 5.0 | 5.5 | 12.0 | 11.0 | 11.5 | 18.0 | 17.0 | 17.5 |
| 18 | 3.0 | 1.5 | 2.5 | 6.0 | 5.0 | 5.5 | 11.0 | 10.0 | 10.5 | 17.0 | 16.5 | 16.5 |
| 19 | 3.0 | 1.5 | 2.5 | 6.0 | 4.0 | 5.0 | 11.0 | 9.5 | 10.5 | 19.0 | 16.0 | 17.5 |
| 20 | 4.0 | 2.5 | 3.5 | 6.0 | 5.0 | 5.5 | 11.5 | 10.0 | 11.0 | 19.5 | 17.0 | 18.0 |
| 21 | 4.5 | 3.5 | 4.0 | 6.0 | 5.5 | 5.5 | 12.5 | 11.0 | 12.0 | 18.5 | 18.0 | 18.0 |
| 22 | 3.5 | 1.5 | 2.0 | 5.5 | 5.0 | 5.0 | 15.0 | 12.0 | 13.5 | 18.0 | 16.0 | 17.0 |
| 23 | 3.0 | 1.0 | 2.0 | 5.5 | 4.0 | 4.5 | 17.0 | 14.0 | 15.5 | 16.5 | 16.0 | 16.0 |
| 24 | 3.0 | 2.0 | 2.5 | 5.5 | 4.5 | 5.0 | 17.5 | 15.5 | 16.5 | 17.0 | 15.5 | 16.5 |
| 25 | 3.0 | 2.5 | 3.0 | 5.5 | 4.0 | 5.0 | 17.5 | 14.5 | 15.5 | 17.0 | 16.5 | 16.5 |
| 26 | 3.5 | 2.5 | 3.0 | 5.5 | 4.5 | 4.5 | 15.0 | 13.0 | 14.5 | 16.5 | 16.0 | 16.5 |
| 27 | 4.0 | 2.5 | 3.0 | 5.0 | 3.5 | 4.0 | 15.5 | 13.5 | 14.5 | 16.5 | 16.0 | 16.0 |
| 28 | 4.0 | 3.0 | 3.5 | 5.5 | 4.0 | 5.0 | 16.0 | 14.5 | 15.5 | 17.5 | 16.0 | 17.0 |
| 29 | --- | --- | --- | 5.5 | 5.0 | 5.0 | 16.0 | 14.0 | 15.0 | 18.5 | 16.5 | 17.5 |
| 30 | --- | --- | --- | 5.0 | 4.5 | 5.0 | 16.5 | 14.0 | 15.5 | 18.5 | 17.0 | 18.0 |
| 31 | --- | --- | --- | 5.0 | 4.5 | 4.5 | --- | --- | --- | 18.0 | 16.5 | 17.5 |
| MONTH | 4.5 | .5 | 2.6 | 6.0 | 1.5 | 4.3 | 17.5 | 4.5 | 10.9 | 23.0 | 15.5 | 18.2 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | | |
| 1 | 17.5 | 16.0 | 17.0 | 26.0 | 24.5 | 25.5 | 25.5 | 23.0 | 24.0 | 25.5 | 23.5 | 24.5 |
| 2 | 17.0 | 15.0 | 16.0 | 24.5 | 22.0 | 23.0 | 26.0 | 23.5 | 24.5 | 25.0 | 23.0 | 24.0 |
| 3 | 17.5 | 16.0 | 16.5 | 23.0 | 21.0 | 22.0 | 25.5 | 24.5 | 25.0 | 24.5 | 22.5 | 23.0 |
| 4 | 17.5 | 16.5 | 17.0 | 22.5 | 22.0 | 22.5 | 26.0 | 24.0 | 25.0 | 23.5 | 21.5 | 22.5 |
| 5 | 18.5 | 17.0 | 18.0 | 23.5 | 22.0 | 23.0 | 26.5 | 23.5 | 25.0 | 23.5 | 21.0 | 22.0 |
| 6 | 19.5 | 18.5 | 19.0 | 23.0 | 22.0 | 22.5 | 27.0 | 24.5 | 25.5 | 23.5 | 21.0 | 22.0 |
| 7 | 20.5 | 19.0 | 19.5 | 23.0 | 21.5 | 22.5 | 28.0 | 25.5 | 26.5 | 23.5 | 20.5 | 22.0 |
| 8 | 21.0 | 19.5 | 20.5 | 23.0 | 21.5 | 22.0 | 29.0 | 27.0 | 28.0 | 23.5 | 21.0 | 22.0 |
| 9 | 21.0 | 19.5 | 20.5 | 24.0 | 21.0 | 22.5 | 29.5 | 27.5 | 28.5 | 24.0 | 21.5 | 22.5 |
| 10 | 20.5 | 19.5 | 20.5 | 25.0 | 23.0 | 24.0 | 30.0 | 27.5 | 28.5 | 24.5 | 22.5 | 23.0 |
| 11 | 20.5 | 20.0 | 20.0 | 25.0 | 23.0 | 24.0 | 27.5 | 26.5 | 27.0 | 24.5 | 22.5 | 23.5 |
| 12 | 22.0 | 20.0 | 21.0 | 23.5 | 22.5 | 23.0 | 26.5 | 24.5 | 25.5 | 24.0 | 22.0 | 23.0 |
| 13 | 23.5 | 21.5 | 22.5 | 23.0 | 22.0 | 22.5 | 25.0 | 24.0 | 24.5 | 23.5 | 21.5 | 22.5 |
| 14 | 23.5 | 23.0 | 23.5 | 22.5 | 21.5 | 22.0 | 26.0 | 24.0 | 25.0 | 22.0 | 20.0 | 21.0 |
| 15 | 24.0 | 23.0 | 23.5 | 23.5 | 21.0 | 22.0 | 26.0 | 24.0 | 25.0 | 20.0 | 18.0 | 19.0 |
| 16 | 25.0 | 24.0 | 24.0 | 24.5 | 21.5 | 23.0 | 26.0 | 24.0 | 25.0 | 19.0 | 17.5 | 18.0 |
| 17 | 24.0 | 21.0 | 22.0 | 25.0 | 22.5 | 23.5 | 26.0 | 24.5 | 25.0 | 19.0 | 17.5 | 18.0 |
| 18 | 23.0 | 21.0 | 21.5 | 25.0 | 23.0 | 24.0 | 26.0 | 24.0 | 25.0 | 19.5 | 17.5 | 18.5 |
| 19 | 23.0 | 22.0 | 22.5 | 25.5 | 23.0 | 24.0 | 26.0 | 24.0 | 25.0 | 20.0 | 18.0 | 19.0 |
| 20 | 23.5 | 22.5 | 23.0 | 25.5 | 23.0 | 24.0 | 26.0 | 24.5 | 25.0 | 20.0 | 19.0 | 19.5 |
| 21 | 23.5 | 22.5 | 23.0 | 26.0 | 23.0 | 24.5 | 26.0 | 24.0 | 25.0 | 21.0 | 19.5 | 20.0 |
| 22 | 23.5 | 22.0 | 22.5 | 26.5 | 23.0 | 24.5 | 26.5 | 24.0 | 25.0 | 21.5 | 20.5 | 21.0 |
| 23 | 23.5 | 22.0 | 23.0 | 26.5 | 23.5 | 25.0 | 25.0 | 24.0 | 24.5 | 22.0 | 20.5 | 21.0 |
| 24 | 22.0 | 21.5 | 22.0 | 27.5 | 25.0 | 26.0 | 24.5 | 22.5 | 23.5 | 22.0 | 21.0 | 21.5 |
| 25 | 23.5 | 21.5 | 22.0 | 28.0 | 26.0 | 27.0 | 25.0 | 22.5 | 23.5 | 21.5 | 20.5 | 21.0 |
| 26 | 24.0 | 22.0 | 23.0 | 27.0 | 26.0 | 26.5 | 25.0 | 22.5 | 23.5 | 20.5 | 19.0 | 20.0 |
| 27 | 24.5 | 22.5 | 23.5 | 26.5 | 23.5 | 25.5 | 24.5 | 23.0 | 24.0 | 19.0 | 18.0 | 18.5 |
| 28 | 25.5 | 24.0 | 25.0 | 25.5 | 23.5 | 24.5 | 25.0 | 23.5 | 24.0 | 18.5 | 17.0 | 17.5 |
| 29 | 25.5 | 24.5 | 25.0 | 24.5 | 23.0 | 23.5 | 25.5 | 23.5 | 24.5 | 17.5 | 16.5 | 17.0 |
| 30 | 26.0 | 24.5 | 25.5 | 24.5 | 23.0 | 23.5 | 25.0 | 23.5 | 24.0 | 16.5 | 15.5 | 15.5 |
| 31 | --- | --- | --- | 25.0 | 22.5 | 23.5 | 25.0 | 24.0 | 24.5 | --- | --- | --- |
| MONTH | 26.0 | 15.0 | 21.4 | 28.0 | 21.0 | 23.7 | 30.0 | 22.5 | 25.1 | 25.5 | 15.5 | 20.8 |
| YEAR | 30.0 | .0 | 12.8 | | | | | | | | | |

PASSAIC RIVER BASIN

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01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

TEMPERATURE, WATER (DEG. C), MIDDLE INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|----------|------|------|----------|------|------|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 16.0 | 14.5 | 15.0 | 10.5 | 9.5 | 10.0 | 6.0 | 5.5 | 5.5 | .5 | .0 | .0 |
| 2 | 16.5 | 15.0 | 16.0 | 10.5 | 9.5 | 10.0 | 5.5 | 4.0 | 4.5 | .5 | .0 | .5 |
| 3 | 17.5 | 15.5 | 16.5 | 11.0 | 9.5 | 10.0 | 4.0 | 3.0 | 3.5 | .5 | .0 | .5 |
| 4 | 18.0 | 16.5 | 17.0 | 11.5 | 10.5 | 11.0 | 3.0 | 2.0 | 2.5 | .5 | .5 | .5 |
| 5 | 17.5 | 17.0 | 17.5 | 11.0 | 10.5 | 11.0 | 3.0 | 2.5 | 2.5 | .5 | .5 | .5 |
| 6 | 17.5 | 17.0 | 17.5 | 11.5 | 10.0 | 10.5 | 3.0 | 2.5 | 2.5 | .5 | .5 | .5 |
| 7 | 17.0 | 16.0 | 17.0 | 10.5 | 9.5 | 10.0 | 3.0 | 2.0 | 2.5 | 1.0 | .5 | .5 |
| 8 | 16.0 | 14.5 | 15.5 | 10.0 | 9.5 | 9.5 | 2.5 | 1.5 | 2.0 | 1.0 | .5 | 1.0 |
| 9 | 14.5 | 13.0 | 13.5 | 10.5 | 9.5 | 10.0 | 2.5 | 1.5 | 2.0 | 1.5 | 1.0 | 1.5 |
| 10 | 13.0 | 12.0 | 12.5 | 12.5 | 10.0 | 11.5 | 2.5 | 1.5 | 2.0 | 1.5 | 1.0 | 1.5 |
| 11 | 12.5 | 11.0 | 12.0 | 12.5 | 12.0 | 12.5 | 3.0 | 2.0 | 2.5 | 1.5 | 1.0 | 1.0 |
| 12 | 13.5 | 11.5 | 12.5 | 12.0 | 11.0 | 11.5 | 4.0 | 3.0 | 3.5 | 2.0 | 1.0 | 1.5 |
| 13 | 14.0 | 12.0 | 13.0 | 11.0 | 10.5 | 11.0 | 4.0 | 3.5 | 3.5 | 2.0 | 1.0 | 1.5 |
| 14 | 14.5 | 13.0 | 14.0 | 11.0 | 10.5 | 10.5 | 3.5 | 3.0 | 3.0 | 2.0 | 1.5 | 1.5 |
| 15 | 15.5 | 14.0 | 15.0 | 10.5 | 9.5 | 10.0 | 3.5 | 3.0 | 3.0 | 2.5 | 1.5 | 2.0 |
| 16 | 15.0 | 15.0 | 15.0 | 9.5 | 8.5 | 9.0 | 3.0 | 2.5 | 3.0 | 3.5 | 2.0 | 3.0 |
| 17 | 15.0 | 14.5 | 15.0 | 8.5 | 8.0 | 8.5 | 7.5 | 3.0 | 5.0 | 3.5 | 3.0 | 3.0 |
| 18 | 15.0 | 14.5 | 14.5 | 8.0 | 7.5 | 8.0 | 5.5 | 4.0 | 5.0 | 3.5 | 2.5 | 3.0 |
| 19 | 14.5 | 13.5 | 14.0 | 7.5 | 6.5 | 7.0 | 4.0 | 3.0 | 3.5 | 3.0 | 2.5 | 2.5 |
| 20 | 14.5 | 13.5 | 14.0 | 7.0 | 5.5 | 6.5 | 3.0 | 2.0 | 2.5 | 2.5 | 1.5 | 2.5 |
| 21 | 14.5 | 13.0 | 14.0 | 6.0 | 5.0 | 5.5 | 2.0 | 1.0 | 1.5 | 1.5 | .5 | 1.0 |
| 22 | 14.5 | 13.0 | 14.0 | 5.0 | 4.0 | 4.5 | 1.5 | 1.0 | 1.5 | 1.0 | .5 | .5 |
| 23 | 14.0 | 12.5 | 13.5 | 4.0 | 3.0 | 3.5 | 1.0 | .5 | .5 | 1.0 | .5 | .5 |
| 24 | 13.5 | 12.5 | 13.0 | 4.0 | 2.5 | 3.0 | 1.0 | .5 | .5 | 1.0 | .5 | 1.0 |
| 25 | 13.5 | 12.5 | 13.0 | 3.5 | 2.0 | 2.5 | .5 | .5 | .5 | 1.5 | 1.0 | 1.5 |
| 26 | 14.5 | 13.0 | 13.5 | 5.5 | 3.0 | 4.0 | .5 | .0 | .0 | 1.5 | 1.0 | 1.5 |
| 27 | 14.0 | 13.5 | 13.5 | 6.5 | 5.0 | 6.0 | .5 | .0 | .5 | 2.0 | 1.0 | 1.5 |
| 28 | 14.5 | 13.0 | 14.0 | 6.5 | 6.0 | 6.5 | .5 | .5 | .5 | 2.0 | 1.5 | 2.0 |
| 29 | 13.0 | 11.5 | 12.5 | 6.0 | 6.0 | 6.0 | .5 | .5 | .5 | 2.0 | 1.5 | 2.0 |
| 30 | 11.5 | 10.5 | 11.0 | 6.0 | 5.5 | 6.0 | .5 | .0 | .0 | 2.5 | 2.0 | 2.0 |
| 31 | 11.0 | 9.5 | 10.0 | --- | --- | --- | .5 | .0 | .0 | 2.5 | 2.0 | 2.5 |
| MONTH | 18.0 | 9.5 | 14.2 | 12.5 | 2.0 | 8.2 | 7.5 | .0 | 2.3 | 3.5 | .0 | 1.4 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 2.5 | 2.0 | 2.0 | 3.0 | 2.5 | 3.0 | 5.0 | 5.0 | 5.0 | 17.5 | 16.0 | 17.0 |
| 2 | 2.5 | 2.0 | 2.0 | 3.0 | 3.0 | 3.0 | 5.5 | 5.0 | 5.0 | 19.0 | 17.5 | 18.5 |
| 3 | 2.0 | 1.5 | 1.5 | 4.0 | 3.0 | 3.5 | 7.5 | 5.0 | 6.0 | 20.0 | 18.5 | 19.5 |
| 4 | 1.5 | 1.0 | 1.5 | 4.0 | 3.5 | 4.0 | 9.0 | 6.5 | 7.5 | 21.5 | 19.5 | 20.5 |
| 5 | 1.5 | .5 | 1.0 | 3.5 | 2.0 | 3.0 | 10.0 | 7.5 | 8.5 | 22.5 | 21.0 | 22.0 |
| 6 | 1.5 | .5 | 1.0 | 2.5 | 2.0 | 2.5 | 10.0 | 9.0 | 9.0 | 21.5 | 20.0 | 21.0 |
| 7 | 3.0 | 1.5 | 2.0 | 4.0 | 2.0 | 3.0 | 9.0 | 8.5 | 9.0 | 20.0 | 17.5 | 19.0 |
| 8 | 2.5 | 2.0 | 2.0 | 5.0 | 3.5 | 4.0 | 9.0 | 8.0 | 8.5 | 19.0 | 17.0 | 18.0 |
| 9 | 3.0 | 2.0 | 2.5 | 4.5 | 4.0 | 4.5 | 10.5 | 8.0 | 9.0 | 19.0 | 17.0 | 18.0 |
| 10 | 4.0 | 2.5 | 3.5 | 5.0 | 3.5 | 4.5 | 11.0 | 10.0 | 10.5 | 20.0 | 17.5 | 18.5 |
| 11 | 3.5 | 2.0 | 3.0 | 5.0 | 4.0 | 4.5 | 10.5 | 10.0 | 10.0 | 21.0 | 18.5 | 19.5 |
| 12 | 2.0 | 1.5 | 1.5 | 6.0 | 4.0 | 5.0 | 10.0 | 9.5 | 9.5 | 22.5 | 19.5 | 21.0 |
| 13 | 2.5 | 1.5 | 2.0 | 5.5 | 4.5 | 5.0 | 12.0 | 10.0 | 10.5 | 22.0 | 19.5 | 20.5 |
| 14 | 2.5 | 2.0 | 2.5 | 5.0 | 4.0 | 4.5 | 13.0 | 10.5 | 11.5 | 21.0 | 19.0 | 20.0 |
| 15 | 3.0 | 2.5 | 3.0 | 5.0 | 4.0 | 4.5 | 13.5 | 12.0 | 12.5 | 20.0 | 18.0 | 19.0 |
| 16 | 3.0 | 3.0 | 3.0 | 6.5 | 5.0 | 5.5 | 13.5 | 13.0 | 13.0 | 18.5 | 17.5 | 18.0 |
| 17 | 3.0 | 2.5 | 3.0 | 6.5 | 6.5 | 6.5 | 13.0 | 12.0 | 12.5 | 18.0 | 17.0 | 17.5 |
| 18 | 2.5 | 1.5 | 2.0 | 6.5 | 5.5 | 6.0 | 12.0 | 11.0 | 11.5 | 17.0 | 16.5 | 16.5 |
| 19 | 2.5 | 1.5 | 2.0 | 6.5 | 5.5 | 6.0 | 12.0 | 10.5 | 11.0 | 18.5 | 16.0 | 17.0 |
| 20 | 3.0 | 2.0 | 2.5 | 7.0 | 6.0 | 6.5 | 12.0 | 10.5 | 11.5 | 19.0 | 17.0 | 18.0 |
| 21 | 4.0 | 3.0 | 3.5 | 7.0 | 5.5 | 6.0 | 13.0 | 11.5 | 12.5 | 18.5 | 18.0 | 18.0 |
| 22 | 3.5 | 2.0 | 3.0 | 5.5 | 5.0 | 5.0 | 15.5 | 12.5 | 14.0 | 18.0 | 16.0 | 17.0 |
| 23 | 2.5 | 1.5 | 2.0 | 5.5 | 4.0 | 5.0 | 17.5 | 14.5 | 16.0 | 16.0 | 15.5 | 15.5 |
| 24 | 3.0 | 1.5 | 2.5 | 6.0 | 5.0 | 5.5 | 18.0 | 16.0 | 17.0 | 17.0 | 15.5 | 16.0 |
| 25 | 3.0 | 2.5 | 2.5 | 6.0 | 4.5 | 5.5 | 18.0 | 15.5 | 16.0 | 17.0 | 16.5 | 16.5 |
| 26 | 3.5 | 3.0 | 3.0 | 6.0 | 4.5 | 5.0 | 15.5 | 14.5 | 15.0 | 16.5 | 16.0 | 16.5 |
| 27 | 4.0 | 3.0 | 3.5 | 5.5 | 3.5 | 4.5 | 15.5 | 14.0 | 14.5 | 16.5 | 16.0 | 16.0 |
| 28 | 4.0 | 3.0 | 3.5 | 6.5 | 4.5 | 5.5 | 16.0 | 14.5 | 15.5 | 17.5 | 16.0 | 16.5 |
| 29 | --- | --- | --- | 6.0 | 5.5 | 6.0 | 16.0 | 14.5 | 15.5 | 18.5 | 17.0 | 17.5 |
| 30 | --- | --- | --- | 6.0 | 5.0 | 5.0 | 16.0 | 15.0 | 15.5 | 18.5 | 17.0 | 17.5 |
| 31 | --- | --- | --- | 5.0 | 4.5 | 5.0 | --- | --- | --- | 18.0 | 16.5 | 17.0 |
| MONTH | 4.0 | .5 | 2.4 | 7.0 | 2.0 | 4.7 | 18.0 | 5.0 | 11.4 | 22.5 | 15.5 | 18.2 |

PASSAIC RIVER BASIN

01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

TEMPERATURE, WATER (DEG. C), MIDDLE INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 17.5 | 16.0 | 17.0 | 26.5 | 25.0 | 26.0 | 26.0 | 23.0 | 24.5 | 25.5 | 24.0 | 24.5 |
| 2 | 17.0 | 15.0 | 16.5 | 25.0 | 23.0 | 23.5 | 26.5 | 24.0 | 25.0 | 25.0 | 23.5 | 24.0 |
| 3 | 17.5 | 16.0 | 16.5 | 23.5 | 22.0 | 23.0 | 25.5 | 24.5 | 25.0 | 24.5 | 22.5 | 23.0 |
| 4 | 18.0 | 17.0 | 17.5 | 23.0 | 22.0 | 22.5 | 26.0 | 24.5 | 25.0 | 23.0 | 22.0 | 22.5 |
| 5 | 18.5 | 17.0 | 18.0 | 23.5 | 22.5 | 23.0 | 26.5 | 24.5 | 25.0 | 23.5 | 21.5 | 22.0 |
| 6 | 19.0 | 18.0 | 18.5 | 23.5 | 22.5 | 23.0 | 27.0 | 24.5 | 26.0 | 23.5 | 21.0 | 22.0 |
| 7 | 19.5 | 18.5 | 19.0 | 23.0 | 22.0 | 22.5 | 28.0 | 25.5 | 27.0 | 23.5 | 21.0 | 22.0 |
| 8 | 20.0 | 18.5 | 19.5 | 23.0 | 21.5 | 22.0 | 29.5 | 27.0 | 28.0 | 23.5 | 21.0 | 22.0 |
| 9 | 20.0 | 19.0 | 19.5 | 23.5 | 21.5 | 22.5 | 30.0 | 27.5 | 28.5 | 24.0 | 21.5 | 22.5 |
| 10 | 20.5 | 19.0 | 20.0 | 24.5 | 23.0 | 24.0 | 29.5 | 27.5 | 28.5 | 24.0 | 22.5 | 23.0 |
| 11 | 20.5 | 19.5 | 20.0 | 24.5 | 23.5 | 24.0 | 28.0 | 27.0 | 27.5 | 24.0 | 22.5 | 23.5 |
| 12 | 21.5 | 19.5 | 20.5 | 24.0 | 23.0 | 23.5 | 27.0 | 25.0 | 26.0 | 24.0 | 22.5 | 23.0 |
| 13 | 23.0 | 21.0 | 22.0 | 23.5 | 22.5 | 23.0 | 25.0 | 24.5 | 25.0 | 23.5 | 21.5 | 22.5 |
| 14 | 23.5 | 22.5 | 23.0 | 23.0 | 22.0 | 22.5 | 25.5 | 24.0 | 24.5 | 22.5 | 20.0 | 21.0 |
| 15 | 23.5 | 23.0 | 23.5 | 24.0 | 21.5 | 22.5 | 25.0 | 24.5 | 25.0 | 20.0 | 18.0 | 19.0 |
| 16 | 24.5 | 23.5 | 24.0 | 24.5 | 22.0 | 23.0 | 25.5 | 25.0 | 25.0 | 18.0 | 17.5 | 18.0 |
| 17 | 24.0 | 21.0 | 22.0 | 25.0 | 23.0 | 24.0 | 26.0 | 25.0 | 25.0 | 18.5 | 17.5 | 18.0 |
| 18 | 22.5 | 21.0 | 21.5 | 25.0 | 23.5 | 24.5 | 26.0 | 24.0 | 25.0 | 19.5 | 17.5 | 18.5 |
| 19 | 23.0 | 21.5 | 22.5 | 25.5 | 24.0 | 24.5 | 25.5 | 24.5 | 25.0 | 20.0 | 18.0 | 19.0 |
| 20 | 24.0 | 22.5 | 23.0 | 25.5 | 23.5 | 24.5 | 26.0 | 24.5 | 25.0 | 19.5 | 19.0 | 19.5 |
| 21 | 24.0 | 22.5 | 23.0 | 26.0 | 23.5 | 25.0 | 25.5 | 24.5 | 25.0 | 20.5 | 19.5 | 20.0 |
| 22 | 23.5 | 22.0 | 22.5 | 26.0 | 24.0 | 25.0 | 26.0 | 24.5 | 25.0 | 21.0 | 20.0 | 21.0 |
| 23 | 23.0 | 22.0 | 22.5 | 26.5 | 24.5 | 25.5 | 25.0 | 24.0 | 24.5 | 21.5 | 20.5 | 21.0 |
| 24 | 22.0 | 21.5 | 22.0 | 27.5 | 25.5 | 26.0 | 24.5 | 23.5 | 24.0 | 22.0 | 21.0 | 21.5 |
| 25 | 23.0 | 21.5 | 22.0 | 28.5 | 26.5 | 27.5 | 24.5 | 23.0 | 23.5 | 21.5 | 21.0 | 21.5 |
| 26 | 23.5 | 22.0 | 23.0 | 27.5 | 26.5 | 27.0 | 25.0 | 23.0 | 24.0 | 21.0 | 19.5 | 20.0 |
| 27 | 24.5 | 22.5 | 23.5 | 26.5 | 25.0 | 26.0 | 24.5 | 23.0 | 24.0 | 19.5 | 17.5 | 18.5 |
| 28 | 25.5 | 23.5 | 24.5 | 25.0 | 24.0 | 24.5 | 25.5 | 23.5 | 24.0 | 18.0 | 17.0 | 17.5 |
| 29 | 26.0 | 24.5 | 25.5 | 24.5 | 23.5 | 24.0 | 25.5 | 23.5 | 24.5 | 17.0 | 16.5 | 16.5 |
| 30 | 26.0 | 25.0 | 26.0 | 24.5 | 23.0 | 23.5 | 25.0 | 24.0 | 24.0 | 16.5 | 15.5 | 15.5 |
| 31 | --- | --- | --- | 25.0 | 23.0 | 24.0 | 25.0 | 24.0 | 24.0 | --- | --- | --- |
| MONTH | 26.0 | 15.0 | 21.3 | 28.5 | 21.5 | 24.1 | 30.0 | 23.0 | 25.2 | 25.5 | 15.5 | 20.8 |
| YEAR | 30.0 | .0 | 12.9 | | | | | | | | | |

TEMPERATURE, WATER (DEG. C), RIGHT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|------|------|----------|------|------|----------|-----|------|---------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 15.5 | 14.0 | 14.5 | 10.0 | 9.5 | 9.5 | 6.0 | 5.5 | 5.5 | .0 | .0 | .0 |
| 2 | 16.0 | 14.5 | 15.5 | 10.0 | 9.5 | 9.5 | 5.5 | 4.0 | 4.5 | .5 | .0 | .0 |
| 3 | 17.0 | 15.5 | 16.0 | 10.5 | 9.5 | 10.0 | 4.0 | 3.0 | 3.0 | .5 | .0 | .0 |
| 4 | 18.0 | 16.0 | 17.0 | 11.0 | 10.5 | 10.5 | 3.0 | 2.0 | 2.5 | .5 | .0 | .0 |
| 5 | 17.5 | 17.0 | 17.5 | 11.0 | 10.5 | 10.5 | 2.5 | 2.0 | 2.0 | .5 | .0 | .0 |
| 6 | 17.5 | 17.0 | 17.5 | 11.0 | 10.0 | 10.5 | 2.5 | 1.5 | 2.0 | .5 | .0 | .0 |
| 7 | 17.5 | 16.0 | 17.0 | 10.0 | 9.5 | 10.0 | 2.5 | 1.5 | 2.0 | .5 | .0 | .5 |
| 8 | 16.0 | 15.0 | 15.5 | 10.0 | 9.5 | 9.5 | 2.0 | 1.5 | 2.0 | 1.0 | .5 | .5 |
| 9 | 15.0 | 13.0 | 14.0 | 10.0 | 9.5 | 10.0 | 2.5 | 1.5 | 2.0 | 1.5 | .5 | 1.0 |
| 10 | 13.0 | 11.5 | 12.0 | 12.5 | 10.0 | 11.0 | 2.5 | 1.0 | 2.0 | 1.5 | 1.0 | 1.5 |
| 11 | 12.0 | 11.0 | 11.5 | 12.5 | 12.0 | 12.5 | 3.0 | 2.0 | 2.5 | 1.5 | .5 | 1.0 |
| 12 | 12.0 | 11.0 | 11.5 | 12.0 | 11.0 | 11.5 | 4.0 | 3.0 | 3.5 | 1.5 | .5 | 1.0 |
| 13 | 13.0 | 12.0 | 12.5 | 11.0 | 10.5 | 10.5 | 4.0 | 3.0 | 3.5 | 2.0 | 1.0 | 1.5 |
| 14 | 14.0 | 13.0 | 13.5 | 11.0 | 10.5 | 10.5 | 3.5 | 3.0 | 3.5 | 2.0 | 1.0 | 1.5 |
| 15 | 15.0 | 14.0 | 14.5 | 10.5 | 9.5 | 10.0 | 3.5 | 3.0 | 3.0 | 2.5 | 1.5 | 2.0 |
| 16 | 15.0 | 15.0 | 15.0 | 9.5 | 8.5 | 9.0 | 3.0 | 2.5 | 3.0 | 3.5 | 2.0 | 3.0 |
| 17 | 15.5 | 15.0 | 15.0 | 8.5 | 8.0 | 8.5 | 6.0 | 3.0 | 4.5 | 3.5 | 3.0 | 3.5 |
| 18 | 15.0 | 14.5 | 15.0 | 8.0 | 7.5 | 8.0 | 6.5 | 4.5 | 6.0 | 3.5 | 2.5 | 3.0 |
| 19 | 14.5 | 13.5 | 14.0 | 7.5 | 6.5 | 7.0 | 4.5 | 2.5 | 3.5 | 3.0 | 2.5 | 2.5 |
| 20 | 14.0 | 13.5 | 13.5 | 6.5 | 5.5 | 6.0 | 2.5 | 2.0 | 2.5 | 2.5 | 1.5 | 2.5 |
| 21 | 14.0 | 13.0 | 13.5 | 6.0 | 5.0 | 5.5 | 2.0 | 1.0 | 1.5 | 1.5 | .5 | 1.0 |
| 22 | 14.0 | 13.0 | 13.5 | 5.0 | 4.0 | 4.5 | 1.5 | 1.0 | 1.5 | .5 | .0 | .5 |
| 23 | 13.5 | 13.0 | 13.0 | 4.0 | 3.0 | 3.5 | 1.0 | .5 | .5 | .5 | .0 | .5 |
| 24 | 13.5 | 12.5 | 13.0 | 3.0 | 2.5 | 3.0 | 1.0 | .5 | .5 | 1.0 | .5 | .5 |
| 25 | 13.5 | 12.5 | 13.0 | 3.0 | 2.0 | 2.5 | .5 | .0 | .5 | 1.5 | 1.0 | 1.5 |
| 26 | 14.0 | 13.0 | 13.5 | 4.5 | 3.0 | 3.5 | .5 | .0 | .0 | 1.5 | 1.0 | 1.0 |
| 27 | 14.0 | 13.5 | 13.5 | 7.0 | 4.5 | 6.0 | .5 | .0 | .0 | 2.0 | 1.0 | 1.5 |
| 28 | 14.0 | 13.0 | 13.5 | 6.5 | 6.0 | 6.5 | .5 | .5 | .5 | 2.0 | 1.5 | 2.0 |
| 29 | 13.0 | 12.0 | 12.5 | 6.0 | 6.0 | 6.0 | .5 | .0 | .5 | 2.0 | 1.5 | 1.5 |
| 30 | 12.0 | 10.5 | 11.0 | 6.0 | 5.5 | 6.0 | .0 | .0 | .0 | 2.5 | 1.5 | 2.0 |
| 31 | 10.5 | 9.5 | 10.0 | --- | --- | --- | .0 | .0 | .0 | 2.5 | 2.0 | 2.5 |
| MONTH | 18.0 | 9.5 | 14.0 | 12.5 | 2.0 | 8.1 | 6.5 | .0 | 2.2 | 3.5 | .0 | 1.3 |

TEMPERATURE, WATER (DEG. C), RIGHT INTAKE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|------|
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 2.5 | 2.0 | 2.0 | 3.0 | 2.5 | 3.0 | 6.0 | 5.5 | 5.5 | 17.5 | 16.0 | 17.0 |
| 2 | 2.5 | 2.0 | 2.0 | 3.0 | 2.5 | 3.0 | 6.0 | 5.0 | 5.5 | 19.5 | 17.5 | 18.5 |
| 3 | 2.0 | 1.0 | 1.5 | 4.0 | 3.0 | 3.5 | 8.0 | 5.5 | 6.5 | 21.0 | 19.5 | 20.0 |
| 4 | 1.5 | 1.0 | 1.0 | 4.0 | 3.5 | 4.0 | 9.5 | 6.5 | 8.0 | 22.0 | 20.5 | 21.0 |
| 5 | 1.5 | .5 | 1.0 | 3.5 | 2.0 | 3.0 | 11.0 | 8.0 | 9.0 | 22.5 | 21.0 | 22.0 |
| 6 | 1.5 | .5 | 1.0 | 2.5 | 2.0 | 2.0 | 11.0 | 9.5 | 9.5 | 21.5 | 20.0 | 21.0 |
| 7 | 3.0 | 1.5 | 2.0 | 4.0 | 2.0 | 3.0 | 9.5 | 9.0 | 9.5 | 20.0 | 18.0 | 19.5 |
| 8 | 2.5 | 2.0 | 2.0 | 5.0 | 3.0 | 4.0 | 9.5 | 8.5 | 9.0 | 19.5 | 17.5 | 18.0 |
| 9 | 3.0 | 2.0 | 2.5 | 4.5 | 4.0 | 4.0 | 11.5 | 8.5 | 9.5 | 19.0 | 17.0 | 18.0 |
| 10 | 4.0 | 2.5 | 3.5 | 5.0 | 3.5 | 4.5 | 13.5 | 11.5 | 12.5 | 20.0 | 17.5 | 18.5 |
| 11 | 3.5 | 2.0 | 3.0 | 5.0 | 4.0 | 4.5 | 13.5 | 11.5 | 12.5 | 21.5 | 18.5 | 20.0 |
| 12 | 2.0 | 1.0 | 1.5 | 6.0 | 4.0 | 5.0 | 11.5 | 11.0 | 11.0 | 22.5 | 19.5 | 21.0 |
| 13 | 2.5 | 1.0 | 2.0 | 5.5 | 5.0 | 5.0 | 13.0 | 11.0 | 12.0 | 22.0 | 19.5 | 20.5 |
| 14 | 2.5 | 2.0 | 2.5 | 5.0 | 4.5 | 5.0 | 14.0 | 12.0 | 13.0 | 21.0 | 19.0 | 20.0 |
| 15 | 3.0 | 2.5 | 3.0 | 5.0 | 4.5 | 5.0 | 14.0 | 13.0 | 13.5 | 20.0 | 18.0 | 19.0 |
| 16 | 3.0 | 3.0 | 3.0 | 6.5 | 5.0 | 5.5 | 14.0 | 13.5 | 13.5 | 18.5 | 17.5 | 18.0 |
| 17 | 3.0 | 2.5 | 3.0 | 7.0 | 6.5 | 6.5 | 13.5 | 12.5 | 13.0 | 18.0 | 17.0 | 17.5 |
| 18 | 2.5 | 1.5 | 2.0 | 7.0 | 6.5 | 6.5 | 12.5 | 11.5 | 12.0 | 17.0 | 16.5 | 16.5 |
| 19 | 2.5 | 1.0 | 2.0 | 7.0 | 6.0 | 6.5 | 12.0 | 11.0 | 11.5 | 18.5 | 16.0 | 17.0 |
| 20 | 3.0 | 2.0 | 2.5 | 7.5 | 6.5 | 7.0 | 12.5 | 10.5 | 11.5 | 19.5 | 17.0 | 18.0 |
| 21 | 4.0 | 3.0 | 3.5 | 7.5 | 6.5 | 7.0 | 13.5 | 11.5 | 12.5 | 18.5 | 18.0 | 18.0 |
| 22 | 3.5 | 2.0 | 2.5 | 6.5 | 5.5 | 6.0 | 16.0 | 13.0 | 14.0 | 18.0 | 16.0 | 17.0 |
| 23 | 2.0 | 1.5 | 2.0 | 7.0 | 4.5 | 5.5 | 18.0 | 15.0 | 16.5 | 16.0 | 15.5 | 15.5 |
| 24 | 3.0 | 1.5 | 2.5 | 7.0 | 6.0 | 6.5 | 19.0 | 17.0 | 18.0 | 17.0 | 15.5 | 16.0 |
| 25 | 3.0 | 2.5 | 2.5 | 6.5 | 5.0 | 6.0 | 19.0 | 17.0 | 17.5 | 17.0 | 16.5 | 16.5 |
| 26 | 3.5 | 3.0 | 3.0 | 6.5 | 5.0 | 5.5 | 17.0 | 15.0 | 15.5 | 16.5 | 16.0 | 16.5 |
| 27 | 4.0 | 3.0 | 3.5 | 5.5 | 3.5 | 4.5 | 16.0 | 14.0 | 14.5 | 16.5 | 16.0 | 16.0 |
| 28 | 3.5 | 3.0 | 3.5 | 7.0 | 4.5 | 5.5 | 16.0 | 14.5 | 15.5 | 17.5 | 16.0 | 16.5 |
| 29 | --- | --- | --- | 6.5 | 6.0 | 6.0 | 16.0 | 15.0 | 15.5 | 18.5 | 17.0 | 18.0 |
| 30 | --- | --- | --- | 6.0 | 5.0 | 5.5 | 16.0 | 15.0 | 15.5 | 18.5 | 17.0 | 18.0 |
| 31 | --- | --- | --- | 5.5 | 5.0 | 5.0 | --- | --- | --- | 18.0 | 16.5 | 17.5 |
| MONTH | 4.0 | .5 | 2.4 | 7.5 | 2.0 | 5.0 | 19.0 | 5.0 | 12.1 | 22.5 | 15.5 | 18.3 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | | |
| 1 | 17.5 | 16.0 | 17.0 | 26.5 | 26.0 | 26.5 | 25.5 | 23.0 | 24.0 | 25.0 | 24.0 | 24.5 |
| 2 | 17.0 | 15.5 | 16.0 | 26.0 | 24.0 | 25.0 | 26.0 | 24.0 | 25.0 | 24.5 | 23.0 | 24.0 |
| 3 | 17.5 | 16.0 | 16.5 | 24.0 | 22.5 | 23.0 | 25.5 | 24.5 | 25.0 | 24.5 | 22.5 | 23.0 |
| 4 | 18.0 | 17.0 | 17.5 | 23.0 | 22.0 | 22.5 | 26.0 | 24.5 | 25.0 | 23.0 | 22.0 | 22.5 |
| 5 | 18.5 | 17.0 | 18.0 | 24.0 | 22.5 | 23.0 | 26.0 | 24.5 | 25.0 | 23.0 | 21.5 | 22.0 |
| 6 | 19.0 | 18.0 | 18.5 | 23.5 | 22.5 | 23.0 | 27.0 | 24.5 | 26.0 | 23.0 | 21.0 | 22.0 |
| 7 | 19.5 | 18.5 | 19.0 | 23.0 | 22.0 | 22.5 | 28.5 | 25.5 | 27.0 | 23.5 | 21.0 | 22.0 |
| 8 | 20.0 | 19.0 | 19.5 | 23.0 | 22.0 | 22.0 | 29.0 | 27.0 | 28.0 | 23.5 | 21.0 | 22.0 |
| 9 | 20.5 | 19.0 | 19.5 | 23.5 | 22.0 | 22.5 | 30.0 | 27.5 | 28.5 | 24.0 | 21.5 | 22.5 |
| 10 | 20.5 | 19.5 | 20.0 | 24.5 | 23.0 | 24.0 | 29.5 | 28.5 | 29.0 | 24.0 | 22.5 | 23.5 |
| 11 | 20.5 | 19.5 | 20.0 | 25.0 | 24.5 | 24.5 | 28.5 | 27.0 | 27.5 | 24.0 | 22.5 | 23.5 |
| 12 | 22.0 | 19.5 | 20.5 | 24.5 | 23.5 | 24.0 | 27.0 | 25.0 | 26.0 | 23.5 | 22.5 | 23.0 |
| 13 | 23.0 | 21.5 | 22.0 | 24.0 | 22.5 | 23.0 | 25.0 | 24.5 | 25.0 | 23.5 | 21.5 | 22.5 |
| 14 | 23.5 | 22.5 | 23.0 | 23.5 | 22.0 | 22.5 | 25.5 | 24.0 | 24.5 | 22.5 | 20.0 | 21.0 |
| 15 | 24.0 | 23.0 | 23.5 | 24.0 | 21.5 | 22.5 | 25.0 | 24.5 | 25.0 | 20.0 | 18.0 | 18.5 |
| 16 | 24.5 | 23.5 | 24.0 | 25.0 | 22.0 | 23.5 | 26.0 | 25.0 | 25.0 | 18.0 | 17.5 | 18.0 |
| 17 | 24.0 | 21.5 | 22.5 | 25.0 | 23.0 | 24.0 | 26.0 | 25.0 | 25.5 | 18.5 | 17.5 | 18.0 |
| 18 | 22.5 | 21.0 | 21.5 | 25.0 | 24.0 | 24.5 | 26.0 | 24.0 | 25.0 | 19.5 | 17.5 | 18.5 |
| 19 | 23.0 | 21.5 | 22.5 | 25.5 | 24.0 | 24.5 | 26.0 | 24.5 | 25.0 | 19.5 | 18.0 | 19.0 |
| 20 | 24.0 | 22.5 | 23.5 | 25.5 | 23.5 | 24.5 | 26.0 | 24.5 | 25.0 | 19.5 | 19.0 | 19.5 |
| 21 | 24.0 | 22.5 | 23.0 | 26.5 | 23.5 | 25.0 | 26.0 | 24.5 | 25.0 | 20.5 | 19.5 | 20.0 |
| 22 | 23.5 | 22.0 | 22.5 | 26.5 | 24.0 | 25.0 | 26.5 | 24.5 | 25.5 | 21.0 | 20.5 | 21.0 |
| 23 | 23.0 | 22.5 | 23.0 | 27.0 | 24.5 | 25.5 | 25.0 | 24.0 | 24.5 | 21.5 | 20.5 | 21.0 |
| 24 | 22.5 | 22.0 | 22.5 | 27.5 | 25.5 | 26.5 | 24.5 | 23.5 | 24.0 | 22.0 | 21.0 | 21.5 |
| 25 | 23.0 | 21.5 | 22.5 | 28.5 | 26.5 | 27.5 | 24.5 | 23.0 | 23.5 | 21.5 | 21.0 | 21.5 |
| 26 | 23.5 | 22.0 | 23.0 | 28.0 | 26.5 | 27.0 | 25.0 | 23.0 | 24.0 | 21.0 | 19.5 | 20.0 |
| 27 | 24.5 | 22.5 | 23.5 | 26.5 | 25.0 | 26.0 | 24.5 | 23.0 | 24.0 | 19.5 | 17.5 | 18.5 |
| 28 | 25.5 | 23.5 | 24.5 | 25.5 | 24.0 | 24.5 | 25.0 | 23.5 | 24.0 | 18.0 | 16.5 | 17.5 |
| 29 | 26.0 | 24.5 | 25.5 | 24.5 | 23.5 | 24.0 | 25.5 | 23.5 | 24.5 | 17.0 | 16.5 | 16.5 |
| 30 | 26.5 | 25.0 | 26.0 | 24.0 | 23.0 | 23.5 | 25.0 | 24.0 | 24.0 | 16.5 | 15.5 | 15.5 |
| 31 | --- | --- | --- | 25.0 | 23.0 | 24.0 | 25.0 | 24.0 | 24.5 | --- | --- | --- |
| MONTH | 26.5 | 15.5 | 21.4 | 28.5 | 21.5 | 24.2 | 30.0 | 23.0 | 25.3 | 25.0 | 15.5 | 20.8 |
| YEAR | 30.0 | .0 | 13.0 | | | | | | | | | |

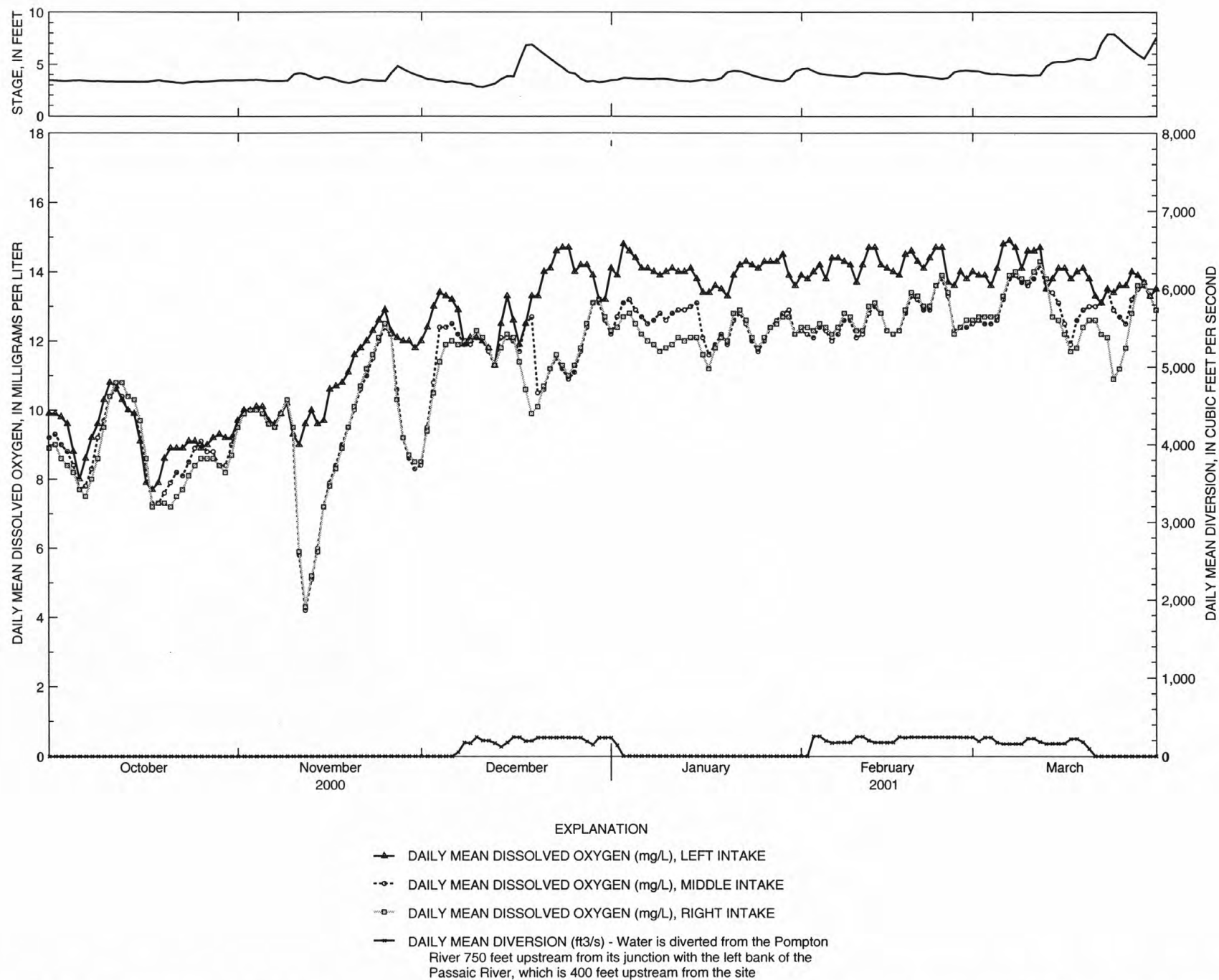


Figure 35. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River at Two Bridges, water year 2001.

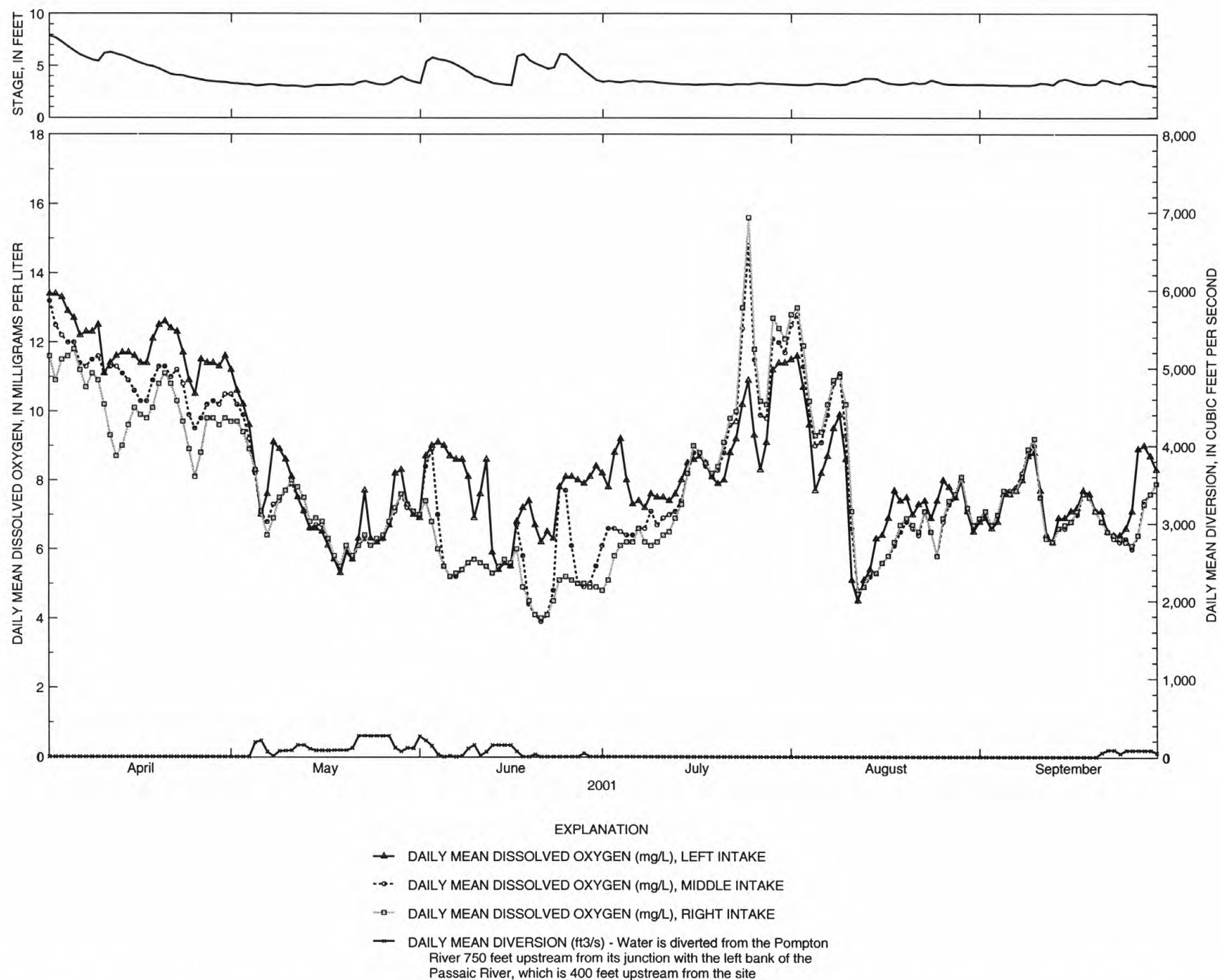


Figure 35. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River at Two Bridges--continued, water year 2001.

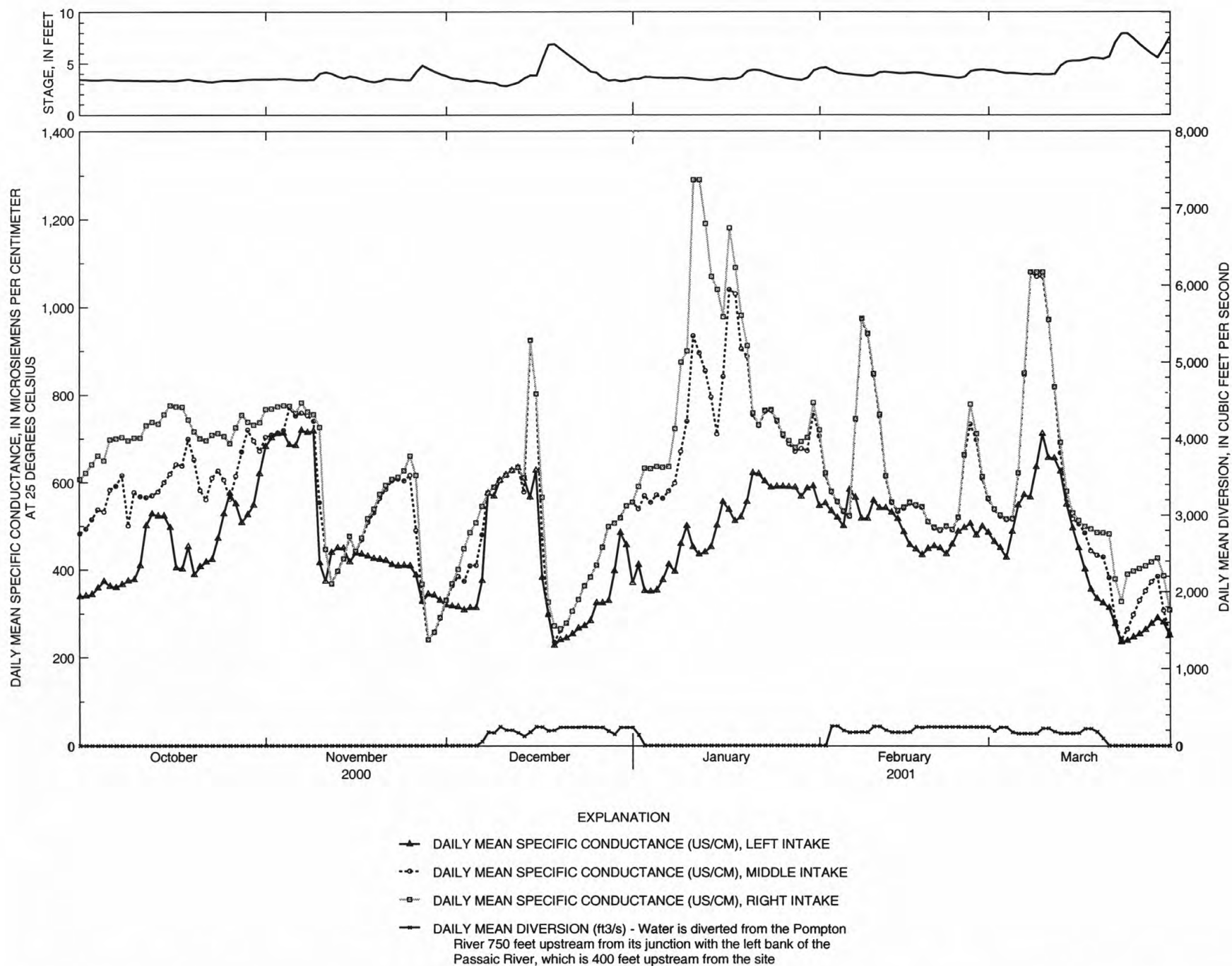


Figure 35. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River at Two Bridges--continued, water year 2001.

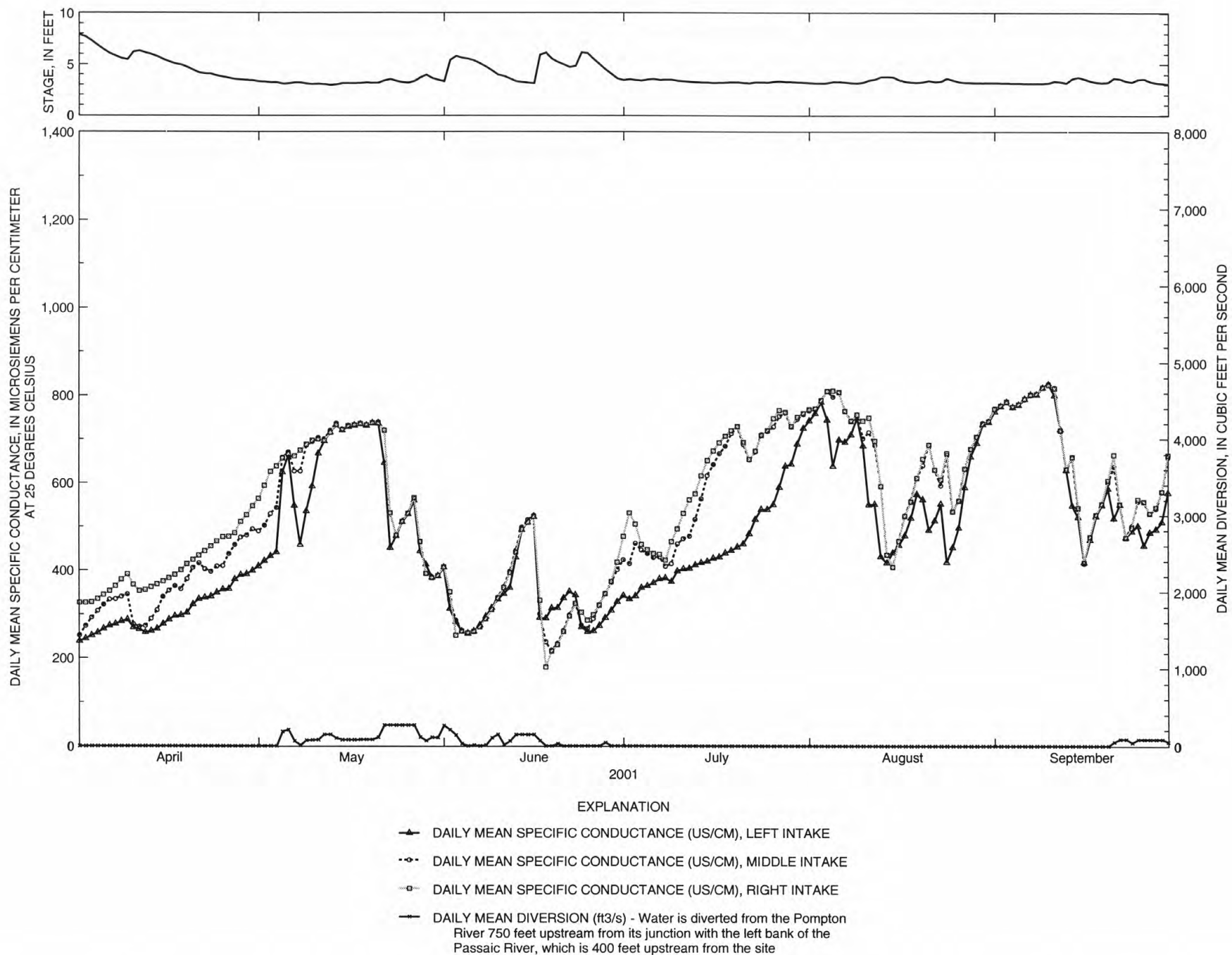


Figure 35. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River at Two Bridges--continued, water year 2001.

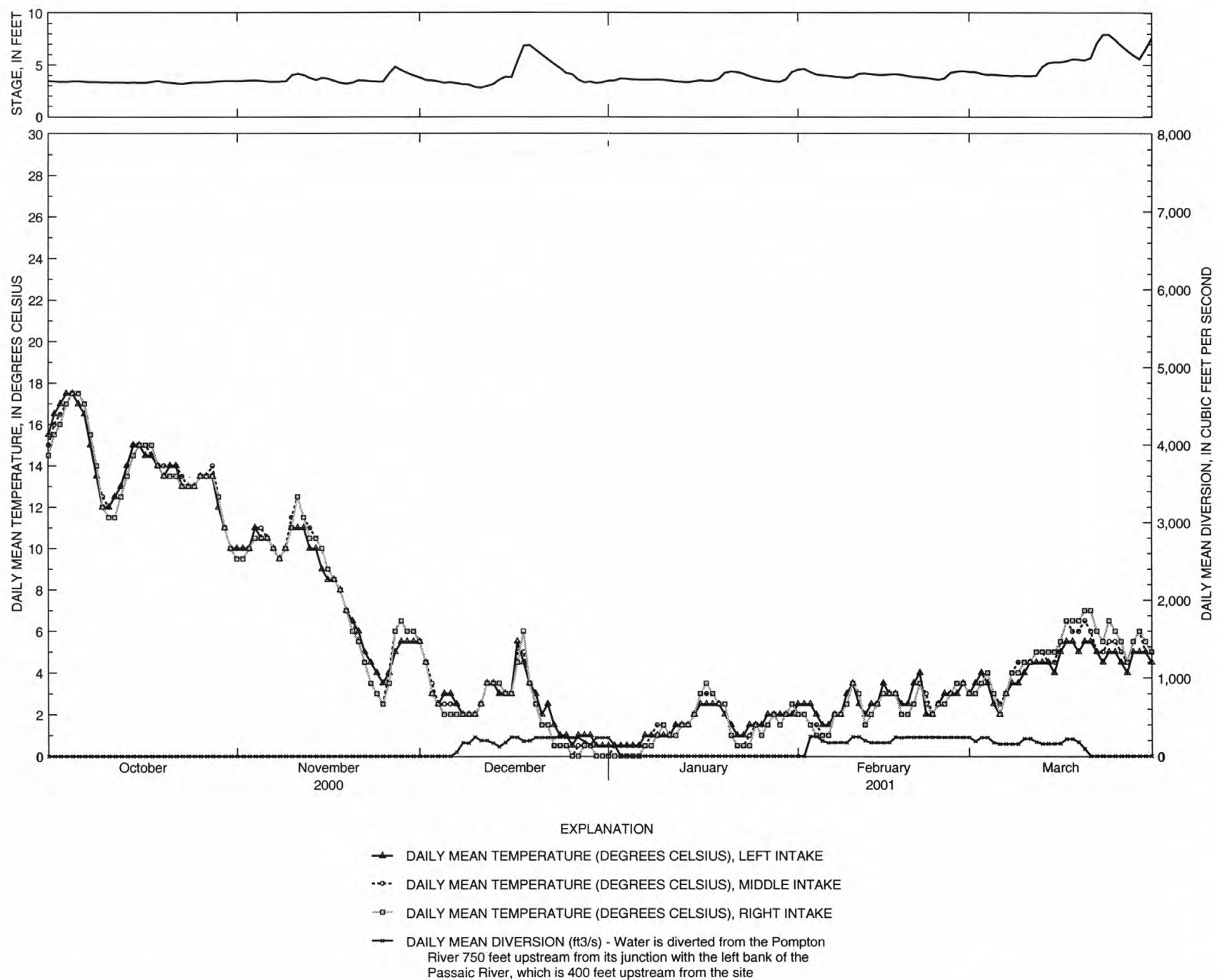


Figure 35. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River at Two Bridges--continued, water year 2001.

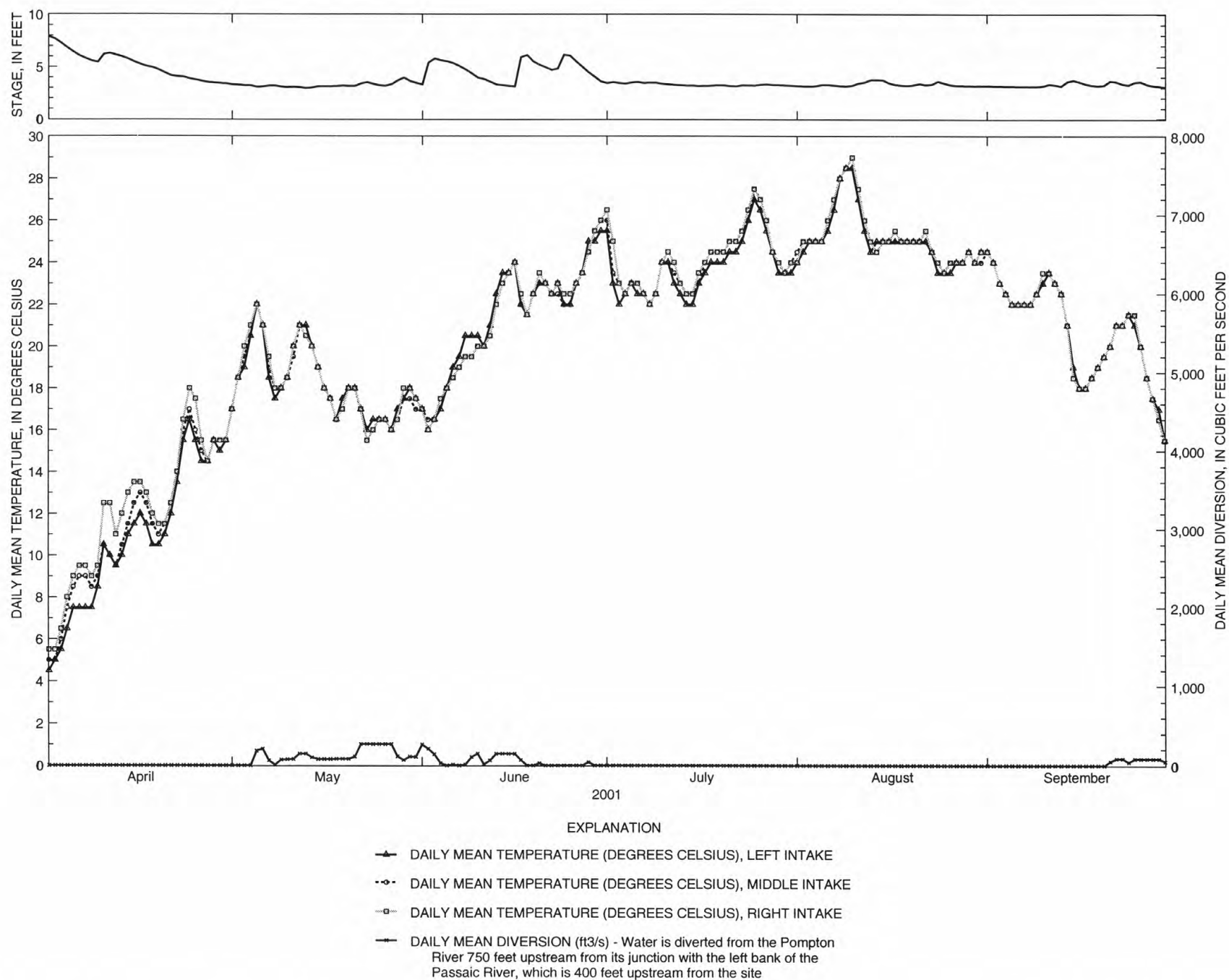


Figure 35. Physical characteristics, concentrations of constituents, stage, and daily diversion measured at 01389005 Passaic River below Pompton River at Two Bridges--continued.

PASSAIC RIVER BASIN

01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

Cross section of specific conductance, water temperature, and dissolved oxygen concentration measurements (distance from left bank looking downstream); and recorded hourly specific conductance, water temperature, and dissolved oxygen concentration measurements from the water-quality monitor at the station, Passaic River below Pompton River at Two Bridges, NJ.

May 31, 2001

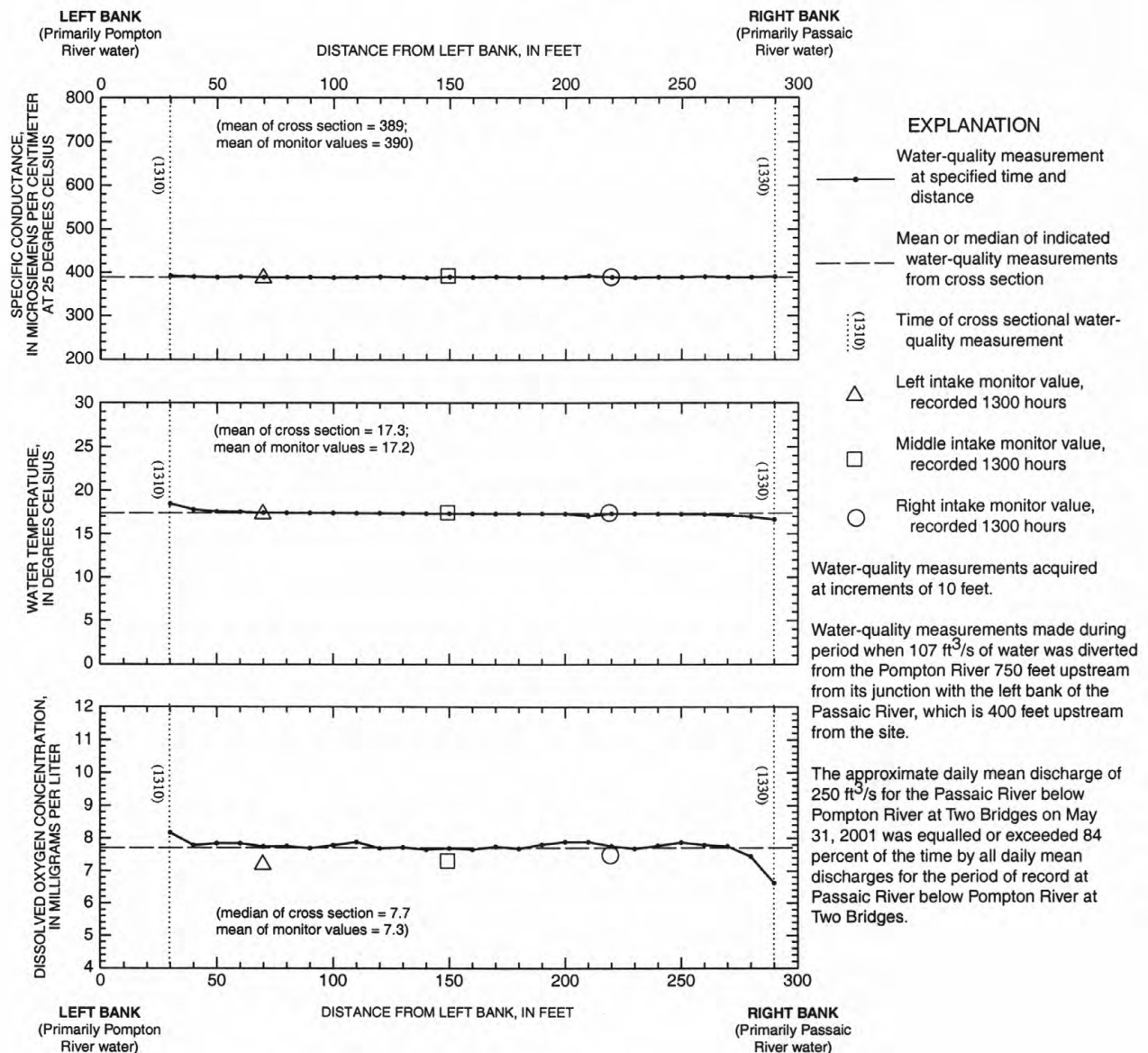


Figure 36. Cross sectional water-quality measurements with recorded monitor values, at Passaic River below Pompton River at Two Bridges, May 31, 2001.

01389005 PASSAIC RIVER BELOW POMPTON RIVER, AT TWO BRIDGES, NJ--Continued

Cross section of specific conductance, water temperature, and dissolved oxygen concentration measurements (distance from left bank looking downstream); and recorded hourly specific conductance, water temperature, and dissolved oxygen concentration measurements from the water-quality monitor at the station, Passaic River below Pompton River at Two Bridges, NJ.

July 3, 2001

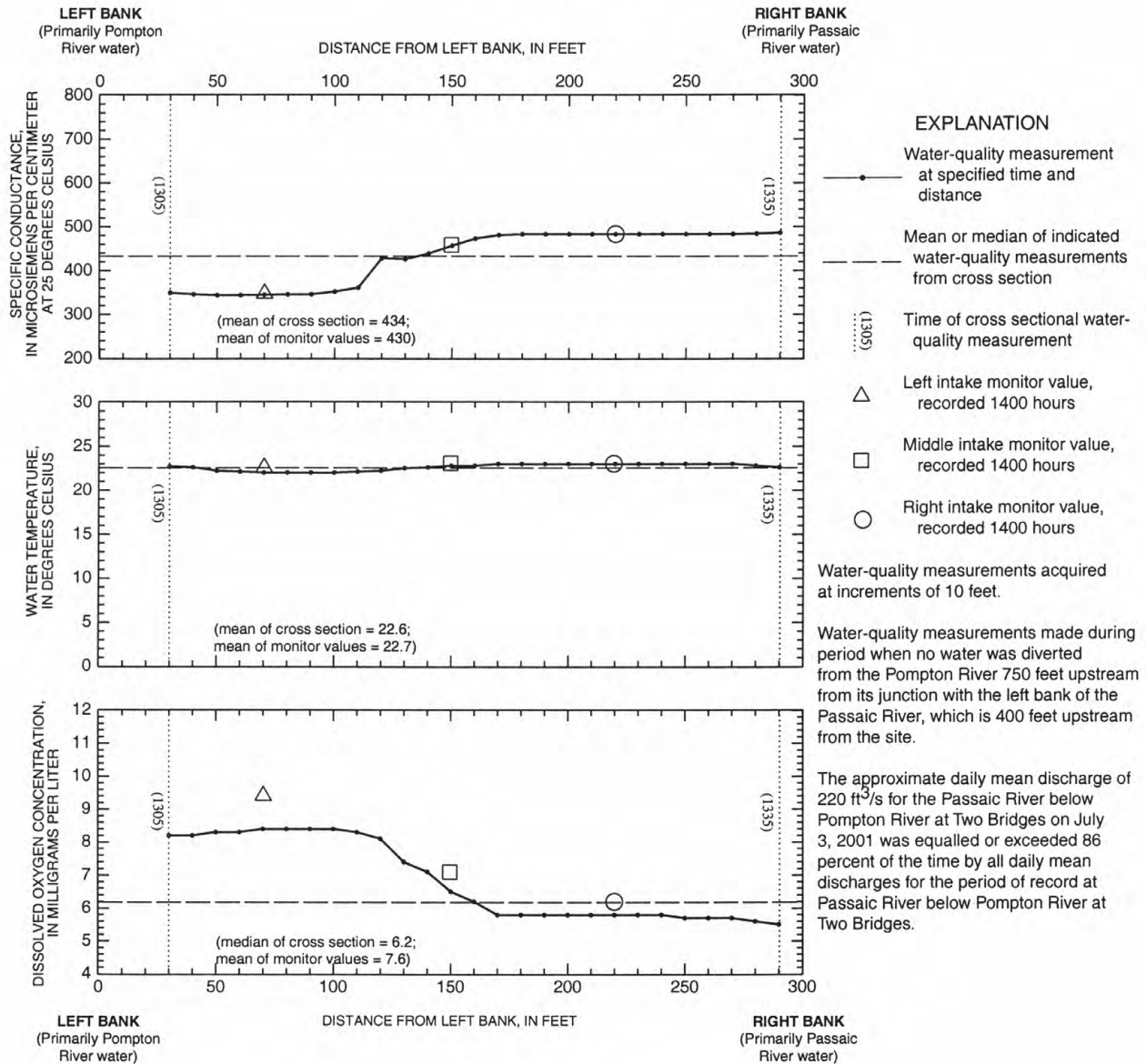


Figure 37. Cross sectional water-quality measurements with recorded monitor values, at Passaic River below Pompton River at Two Bridges, July 3, 2001.

PASSAIC RIVER BASIN

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ

LOCATION.--Lat 40°53'05", long 74°13'35", Passaic County, Hydrologic Unit 02030103, 0.6 mi downstream from Beatties Dam in Little Falls, and 1.0 mi upstream from Peckman River.

DRAINAGE AREA.--762 mi².

PERIOD OF RECORD.--Water years 1963-96, 1998 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1980 to November 1986.

WATER TEMPERATURE: Water years 1963 to 1980 (once daily), September 1980 to November 1986.

DISSOLVED OXYGEN: October 1970 to September 1980 (once daily).

SUSPENDED-SEDIMENT DISCHARGE: August 1963 to July 1965.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|---|--|--|--|---|--|---|--|--|
| | | | | | | | | | | | | | | |
| NOV 08... | 1030 | 131 | -- | .121 | .093 | 763 | 90 | 10.2 | 8.0 | 722 | -- | 10.0 | 170 | |
| FEB 14... | 1000 | 1150 | -- | .151 | .116 | 765 | 94 | 12.9 | 7.7 | 554 | 4.5 | 2.5 | 98 | |
| MAY 10... | 1000 | 181 | 9.2 | .122 | .091 | 763 | 88 | 8.2 | 7.6 | 654 | 17.0 | 18.5 | 160 | |
| SEP 05... | 1000 | 106 | 9.9 | .107 | .079 | 761 | 72 | 6.3 | 7.9 | 718 | 21.0 | 22.0 | 170 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| NOV 08... | 43.2 | 15.1 | 7.05 | 67.9 | 108 | 111 | E.1 | 12.3 | 53.0 | 398 | 393 | .070 | .48 | |
| FEB 14... | 26.1 | 8.09 | 2.35 | 64.0 | 49 | 115 | <.2 | 10.1 | 20.1 | 308 | 282 | .060 | .32 | |
| MAY 10... | 39.9 | 13.6 | 5.07 | 60.6 | 92 | 117 | E.1 | 11.9 | 33.2 | 388 | 350 | .100 | .59 | |
| SEP 05... | 43.3 | 15.0 | 7.03 | 72.7 | 99 | 121 | E.1 | 12.2 | 49.4 | 404 | 380 | <.030 | E.47 | |
| DATE | | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORGANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689) | |
| NOV 08... | .05 | .54 | 4.17 | .016 | 4.7 | 4.7 | .102 | .933 | 1.01 | .7 | <.1 | 4.2 | .7 | |
| FEB 14... | .06 | .32 | 1.51 | .020 | 1.8 | 1.8 | .070 | .124 | .144 | .5 | <.1 | 4.1 | .5 | |
| MAY 10... | .08 | .85 | 3.03 | .047 | 3.6 | 3.9 | .185 | .381 | .526 | 1.3 | M | 4.1 | E1.3 | |
| SEP 05... | <.03 | .66 | E4.41 | .020 | -- | -- | .136 | E.744 | .780 | .9 | <.1 | 4.2 | .9 | |
| DATE | | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | | | | | |
| NOV 08... | E1.3 | -- | 187 | 12 | | | | | | | | | | |
| FEB 14... | E1.8 | -- | 53 | 8 | | | | | | | | | | |
| MAY 10... | 2.0 | 37.2 | 145 | 10 | | | | | | | | | | |
| SEP 05... | E1.2 | 33.9 | 188 | 17 | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

PASSAIC RIVER BASIN

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | JUL | | | | |
| 02... | 1215 | 2800 | 500 | 150 | 16... | 1200 | 2200 | 200 | 2700 |
| 09... | 1210 | 490 | 200 | 240 | 23... | 1200 | 1300 | 800 | 360 |
| | | | | | 30... | 1130 | 2200 | 600 | 190 |

PASSAIC RIVER BASIN

01389850 GOFFLE BROOK AT HAWTHORNE, NJ

LOCATION.--Lat 40°56'20", long 74°09'48", Passaic County, Hydrologic Unit 02030103, at bridge on Wagaraw Road in Hawthorne, 0.2 mi upstream from mouth and Passaic River, and 1.2 mi east of Haledon.

DRAINAGE AREA.--8.77 mi².

PERIOD OF RECORD.--April 1998 to September 1998 and November 2000 to September 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | | |
|--------------|------|---|--|--|--|---|---|---|--|--|--|--|--|---|------|
| | | NOV 28... | 1000 | -- | .146 | .117 | 762 | 101 | 12.1 | 7.7 | 432 | -- | 7.5 | 140 | 41.2 |
| | | FEB 06... | 1000 | -- | .062 | .046 | 761 | 97 | 13.2 | 8.0 | 3180 | 5.0 | 2.0 | 220 | 63.8 |
| JUN 05... | 1000 | 2.6 | .121 | .091 | 762 | 85 | 8.4 | 7.6 | 575 | -- | 16.0 | 170 | 49.5 | | |
| SEP 05... | 1000 | 2.2 | .032 | .023 | 762 | 84 | 7.6 | 7.8 | 530 | 22.0 | 20.0 | 200 | 61.1 | | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | |
| NOV 28... | 9.49 | 2.63 | 26.6 | 97 | 57.6 | E.1 | 11.2 | 16.8 | 239 | 231 | <.030 | .24 | <.03 | | |
| FEB 06... | 14.6 | 3.31 | 518 | 113 | 903 | <.2 | 8.8 | 29.3 | 1780 | 1620 | .050 | <.10 | .04 | | |
| JUN 05... | 10.9 | 2.54 | 45.7 | 108 | 98.2 | <.2 | 12.4 | 17.3 | 344 | 309 | .050 | .34 | .06 | | |
| SEP 05... | 12.6 | 1.58 | 29.4 | 143 | 74.9 | <.2 | 14.2 | 21.8 | 318 | 301 | .050 | E.25 | <.03 | | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | |
| NOV 28... | .28 | 1.60 | .004 | 1.8 | 1.9 | .069 | .032 | .050 | 1.0 | <.1 | 4.2 | 1.0 | 2.1 | | |
| FEB 06... | .30 | 2.59 | <.003 | -- | 2.9 | .045 | .018 | .023 | .7 | <.1 | 3.6 | .7 | 3.7 | | |
| JUN 05... | .38 | 1.74 | .026 | 2.1 | 2.1 | .073 | .040 | .064 | .5 | <.1 | 3.5 | .5 | <1.0 | | |
| SEP 05... | .24 | E1.42 | .012 | -- | -- | <.022 | .014 | .029 | .2 | <.1 | 1.3 | .2 | <1.0 | | |
| | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | | |
| | | | | | | NOV 28... | -- | 38 | <1 | | | | | | |
| | | | | | | FEB 06... | -- | E45 | 5 | | | | | | |
| | | | | | | JUN 05... | 2.90 | 42 | 4 | | | | | | |
| | | | | | | SEP 05... | 6.60 | 37 | 2 | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

E Estimated value.
< Actual value is known to be less than the value shown.
M Presence of material verified but not quantified.

PASSAIC RIVER BASIN

01389850 GOFFLE BROOK AT HAWTHORNE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1-TRI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHYLENE | 1,2-DI-CHLORO-ETHANE | 1,2-DI-CHLORO-PROPANE | TRANS-1,2-DI-CHLORO-ETHENE | BENZENE 1,3-DI-CHLORO-WATER | BENZENE 1,4-DI-CHLORO-WATER | BENZENE O-DI-CHLORO-WATER | BENZENE TOTAL (UG/L) (34030) | BROMO-FORM TOTAL (UG/L) (32104) | CARBON TETRA-CHLO-RIDE TOTAL (UG/L) (32102) | |
|-----------|------|-------------------------|------------------------------------|----------------------------|-------------------------|------------------------------|---|-----------------------------------|--|--|------------------------------------|--|--|----------------|
| | | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (32103) | TOTAL (UG/L) (34541) | TOTAL (UG/L) (34546) | UNFLTRD REC (UG/L) (34566) | UNFLTRD REC (UG/L) (34571) | UNFLTRD REC (UG/L) (34536) | | | | |
| | | | | | | | | | | | | | | |
| FEB 06... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | .28 | <.20 | <.20 | |
| DATE | TIME | CHLORO-DI-BROMO-METHANE | CHLORO-FORM | CIS-1,2-DI-CHLORO-ETHENE | BROMO-DI-CHLORO-METHANE | DI-CHLORO-DI-FLUORO-METHANE | DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER | ETHER ETHYL WATER UNFLTRD RECOVER | ETHER TERT-BUTYL ETHYL UNFLTRD RECOVER | ETHER TERT-PENTYL METHYL UNFLTRD RECOVER | ETHYL-BENZENE TOTAL (UG/L) (34371) | FREON-113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032) | |
| | | TOTAL (UG/L) (34301) | TOTAL (UG/L) (32105) | TOTAL (UG/L) (32106) | TOTAL (UG/L) (77093) | TOTAL (UG/L) (32101) | TOTAL (UG/L) (34668) | (UG/L) (81577) | (UG/L) (81576) | (UG/L) (50004) | | | | (UG/L) (50005) |
| | | | | | | | | | | | | | | |
| FEB 06... | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | .6 | |
| DATE | TIME | METHYL-CHLO-RIDE | META/PARA-XYLENE WATER UNFLTRD REC | O-XYLENE WATER WHOLE TOTAL | STYRENE TOTAL | TETRA-CHLORO-ETHYL-ENE TOTAL | TOLUENE TOTAL | TRI-CHLORO-ETHYL-ENE TOTAL | TRI-CHLORO-FLUORO-METHANE TOTAL | VINYL-CHLO-RIDE TOTAL | VINYLBENZENE TOTAL (UG/L) (39175) | | | |
| | | TOTAL (UG/L) (34423) | (UG/L) (85795) | (UG/L) (77135) | (UG/L) (77128) | (UG/L) (34475) | (UG/L) (34010) | (UG/L) (39180) | (UG/L) (34488) | (UG/L) (39175) | | | | |
| | | | | | | | | | | | | | | |
| FEB 06... | | <.2 | E.19 | <.10 | <.10 | <.1 | .34 | <.10 | <.20 | <.2 | | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| | | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|--|--|--|---|---|--|--|--|--|---|--|---|
| DATE | TIME | | | | | | | | | | | | |
| JUN 05... | 1000 | <.004 | <.002 | <.005 | E.005 | <.010 | E.027 | <.020 | <.005 | <.018 | <.003 | E.003 | .126 |
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E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01389850 GOFFLE BROOK AT HAWTHORNE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | JUL | | | | |
| 02... | 1130 | 24000 | 5400 | 8600 | 23... | 1125 | 490 | 500 | 300 |
| 09... | 1116 | 2200 | 2900 | 1900 | 30... | 1055 | 2400 | 200 | 500 |

PASSAIC RIVER BASIN

01391500 SADDLE RIVER AT LODI, NJ

LOCATION.--Lat 40°53'25", long 74°04'51", Bergen County, Hydrologic Unit 02030103, 560 ft upstream from bridge on Outwater Lane in Lodi and 3.2 mi upstream from mouth. Water-quality samples collected at bridge on Outwater Lane at high flows.

DRAINAGE AREA.--54.6 mi².

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

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|--|--|--|--|--|--|--|--|--|---|---|---|--|
| NOV 21... | 0800 | 35 | -- | .108 | .084 | 755 | 63 | 7.9 | 8.0 | 803 | -- | 5.5 | 220 | |
| FEB 15... | 0830 | 78 | -- | .091 | .069 | 755 | 67 | 8.9 | 7.5 | 960 | 3.0 | 3.0 | 210 | |
| MAY 22... | 0800 | 199 | 29 | .314 | .238 | 755 | 57 | 5.6 | 7.2 | 526 | 14.0 | 15.5 | 120 | |
| AUG 08... | 0800 | 26 | 2.6 | .114 | .087 | 759 | 56 | 4.6 | 7.6 | 914 | 30.0 | 24.5 | 240 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| NOV 21... | 59.5 | 17.7 | 6.10 | 63.4 | 139 | 122 | <.2 | 15.0 | 30.4 | 442 | 430 | .810 | 1.4 | |
| FEB 15... | 59.0 | 15.1 | 4.50 | 93.1 | 124 | 179 | <.2 | 10.5 | 29.5 | 527 | 489 | 1.18 | 1.7 | |
| MAY 22... | 32.7 | 9.09 | 5.14 | 48.1 | 67 | 84.1 | E.1 | 7.2 | 18.4 | 304 | 265 | .980 | 2.0 | |
| AUG 08... | 66.2 | 19.1 | 6.78 | 74.0 | 148 | 146 | E.1 | 11.3 | 31.5 | 480 | 474 | .100 | .66 | |
| DATE | | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 21... | .76 | 1.4 | 7.05 | .260 | 8.4 | 8.5 | .147 | 1.29 | 1.31 | 1.3 | <.1 | 4.3 | 1.3 | |
| FEB 15... | 1.22 | 1.8 | 5.22 | .155 | 6.9 | 7.0 | .148 | .644 | .635 | 1.1 | <.1 | 3.8 | 1.1 | |
| MAY 22... | 1.01 | 3.0 | 4.21 | .331 | 6.2 | 7.2 | .593 | .919 | 1.19 | 5.9 | <.1 | 14 | 5.9 | |
| AUG 08... | .14 | .75 | 6.79 | .103 | 7.5 | 7.5 | .097 | 1.40 | 1.43 | .9 | <.1 | 3.9 | .9 | |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|--------------|---|---|---|--|
| NOV 21... | 3.5 | -- | 161 | 1 |
| FEB 15... | 3.7 | -- | 80 | 10 |
| MAY 22... | 4.7 | 27.3 | 90 | 45 |
| AUG 08... | E1.3 | 10.6 | 152 | 6 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 05... | 0845 | 16000 | 8000 | 4500 | JUL 16... | 1014 | 1400 | 900 | 260 |
| 09... | 1018 | 5400 | 1900 | 1260 | 23... | 1015 | 5400 | 2600 | 250 |
| | | | | | 30... | 1007 | 1700 | 1000 | 380 |

E Estimated value.

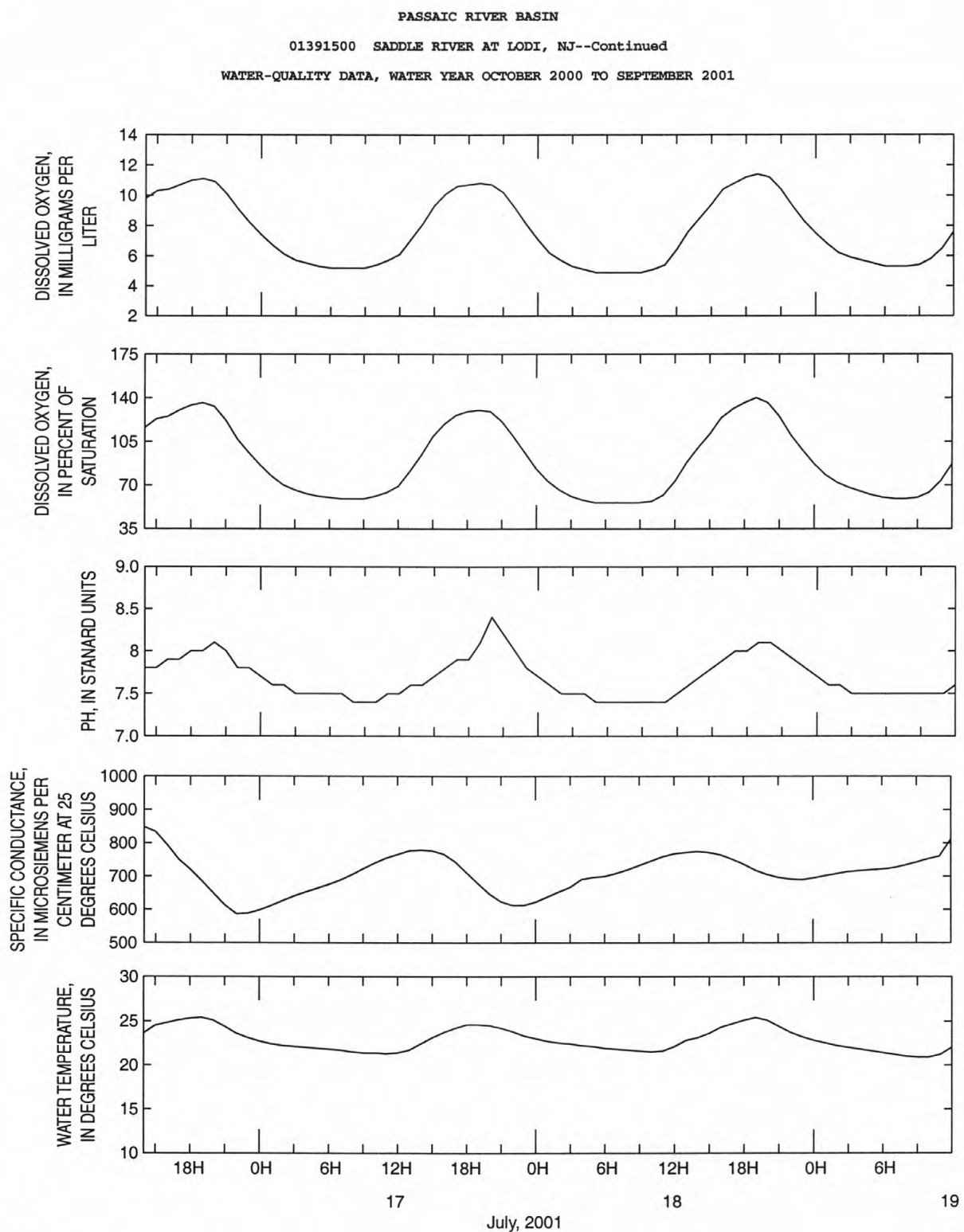


Figure 38. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01391500 Saddle River at Lodi, water year 2001.

PASSAIC RIVER BASIN

171

01391550 SADDLE RIVER AT GARFIELD, NJ

LOCATION.--Lat 41°51'50", long 74°06'06", Bergen County, Hydrologic Unit 02030103, at bridge on Marcellus Place just north of intersection with Saddle River Avenue, 0.3 mi southeast of Garfield, and 0.3 mi upstream of mouth.

DRAINAGE AREA.--60.4 mi².

PERIOD OF RECORD.--November 2000 to September 2001.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY | UV ABSORB- ANCE | UV ABSORB- ANCE | BARO- METRIC | OXYGEN, DIS- SOLVED | OXYGEN, DIS- SOLVED (MG/L) | PH WATER WHOLE | SPE- CIFIC | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|--|--|--|--|---|---|--|---|--|---|---|--|---|
| | | FIELD | 254 NM, WTR FLT | 280 NM, WTR FLT | SURE | (PER- CENT | | (STAND- ARD | CON- DUCT- ANCE | | | | | |
| | | UNFLTRD (NTU) (61028) | (UNITS /CM) (50624) | (UNITS /CM) (61726) | OF (MM HG) (00025) | SATUR- ATION) (00301) | | (00300) | (00400) | | | | | (US/CM) (00095) |
| NOV 08... | 1000 | -- | .103 | .081 | 762 | 76 | 8.7 | 7.6 | 792 | -- | 9.5 | 250 | 69.5 | |
| FEB 28... | 1000 | -- | .105 | .079 | 764 | 99 | 12.7 | 7.7 | 977 | 2.5 | 5.0 | 190 | 55.0 | |
| MAY 08... | 1100 | -- | .102 | .078 | 772 | 68 | 7.0 | 7.5 | 780 | 20.0 | 14.5 | 230 | 65.1 | |
| AUG 08... | 1000 | 1.6 | .115 | .087 | 760 | 64 | 5.1 | 7.6 | 796 | 27.0 | 26.5 | 250 | 67.8 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | ANC UNFLTRD TIT 4.5 LAB SOLVED (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | |
| NOV 08... | 18.9 | 6.19 | 65.0 | 160 | 129 | E.1 | 13.1 | 32.9 | 479 | 463 | .200 | .76 | .23 | |
| FEB 28... | 13.4 | 3.90 | 108 | 114 | 202 | E.1 | 10.0 | 27.2 | 553 | 508 | .910 | 1.3 | .91 | |
| MAY 08... | 16.9 | 5.10 | 74.4 | 141 | 148 | E.1 | 11.6 | 30.4 | 529 | 465 | .250 | .85 | .28 | |
| AUG 08... | 18.7 | 5.98 | 75.1 | 153 | 153 | E.1 | 11.4 | 33.2 | 498 | 484 | .070 | .60 | .10 | |
| DATE | | NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN, PAR- TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 08... | .87 | 7.23 | .138 | 8.0 | 8.1 | .096 | 1.17 | 1.19 | .6 | <.1 | 4.3 | .6 | 2.0 | |
| FEB 28... | 1.5 | 4.07 | .131 | 5.3 | 5.5 | .081 | .432 | .478 | .8 | <.1 | 4.0 | .8 | 2.9 | |
| MAY 08... | .99 | 6.39 | .172 | 7.2 | 7.4 | .089 | .870 | .927 | .9 | <.1 | 4.3 | .9 | 2.9 | |
| AUG 08... | .62 | 6.05 | .038 | 6.6 | 6.7 | .064 | 1.11 | 1.18 | .4 | <.1 | 3.7 | .4 | 2.1 | |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01391550 SADDLE RIVER AT GARFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | | BORON, DIS- SOLVED (UG/L AS B) (01020) | | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | | |
|--------------|------|--|---|--|---|---|--|--|---|---|--|--|---|--|-----|--|--|
| DATE | | | | | | NOV 08... | | -- | | 161 | | 11 | | | | | |
| FEB 28... | | | | | | -- | | 78 | | 3 | | | | | | | |
| MAY 08... | | | | | | 9.00 | | 125 | | 2 | | | | | | | |
| AUG 08... | | | | | | 5.30 | | 153 | | 2 | | | | | | | |
| DATE | TIME | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | | | | |
| AUG 08... | 1000 | -- | -- | -- | -- | -- | -- | E2 | 108 | <.06 | 150 | .09 | <1 | | | | |
| AUG 08... | 1000 | 7.00 | 150 | 1.7 | 300 | 4.8 | .5 | -- | -- | -- | -- | -- | -- | | | | |
| DATE | TIME | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) | | | |
| AUG 08... | 8.6 | 110 | <1 | 53 | <.01 | 2 | E.3 | E.05 | 13 | -- | -- | -- | -- | -- | -- | | |
| AUG 08... | -- | -- | -- | -- | -- | -- | -- | -- | -- | <1 | .2 | 9.5 | 2.6 | | | | |
| DATE | TIME | COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053) | MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148) | ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) | | | |
| AUG 08... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| AUG 08... | 20 | 6300 | 32 | 180 | .06 | 7.4 | <1 | 60 | E30 | <50 | <50 | <50 | <50 | <50 | <50 | | |
| DATE | TIME | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPHTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403) | | | |
| AUG 08... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| AUG 08... | <50 | 70 | 210 | 220 | 220 | 160 | 180 | 250 | E40 | 460 | 180 | <50 | <50 | <50 | <50 | | |
| DATE | TIME | NAPHTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPHTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPHTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. FALL DIAM. % FINER THAN .004 MM (80157) | | | |
| AUG 08... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| AUG 08... | <50 | <50 | <50 | <50 | <50 | <50 | 37 | <50 | <50 | 260 | <50 | E30 | 390 | <1 | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

173

01391550 SADDLE RIVER AT GARFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) | | | | | | | | | | | | | |
|--|------|---|--|---|---|---|---|---|---|---|---|---|--|
| DATE | | | | | | | | | | | | | |
| AUG | | | | | | | | | | | | | |
| 08... | | | | | | | | | | | | | |
| 08... 1 | | | | | | | | | | | | | |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
| FEB 28... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
| DATE | TIME | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
| FEB 28... | .79 | <.2 | .14 | 2.50 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | .8 |
| DATE | TIME | METHYL CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | |
| FEB 28... | | <.2 | <.20 | <.10 | <.10 | .4 | .21 | .52 | <.20 | 1.0 | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA-BHC DIS-SOLVED (UG/L) (34253) | ATRA-ZINE, WATER, DISS, REC (UG/L) (39632) | BEN-FLUR-ALIN WAT FLD 0.7 U (UG/L) (82673) | CAR-BARYL WATER FLTRD 0.7 U (UG/L) (82680) | CARBO-FURAN WATER FLTRD 0.7 U (UG/L) (82674) | CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933) | CYANA-ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U (UG/L) (82682) | DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040) | DI-AZINON, DIS-SOLVED (UG/L) (39572) | | |
|-----------|-------|--|---|-------------------------------------|--|--|---|--|---|---|---|--|--|--|--|
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| MAY 08... | 1100 | <.004 | <.002 | <.005 | E.005 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.003 | .079 | | |
| DATE | | DI-ELDRIN DIS-SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U (UG/L) (82668) | LINDANE DIS-SOLVED (UG/L) (39341) | LIN-URON WATER FLTRD 0.7 U (UG/L) (82666) | MALA-THION, DIS-SOLVED (UG/L) (39532) | METHYL-AZIN-PHOS WAT FLT 0.7 U (UG/L) (82686) | METO-LACHLOR WATER DISSOLV (UG/L) (39415) | METRI-SENCOB WATER DISSOLV (UG/L) (82630) | MOL-INATE WATER FLTRD 0.7 U (UG/L) (82671) | NAPROP-AMIDE WATER FLTRD 0.7 U (UG/L) (82684) | P,P'-DDE DISSOLV (UG/L) (34653) | PENDI-METH-ALIN WAT FLT 0.7 U (UG/L) (82683) | PRO-METON, WATER, DISS, REC (UG/L) (04037) | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| MAY 08... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.002 | <.006 | <.002 | <.007 | <.003 | <.010 | .016 | | |

E Estimated value.

< Actual value is known to be less than the value shown.

PASSAIC RIVER BASIN

01391550 SADDLE RIVER AT GARFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-------|---|---|--|---|---|
| MAY | | | | | |
| 08... | E.005 | <.016 | <.034 | <.005 | E.004 |

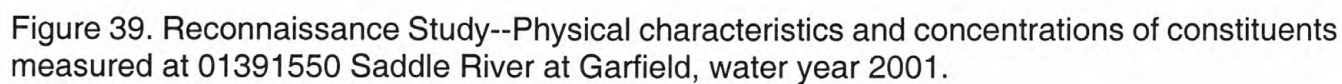
WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | JUL | | | | |
| 05... | 0815 | >24000 | 4900 | 5200 | 16... | 1000 | 5400 | 1400 | 200 |
| 09... | 1004 | 1700 | 1800 | 1900 | 23... | 0955 | 3500 | 2500 | 200 |
| | | | | | 30... | 0953 | 5400 | 1200 | 280 |

E Estimated value.

> Actual value is known to be greater than the value shown.



RAHWAY RIVER BASIN

01393960 WEST BRANCH RAHWAY RIVER AT NORTHFIELD AVENUE, AT WEST ORANGE, NJ

LOCATION.--Lat 40°46'11", long 74°17'00", Essex County, Hydrologic Unit 02030104, at bridge on Northfield Avenue in West Orange, 0.1 mi upstream of Orange Reservoir, and 2.2 mi east of Northfield.

DRAINAGE AREA.--7.09 mi².

PERIOD OF RECORD.--Water Year 1999 and November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY | UV ABSORB- ANCE | UV ABSORB- ANCE | BARO- METRIC PRES- | OXYGEN, DIS- SOLVED | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE | SPE- CIFIC CON- DUCT- | TEMPER- ATURE | TEMPER- ATURE | HARD- NESS | CALCIUM | |
|--------------|------|---|--|--|--|---|---|--|--|--|--|---|--|---|
| | | FIELD | 254 NM, | 280 NM, | SURE | (PER- CENT | | (STAND- ARD | CON- DUCT- ANCE | AIR | WATER | TOTAL | DIS- SOLVED | |
| | | WATER UNFLTRD (NTU) (61028) | WTR FLT (UNITS /CM) (50624) | WTR FLT (UNITS /CM) (61726) | (MM OF HG) (00025) | SATUR- ATION) (00301) | | UNITS) (00400) | (US/CM) (00095) | (DEG C) (00020) | (DEG C) (00010) | (MG/L AS CACO3) (00900) | (MG/L AS CA) (00915) | |
| NOV 14... | 1000 | -- | .074 | .055 | 750 | 85 | 9.4 | 7.6 | 577 | -- | 10.0 | 180 | 45.0 | |
| FEB 14... | 1000 | -- | .073 | .054 | 758 | 77 | 10.3 | 7.7 | 1270 | 8.0 | 3.0 | 210 | 52.0 | |
| MAY 24... | 1100 | 2.8 | .124 | .090 | 752 | 69 | 7.0 | 7.4 | 670 | 20.5 | 14.0 | 150 | 37.4 | |
| AUG 15... | 1100 | 4.6 | .158 | .115 | 756 | 62 | 5.4 | 7.4 | 411 | 21.5 | 21.5 | 110 | 29.3 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| NOV 14... | 16.0 | 1.75 | 44.0 | 71 | 121 | E.1 | 13.3 | 30.4 | 341 | 319 | .040 | .25 | <.03 | |
| FEB 14... | 18.4 | 2.10 | 197 | 59 | 384 | <.2 | 12.4 | 27.1 | 810 | 736 | <.030 | .26 | .03 | |
| MAY 24... | 13.1 | 1.91 | 76.1 | 63 | 160 | E.1 | 11.7 | 23.1 | 405 | 366 | .060 | .40 | .07 | |
| AUG 15... | 10.1 | 1.69 | 33.2 | 46 | 83.9 | <.2 | 9.1 | 15.2 | 262 | 216 | .100 | .45 | .18 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 14... | .25 | .925 | <.003 | 1.2 | 1.2 | .068 | .083 | .096 | .6 | <.1 | 3.7 | .6 | 2.7 | |
| FEB 14... | .32 | 1.74 | .003 | 2.0 | 2.1 | .106 | .020 | .044 | 1.1 | <.1 | 2.8 | 1.1 | E1.7 | |
| MAY 24... | .52 | 1.00 | .025 | 1.4 | 1.5 | .076 | .064 | .088 | .6 | <.1 | 4.1 | .6 | E1.4 | |
| AUG 15... | .54 | 1.35 | .037 | 1.8 | 1.9 | .099 | .062 | .092 | 1.1 | <.1 | 5.4 | 1.1 | 3.9 | |
| | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) | | | | | | |
| NOV 14... | | | | | | -- | 94 | 3 | | | | | | |
| FEB 14... | | | | | | -- | 67 | 3 | | | | | | |
| MAY 24... | | | | | | 10.7 | 70 | 2 | | | | | | |
| AUG 15... | | | | | | 14.6 | 79 | 5 | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

RAHWAY RIVER BASIN

177

01393960 WEST BRANCH RAHWAY RIVER AT NORTHFIELD AVENUE, AT WEST ORANGE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|------|------|--|--|---|--|--|---|--|--|--|--|--|--|
|------|------|--|--|---|--|--|---|--|--|--|--|--|--|

| | | | | | | | | | | | | | | |
|-----|-------|------|----|------|------|----|------|---|-----|-----|---|----|------|---|
| AUG | 15... | 1100 | <2 | 25.4 | <.06 | 70 | E.03 | M | 4.0 | 260 | 2 | 45 | <.01 | 1 |
|-----|-------|------|----|------|------|----|------|---|-----|-----|---|----|------|---|

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|------|---|--|--|
|------|---|--|--|

| | | | | |
|-----|-------|-----|------|---|
| AUG | 15... | <.4 | <.05 | 8 |
|-----|-------|-----|------|---|

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLORIDE TOTAL (UG/L) (32102) |
|------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|--|
|------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|--|

| | | | | | | | | | | | | | | |
|-----|-------|------|------|------|------|-----|------|------|------|------|------|------|------|------|
| FEB | 14... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
|-----|-------|------|------|------|------|-----|------|------|------|------|------|------|------|------|

| DATE | TIME | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER TERT- BUTYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|------|------|--|---|---|---|---|---|---|---|---|---|---|---|--|
|------|------|--|---|---|---|---|---|---|---|---|---|---|---|--|

| | | | | | | | | | | | | | | |
|-----|-------|------|-----|-----|------|-----|-----|-----|-----|------|-----|------|------|-----|
| FEB | 14... | <.10 | <.2 | .48 | <.10 | .19 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | 1.7 |
|-----|-------|------|-----|-----|------|-----|-----|-----|-----|------|-----|------|------|-----|

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
|------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|

| | | | | | | | | | | |
|-----|-------|-----|------|------|------|----|------|------|------|-----|
| FEB | 14... | <.2 | <.20 | <.10 | <.10 | .1 | <.10 | <.10 | <.20 | <.2 |
|-----|-------|-----|------|------|------|----|------|------|------|-----|

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|------|------|---|--|--|---|--|---|---|--|--|--|--|---|
|------|------|---|--|--|---|--|---|---|--|--|--|--|---|

| | | | | | | | | | | | | | | |
|-----|-------|------|-------|-------|-------|------|-------|------|-------|------|-------|-------|-------|------|
| MAY | 24... | 1100 | <.004 | <.002 | <.005 | .009 | <.010 | E1.2 | <.020 | .006 | <.018 | <.003 | E.011 | .020 |
|-----|-------|------|-------|-------|-------|------|-------|------|-------|------|-------|-------|-------|------|

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

RAHWAY RIVER BASIN

01393960 WEST BRANCH RAHWAY RIVER AT NORTHFIELD AVENUE, AT WEST ORANGE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|---|---|--|---|---|---|---|
| | MAY 24... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.004 | <.006 | <.002 | <.007 | <.003 | .014 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| MAY 24... | E.011 | <.016 | <.034 | <.005 | E.003 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 1105 | >24000 | 5700 | 6800 | AUG 02... | 1125 | 790 | 600 | 710 |
| 11... | 1100 | 70 | 200 | 10 | | | | | |
| 18... | 1100 | 16000 | 39000 | 2400 | | | | | |
| 25... | 1100 | 2400 | 1100 | 430 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

> Actual value is known to be greater than the value shown.

RAHWAY RIVER BASIN

179

01394500 RAHWAY RIVER NEAR SPRINGFIELD

LOCATION.--Lat 40°41'11", long 74°18'44", Union County, Hydrologic Unit 02030104, downstream from bridge on eastbound U.S. Highway 22, 100 ft downstream from Pope Brook, and 1.5 mi south of Springfield.

DRAINAGE AREA.--25.5 mi².

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301) | | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|---|--|--|---|--|--|--|--|---|---|---|--|
| NOV 08... | 1100 | E10 | -- | .060 | .047 | 762 | 62 | 7.2 | 7.6 | 650 | -- | 8.8 | 220 | |
| FEB 01... | 1100 | 52 | -- | .145 | .111 | 763 | 89 | 11.8 | 7.5 | 712 | 3.5 | 3.5 | 120 | |
| MAY 09... | 1045 | 13 | 3.6 | .070 | .054 | 767 | 58 | 5.9 | 7.6 | 743 | 22.0 | 14.5 | 220 | |
| AUG 16... | 1045 | 9.8 | 4.4 | .085 | .062 | 764 | 57 | 5.1 | 7.6 | 617 | 25.0 | 21.0 | 200 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| NOV 08... | 67.2 | 13.5 | 2.12 | 37.8 | 138 | 91.5 | .2 | 16.6 | 37.5 | 366 | 355 | .050 | .20 | |
| FEB 01... | 34.7 | 7.96 | 2.27 | 83.7 | 59 | 158 | <.2 | 11.4 | 21.7 | 379 | 362 | .070 | .27 | |
| MAY 09... | 67.1 | 13.7 | 2.23 | 53.6 | 127 | 127 | E.1 | 15.0 | 35.0 | 454 | 396 | .150 | .79 | |
| AUG 16... | 60.0 | 12.3 | 2.35 | 38.7 | 121 | 93.8 | <.2 | 15.4 | 33.7 | 364 | 334 | .080 | .32 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE SUSP WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 08... | .07 | .23 | 1.35 | .010 | 1.6 | 1.6 | .068 | .025 | .048 | .4 | <.1 | 2.1 | .4 | |
| FEB 01... | .08 | .53 | 1.59 | .012 | 1.9 | 2.1 | .063 | .034 | .063 | .7 | <.1 | 4.5 | .7 | |
| MAY 09... | .19 | .52 | 1.29 | .053 | 2.1 | 1.8 | .121 | .041 | .083 | .8 | <.1 | 2.5 | .8 | |
| AUG 16... | .05 | .37 | 1.17 | .025 | 1.5 | 1.5 | .075 | .071 | .116 | .6 | <.1 | 3.0 | .6 | |

E Estimated value.

< Actual value is known to be less than the value shown.

RAHWAY RIVER BASIN

01394500 RAHWAY RIVER NEAR SPRINGFIELD--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|--------------|---|---|---|--|
| NOV 08... | <1.0 | -- | 77 | 7 |
| FEB 01... | E1.0 | -- | 50 | 1 |
| MAY 09... | E1.2 | 8.90 | 81 | <1 |
| AUG 16... | <1.0 | 7.30 | 78 | 2 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUN 19... | 0955 | 9200 | 3000 | 1600 | JUL 02... | 0920 | >24000 | 53000 | 8800 |
| 26... | 1000 | 2400 | 1800 | 280 | 10... | 1025 | 330 | 100 | 120 |

E Estimated value.

> Actual value is known to be greater than the value shown.

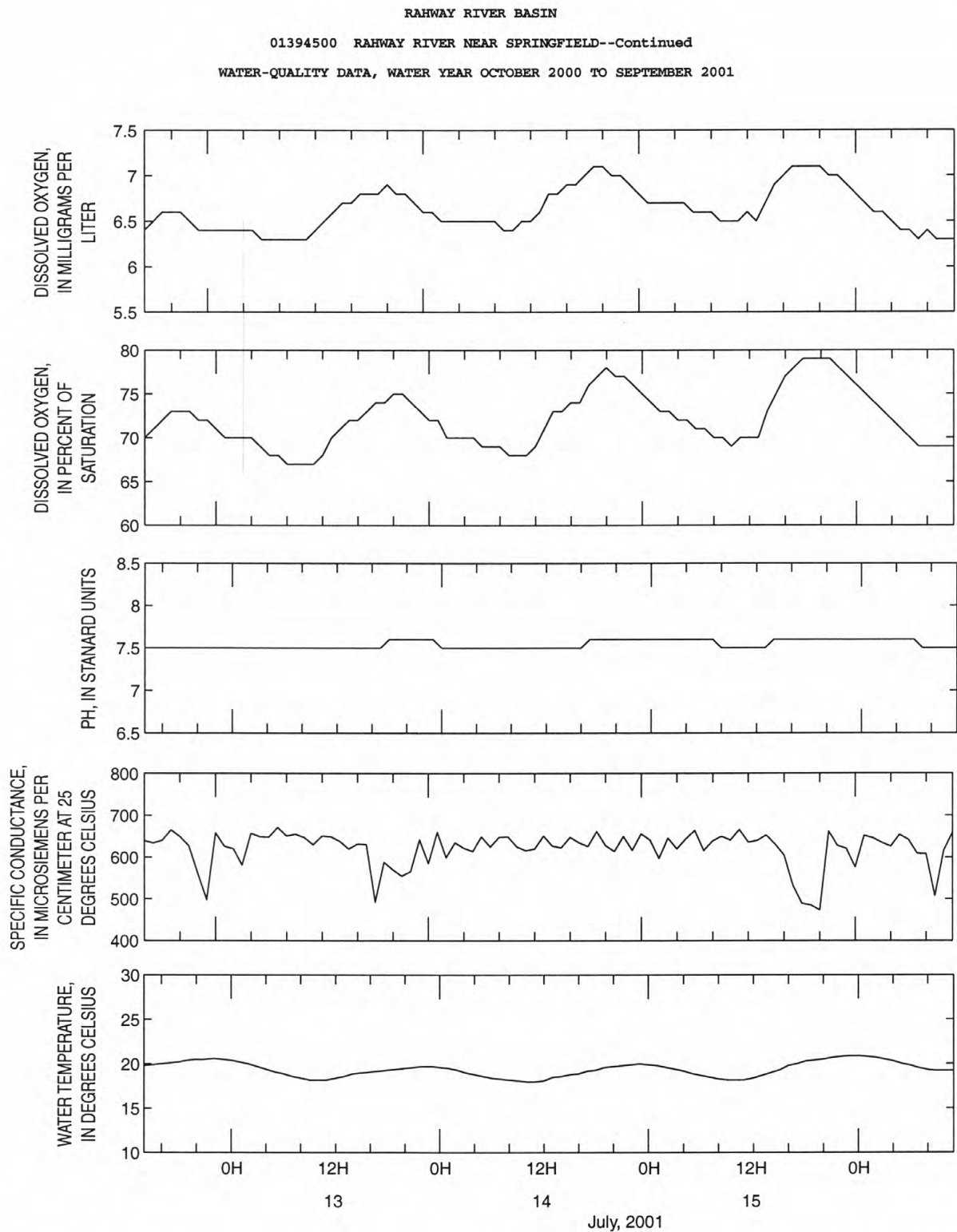


Figure 40. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01394500 Rahway River near Springfield, water year 2001.

RAHWAY RIVER BASIN

01395000 RAHWAY RIVER AT RAHWAY, NJ

LOCATION.--Lat 40°37'08", long 74°17'01", revised, Union County, Hydrologic Unit 02030104, at St. Georges Avenue bridge in Rahway and 0.9 mi upstream from Robinsons Branch.

DRAINAGE AREA.--40.9 mi².

PERIOD OF RECORD.--Water years 1923-24, 1952, 1962, 1967-70, 1979 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analyses of the split and concurrent replicate samples were performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) |
|-------|------|----------------------|---|---|--|--|--|---|-----------------------------------|--|---|----------------------------------|
| DEC | | | | | | | | | | | | |
| 12... | 0800 | ENVIRONMENTAL | 13 | -- | .061 | .046 | 748 | 69 | 8.6 | 7.9 | 592 | 7.0 |
| 12... | 0800 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | 0801 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | | |
| 28... | 0800 | ENVIRONMENTAL | 39 | -- | .116 | .086 | 760 | 84 | 10.7 | 7.4 | 1110 | -- |
| JUN | | | | | | | | | | | | |
| 12... | 0800 | ENVIRONMENTAL | 19 | 5.4 | .084 | .061 | 755 | 72 | 6.5 | 7.7 | 657 | 21.0 |
| 12... | 0830 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | 0831 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | | |
| 21... | 0800 | ENVIRONMENTAL | 10 | 5.1 | .119 | .087 | 762 | 74 | 6.3 | 7.8 | 479 | 22.5 |
| 21... | 0800 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | 0801 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD LAB (MG/L CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) |
|-------|------------------------------------|---|---|---|--|---|--------------------------------------|--|---|---|--|--|---|
| DEC | | | | | | | | | | | | | |
| 12... | 5.0 | 210 | 64.4 | 11.6 | 1.96 | 30.4 | 136 | 69.1 | E.1 | 17.9 | 44.3 | 341 | 329 |
| 12... | -- | 200 | 61.0 | 12.0 | 2.20 | 30.0 | 140 | 67.0 | .2 | -- | 60.0 | 360 | 321 |
| 12... | -- | 200 | 61.0 | 12.0 | 2.20 | 30.0 | 140 | 70.0 | .2 | -- | 54.0 | 350 | 318 |
| FEB | | | | | | | | | | | | | |
| 28... | 5.0 | 160 | 47.5 | 8.94 | 2.07 | 137 | 77 | 241 | <.2 | 10 | 29.1 | 566 | 527 |
| JUN | | | | | | | | | | | | | |
| 12... | 20.0 | 210 | 64.1 | 12.5 | 2.25 | 42.6 | 129 | 97.6 | E.1 | 16.5 | 38.8 | 378 | 357 |
| 12... | -- | 200 | 61.0 | 12.0 | 2.40 | 42.0 | 120 | 99.0 | .2 | -- | 42.0 | 410 | 335 |
| 12... | -- | 200 | 61.0 | 12.0 | 2.40 | 42.0 | 120 | 100 | .2 | -- | 42.0 | 420 | 336 |
| AUG | | | | | | | | | | | | | |
| 21... | 23.5 | 170 | 51.2 | 9.00 | 2.11 | 26.8 | 111 | 60.6 | <.2 | 11.6 | 36.1 | 279 | 268 |
| 21... | -- | 160 | 51.0 | 9.10 | 2.40 | 29.0 | 100 | 58.0 | .3 | -- | 35.0 | 300 | 248 |
| 21... | -- | 160 | 51.0 | 9.10 | 2.40 | 29.0 | 110 | 58.0 | .3 | -- | 35.0 | 310 | 254 |

E Estimated value.

< Actual value is known to be less than the value shown.

RAHWAY RIVER BASIN

183

01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) |
|-------|--|---|---|--|--|--|---|--|--|--|--|--|---|
| DEC | | | | | | | | | | | | | |
| 12... | .120 | .34 | .16 | .39 | 1.53 | .007 | 1.9 | 1.9 | .040 | .033 | -- | -- | .074 |
| 12... | .130 | .18 | .12 | .23 | 1.10 | <.050 | 1.3 | 1.3 | -- | <.030 | -- | -- | .070 |
| 12... | .130 | .26 | .13 | .71 | 1.00 | <.050 | 1.3 | 1.7 | -- | .030 | -- | -- | .070 |
| FEB | | | | | | | | | | | | | |
| 28... | .030 | .22 | <.03 | .35 | 1.26 | .011 | 1.5 | 1.6 | .070 | .019 | -- | -- | .054 |
| JUN | | | | | | | | | | | | | |
| 12... | .040 | .26 | .03 | .49 | 1.12 | .026 | 1.4 | 1.6 | .157 | .046 | .050 | .030 | .104 |
| 12... | .080 | <1.0 | .08 | .53 | 1.00 | .032 | -- | 1.5 | -- | .040 | .062 | .049 | .090 |
| 12... | .084 | .41 | .09 | .54 | 1.00 | .032 | 1.4 | 1.5 | -- | .030 | .036 | .055 | .080 |
| AUG | | | | | | | | | | | | | |
| 21... | <.030 | .37 | <.03 | .43 | .786 | .007 | 1.2 | 1.2 | .119 | .062 | .050 | .060 | .104 |
| 21... | .061 | .44 | .05 | .62 | .590 | <.050 | 1.0 | 1.2 | -- | .035 | .032 | .030 | .075 |
| 21... | .053 | .20 | .06 | .54 | .580 | <.050 | .78 | 1.1 | -- | .057 | .032 | .033 | .074 |

| DATE | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, PENDEED (MG/L) (00530) |
|-------|--|---|---|--|---|---|---|---|
| DEC | | | | | | | | |
| 12... | .4 | <.1 | 2.3 | .4 | E1.8 | -- | 81 | <1 |
| 12... | -- | -- | 1.5 | -- | -- | -- | 85 | <10 |
| 12... | -- | -- | 1.6 | -- | -- | -- | 85 | <10 |
| FEB | | | | | | | | |
| 28... | .7 | <.1 | 3.5 | .7 | E1.2 | -- | 46 | 16 |
| JUN | | | | | | | | |
| 12... | 1.1 | <.1 | 2.8 | 1.1 | E1.7 | 27.7 | 89 | 18 |
| 12... | -- | -- | 3.0 | -- | -- | -- | 83 | <10 |
| 12... | -- | -- | 2.4 | -- | -- | -- | 83 | <10 |
| AUG | | | | | | | | |
| 21... | .7 | <.1 | 4.3 | .7 | 2.8 | 15.8 | 76 | 11 |
| 21... | -- | -- | 3.4 | -- | -- | -- | 90 | 9 |
| 21... | -- | -- | 3.8 | -- | -- | -- | 89 | 7 |

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUN | | | | | JUL | | | | |
| 12... | 1016 | 16000 | 25000 | 820 | 02... | 0945 | >24000 | 9000 | 4700 |
| 19... | 1030 | 790 | 1000 | 240 | 10... | 0958 | 2200 | 1500 | 240 |
| 26... | 1030 | 490 | 100 | 230 | | | | | |

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.

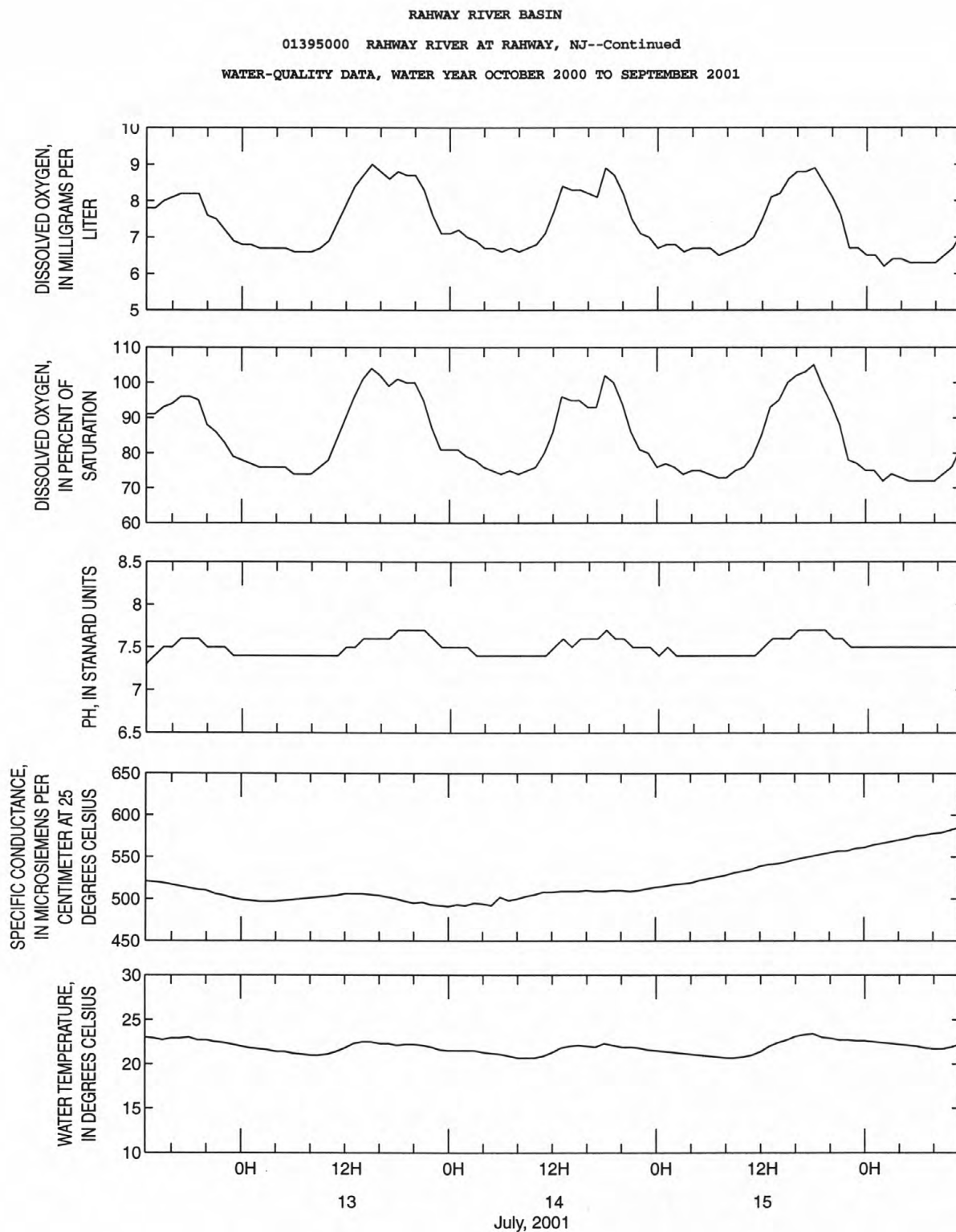


Figure 41. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01395000 Rahway River at Rahway, water year 2001.

01396030 SOUTH BRANCH RAHWAY RIVER AT COLONIA, NJ

LOCATION.--Lat 40°34'57", long 74°18'04", Middlesex County, Hydrologic Unit 02030104, at bridge on Dover Street in Colonia at intersection of Dover Street and Maplewood Avenue, 1.9 mi upstream of mouth, and 2.2 mi southwest at Rahway.

DRAINAGE AREA.--9.31 mi².

PERIOD OF RECORD.--December 2000 to August 2001.

REMARKS.--For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | TUR-BID-ITY FIELD WATER UNFLTRD (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) UNITS (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) |
|-------|------|----------------------|--|---|---|---|--|--|--|--|---|---|
| DEC | | | | | | | | | | | | |
| 12... | 1000 | ENVIRONMENTAL | -- | .069 | .052 | 753 | 97 | 11.5 | 8.0 | 649 | 9.0 | 7.5 |
| 12... | 1000 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | 1001 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | | |
| 06... | 0930 | ENVIRONMENTAL | -- | .143 | .108 | 762 | 97 | 12.9 | 7.4 | 7450 | 8.5 | 2.5 |
| JUN | | | | | | | | | | | | |
| 12... | 0930 | ENVIRONMENTAL | 14 | .261 | .183 | 760 | 74 | 6.7 | 7.5 | 406 | 26.0 | 20.0 |
| 12... | 0930 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | 0931 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | | |
| 21... | 1030 | ENVIRONMENTAL | 3.5 | .101 | .071 | 763 | 95 | 8.3 | 8.0 | 619 | -- | 22.0 |
| 21... | 1030 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | 1031 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | HARD-NESS TOTAL (MG/L AS CAC03) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD LAB (MG/L AS CAC03) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) |
|-------|--|--|--|---|--|---|---|--|--|---|--|--|---|
| DEC | | | | | | | | | | | | | |
| 12... | 220 | 65.8 | 13.9 | 2.56 | 35.8 | 139 | 97.2 | E.1 | 14.1 | 33.2 | 373 | 351 | .060 |
| 12... | 210 | 62.0 | 14.0 | 2.80 | 37.0 | 140 | 96.0 | .2 | -- | 38.0 | 380 | 338 | <.050 |
| 12... | 210 | 62.0 | 14.0 | 2.80 | 37.0 | 140 | 97.0 | .1 | -- | 37.0 | 390 | 338 | <.050 |
| FEB | | | | | | | | | | | | | |
| 06... | 280 | 86.9 | 16.0 | 6.07 | 1360 | 61 | 2230 | <.2 | 8.7 | 46.6 | 4190 | 3800 | .220 |
| JUN | | | | | | | | | | | | | |
| 12... | 98 | 29.1 | 6.28 | 2.75 | 37.6 | 63 | 68.7 | E.1 | 8.1 | 20.8 | 240 | 216 | .280 |
| 12... | 94 | 28.0 | 5.90 | 3.00 | 37.0 | 62 | 73.0 | .3 | -- | 21.0 | 270 | 210 | .330 |
| 12... | 95 | 28.0 | 6.00 | 2.90 | 37.0 | 61 | 72.0 | .2 | -- | 21.0 | 280 | 209 | .330 |
| AUG | | | | | | | | | | | | | |
| 21... | 200 | 57.8 | 12.6 | 2.72 | 39.6 | 131 | 92.2 | E.1 | 11.1 | 39.0 | 343 | 337 | <.030 |
| 21... | 200 | 58.0 | 13.0 | 3.20 | 44.0 | 120 | 87.0 | .2 | -- | 39.0 | 370 | 319 | .034 |
| 21... | 190 | 57.0 | 12.0 | 3.00 | 44.0 | 120 | 86.0 | .2 | -- | 37.0 | 380 | 314 | .040 |

| DATE | NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AMMONIA (MG/L AS N) (00610) | NITRO-GEN,AM-MONIA + ORGANIC (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN TOTAL (MG/L AS N) (00600) | NITRO-GEN,PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOS-PHORUS ORTHOPHOS-PHORUS TOTAL (MG/L AS P) (70507) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) |
|-------|--|---|--|---|---|---|--|--|---|---|--|--|--|
| DEC | | | | | | | | | | | | | |
| 12... | .18 | .06 | .22 | 1.25 | .006 | 1.4 | 1.5 | .040 | .025 | -- | -- | .052 | .4 |
| 12... | .12 | <.05 | .17 | .880 | <.050 | 1.0 | 1.1 | -- | <.030 | -- | -- | .050 | -- |
| 12... | .10 | <.05 | .25 | .980 | <.050 | 1.1 | 1.2 | -- | <.030 | -- | -- | .050 | -- |
| FEB | | | | | | | | | | | | | |
| 06... | .65 | .23 | .78 | 1.40 | <.003 | 2.1 | 2.2 | .112 | .024 | -- | -- | .062 | 1.7 |
| JUN | | | | | | | | | | | | | |
| 12... | 1.0 | .29 | 1.2 | 1.07 | .068 | 2.1 | 2.3 | .249 | .100 | .070 | .040 | .178 | 1.6 |
| 12... | 1.3 | .34 | 1.5 | 1.00 | .073 | 2.3 | 2.5 | -- | .080 | .029 | .036 | .140 | -- |
| 12... | 1.4 | .35 | 1.7 | .990 | .071 | 2.4 | 2.7 | -- | .080 | .026 | .046 | .150 | -- |
| AUG | | | | | | | | | | | | | |
| 21... | .26 | <.03 | .30 | .791 | .005 | 1.0 | 1.1 | .091 | .046 | .030 | .040 | .067 | .5 |
| 21... | .35 | .05 | .49 | .640 | <.050 | .99 | 1.1 | -- | .036 | .030 | .029 | .043 | -- |
| 21... | -- | .03 | .32 | .580 | <.050 | -- | .90 | -- | .031 | .030 | .029 | .035 | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

RAHWAY RIVER BASIN

01396030 SOUTH BRANCH RAHWAY RIVER AT COLONIA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|-------|---|---|--|---|---|---|--|
| DEC | | | | | | | |
| 12... | <.1 | 2.7 | .4 | E1.6 | -- | 74 | <1 |
| 12... | -- | 1.7 | -- | -- | -- | 76 | <10 |
| 12... | -- | 2.0 | -- | -- | -- | 76 | <10 |
| FEB | | | | | | | |
| 06... | <.1 | 4.9 | 1.7 | 4.4 | -- | 86 | 15 |
| JUN | | | | | | | |
| 12... | <.1 | 10 | 1.6 | 5.9 | 11.3 | 75 | 9 |
| 12... | -- | 10 | -- | -- | -- | 69 | <10 |
| 12... | -- | 10 | -- | -- | -- | 70 | <10 |
| AUG | | | | | | | |
| 21... | <.1 | 4.1 | .5 | E1.1 | 8.10 | 110 | 4 |
| 21... | -- | 3.6 | -- | -- | -- | 140 | 4 |
| 21... | -- | 3.0 | -- | -- | -- | 120 | 3 |

| DATE | TIME | SAMPLE TYPE | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) |
|-------|------|----------------------|---|---|--|---|---|--|--|--|--|--|
| AUG | | | | | | | | | | | | |
| 21... | 1030 | ENVIRONMENTAL | -- | -- | -- | -- | -- | -- | <2 | 142 | <.06 | 110 |
| 21... | 1030 | BED MATERIAL | 7.70 | 200 | 2.4 | 440 | 2.6 | <.2 | -- | -- | -- | -- |
| 21... | 1030 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | <2 | 160 | <1.30 | 140 |
| 21... | 1031 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | <2 | 160 | <1.30 | 120 |

| DATE | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CU) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) |
|-------|--|---|--|--|--|--|--|--|---|--|--|--|---|
| AUG | | | | | | | | | | | | | |
| 21... | .13 | 2 | 3.8 | 170 | <1 | 34 | <.01 | 3 | <.4 | <.05 | 6 | -- | -- |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <1 | 15 |
| 21... | <1.00 | <2 | 3.5 | 200 | <2 | 37 | -- | <5 | <1.8 | <1.50 | <8 | -- | -- |
| 21... | <1.00 | <2 | 3.4 | 180 | <2 | 37 | -- | <5 | <1.8 | <1.50 | <8 | -- | -- |

| DATE | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01038) | COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01043) | IRON, SEDIMT- BED MA- TERIAL (UG/G) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053) | MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01068) | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148) | ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01093) | 4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) |
|-------|---|--|--|--|--|--|--|--|--|--|--|--|--|
| AUG | | | | | | | | | | | | | |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | 12 | 5.2 | 28 | 8400 | 38 | 240 | .01 | .1 | <1 | 130 | 100 | M | E50 |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) |
|-------|--|--|--|---|--|--|---|--|--|---|---|---|--|
| AUG | | | | | | | | | | | | | |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | E30 | E50 | E40 | 170 | 510 | 520 | 510 | 310 | 440 | 570 | 80 | 1100 | 360 |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

RAHWAY RIVER BASIN

187

01396030 SOUTH BRANCH RAHWAY RIVER AT COLONIA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) | NAPTHAL ENE, 12 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) | NAPTHAL ENE, 16 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) | NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) | NAPTHAL ENE, 26 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) | NAPTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) | PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) |
|--------------|---|---|---|---|---|---|--|--|---|--|---|---|---|
| AUG 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | <50 | M | M | <50 | E10 | <50 | M | E32 | <50 | E50 | 640 | E20 | E50 |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BED MAT. FALL PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) | BED MAT. SIEVE DIAM. % FINER THAN .004 MM (80157) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) |
|--------------|---|--|--|
| AUG 21... | -- | -- | -- |
| 21... | 900 | <1 | 1 |
| 21... | -- | -- | -- |
| 21... | -- | -- | -- |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|
|------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|

| | | | | | | | | | | | | | |
|--------------|------|------|------|------|-----|------|------|------|------|------|------|------|------|
| FEB 06... | 0930 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
|--------------|------|------|------|------|-----|------|------|------|------|------|------|------|------|

| DATE | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL WATER UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL WATER UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|------|--|---|---|--|---|---|---|--|---|--|---|---|--|
|------|--|---|---|--|---|---|---|--|---|--|---|---|--|

| | | | | | | | | | | | | | |
|--------------|------|-----|------|------|------|-----|-----|-----|------|-----|------|------|-----|
| FEB 06... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | 3.2 |
|--------------|------|-----|------|------|------|-----|-----|-----|------|-----|------|------|-----|

| DATE | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|

| | | | | | | | | | |
|--------------|-----|------|------|------|-----|------|------|------|-----|
| FEB 06... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 |
|--------------|-----|------|------|------|-----|------|------|------|-----|

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

RAHWAY RIVER BASIN

01396030 SOUTH BRANCH RAHWAY RIVER AT COLONIA, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ACETO- CHLOR, WATER FLTRD | ALA- CHLOR, WATER, DISS, | ALPHA BHC DIS- | ATRA- ZINE, WATER, DISS, | BEN- FLUR- ALIN WAT FLT | CAR- BARYL WATER FLTRD | CARBO- FURAN WATER FLTRD | CHLOR- PYRIFOS DIS- | CYANA- ZINE, WATER, DISS, | DCPA WATER FLTRD | DEETHYL ATRA- ZINE, WATER, DISS, | DI- AZINON, DIS- | |
|--------------|------|------------------------------------|------------------------------------|---------------------------------|------------------------------------|----------------------------------|------------------------------------|-----------------------------------|---------------------------|------------------------------------|------------------------------------|--|------------------------------------|--|
| | | REC | REC, | SOLVED | REC | GF, REC | GF, REC | GF, REC | SOLVED | REC | GF, REC | REC | SOLVED | |
| | | (UG/L) (49260) | (UG/L) (46342) | (UG/L) (34253) | (UG/L) (39632) | (UG/L) (82673) | (UG/L) (82680) | (UG/L) (82674) | (UG/L) (38933) | (UG/L) (04041) | (UG/L) (82682) | (UG/L) (04040) | (UG/L) (39572) | |
| JUN 12... | 0930 | <.004 | <.002 | <.005 | .083 | <.010 | E.061 | <.020 | .007 | <.018 | E.001 | E.028 | .604 | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED | EPTC WATER FLTRD | LINDANE DIS- | LIN- URON WATER FLTRD | MALA- THION, DIS- | METHYL AZIN- PHOS WAT FLT | METO- LACHLOR WATER | METRI- BUZIN WATER | MOL- INATE WATER FLTRD | NAPROP- AMIDE WATER FLTRD | P,P' DDE DISSOLV | PENDI- METH- ALIN WAT FLT | PRO- METON, WATER, DISS, REC |
| | | (UG/L) (39381) | GF, REC (82668) | SOLVED (UG/L) (39341) | GF, REC (82666) | SOLVED (UG/L) (39532) | GF, REC (82686) | DISSOLV (39415) | DISSOLV (82630) | GF, REC (82671) | GF, REC (82684) | DISSOLV (34653) | GF, REC (82683) | (UG/L) (04037) |
| | | JUN 12... | <.005 | <.002 | <.004 | <.035 | .043 | E.013 | .042 | <.006 | <.002 | <.007 | <.003 | .047 |
| DATE | TIME | SI- MAZINE, WATER, DISS, | TEBU- THIURON WATER FLTRD | TER- BACIL WATER FLTRD | THIO- BENCARB WATER FLTRD | TRI- FLUR- ALIN WAT FLT | | | | | | | | |
| | | REC | GF, REC | GF, REC | GF, REC | GF, REC | | | | | | | | |
| | | JUN 12... | E.008 | <.016 | <.034 | <.005 | E.009 | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| AUG 01... | 1110 | 2400 | 1000 | 490 | AUG 15... | 1105 | 3500 | 400 | 870 |
| 08... | 1040 | 790 | 1200 | 320 | 22... | 1020 | 5400 | 1700 | 240 |
| | | | | | 29... | 1140 | 9200 | 4200 | 990 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

189

01396550 SPRUCE RUN AT NEWPORT, NJ

LOCATION.--Lat 40°43'29", long 74°54'34", Hunterdon County, Hydrologic Unit 02030105, at bridge on Newport Road, 1.2 mi northwest of Woodglen, and 6.4 mi upstream from Spruce Run Reservoir.

DRAINAGE AREA.--5.67 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | |
|-----------|--|--|---|---|--|--|--|---|--|--|--|---|---|
| NOV 02... | 1040 | ENVIRONMENTAL | 1.9 | -- | .065 | .051 | 746 | 102 | 12.1 | 7.8 | 149 | -- | |
| FEB 08... | 0910 | ENVIRONMENTAL | 9.5 | -- | .063 | .049 | 756 | 97 | 14.0 | 6.7 | 143 | 5.5 | |
| MAY 07... | 1100 | ENVIRONMENTAL | 3.8 | 1.6 | .066 | .051 | 760 | 104 | 10.9 | 7.6 | 145 | 15.0 | |
| AUG 09... | 0900 | ENVIRONMENTAL | 1.3 | 1.1 | .074 | .057 | 745 | 95 | 8.2 | 7.4 | 149 | 27.5 | |
| DATE | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L) (00900) | CALCIUM DIS-SOLVED (MG/L) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L) (00935) | SODIUM, DIS-SOLVED (MG/L) (00930) | ANC TIT 4.5 LAB (MG/L) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L) (00950) | SILICA, DIS-SOLVED (MG/L) (00955) | SULFATE DIS-SOLVED (MG/L) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) |
| NOV 02... | 7.0 | 53 | 12.4 | 5.37 | 1.13 | 7.1 | 41 | 9.9 | E.1 | 18.9 | 12.8 | 98 | 93 |
| FEB 08... | .00 | 39 | 9.10 | 3.90 | .83 | 8.9 | 23 | 17.5 | <.2 | 14.8 | 12.5 | 93 | 85 |
| MAY 07... | 13.0 | 47 | 11.0 | 4.62 | .86 | 7.2 | 33 | 12.3 | <.2 | 13.9 | 12.9 | 83 | 86 |
| AUG 09... | 21.5 | 51 | 12.0 | 5.18 | 1.05 | 7.3 | 39 | 10.4 | E.1 | 14.6 | 11.6 | 105 | 87 |
| DATE | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L) (00623) | NITRO-GEN, AMMONIA TOTAL (MG/L) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613) | NITRO-GEN, NITRATE DIS-SOLVED (MG/L) (00602) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L) (00600) | NITRO-GEN, PHOS-PHORUS DIS-SOLVED (MG/L) (00666) | PHOS-PHORUS DIS-SOLVED (MG/L) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L) (00688) | |
| NOV 02... | .080 | E.09 | .08 | .21 | .199 | <.003 | -- | .41 | .065 | E.003 | .004 | .1 | <.1 |
| FEB 08... | <.030 | .16 | .03 | .15 | .879 | <.003 | 1.0 | 1.0 | .048 | .006 | .008 | .3 | <.1 |
| MAY 07... | <.030 | .14 | <.03 | .18 | .672 | <.003 | .81 | .85 | .068 | E.003 | .008 | E.7 | <.1 |
| AUG 09... | .030 | .13 | .04 | .15 | .289 | <.003 | .42 | .44 | <.022 | .008 | .013 | .2 | <.1 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01396550 SPRUCE RUN AT NEWPORT, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | |
|--------------|------|----------------|---|--|---|---|---|---|---|---|---|--|---|--|
| DATE | | | NOV 02... | 2.0 | .1 | E1.4 | -- | <13 | 2 | | | | | |
| FEB 08... | | | 2.0 | .3 | 2.4 | -- | <13 | <1 | | | | | | |
| MAY 07... | | | 1.9 | E.7 | E2.0 | 3.00 | E8 | 6 | | | | | | |
| AUG 09... | | | 2.0 | .2 | 2.2 | 1.60 | <13 | 3 | | | | | | |
| | | | | | | | | | | | | | | |
| DATE | TIME | SAMPLE TYPE | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | | |
| | | | | | | | | | | | | | | |
| AUG 09... | 0830 | FIELD BLANK | -- | -- | -- | -- | -- | -- | <.2 | -- | -- | <.08 | | |
| 09... | 0900 | ENVIRONMENTAL | <2 | 17.6 | <.06 | 7 | <.04 | <1 | -- | 1.2 | 110 | -- | | |
| | | | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY DIS- SOLVED (UG/L AS HG) (71890) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | | |
| AUG 09... | | -- | -- | <.01 | -- | <.06 | -- | -- | -- | <1 | -- | | | |
| 09... | | <1 | 7 | -- | <.01 | -- | <1 | .4 | <.05 | -- | 2 | | | |
| | | | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
| FEB 08... | 0910 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |
| | | | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHER BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
| FEB 08... | | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
| | | | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | |
| FEB 08... | | <.2 | <.20 | <.10 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

191

01396550 SPRUCE RUN AT NEWPORT, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | | |
|--------------|-------|--|---|---|---|--|---|--|---|--|---|--|--|---|--|
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| MAY 07... | 1100 | <.004 | <.002 | <.005 | E.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.011 | <.005 | | |
| DATE | | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| MAY 07... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.002 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | | |
| DATE | | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT GF, REC (UG/L) (82661) | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| MAY 07... | | | | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 12... | 0930 | <20 | <100 | 20 | 02... | 0900 | 20 | <100 | 110 |
| 19... | 0830 | 230 | 300 | 310 | 09... | 0800 | 40 | 100 | 180 |
| 26... | 0930 | <20 | 100 | 210 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

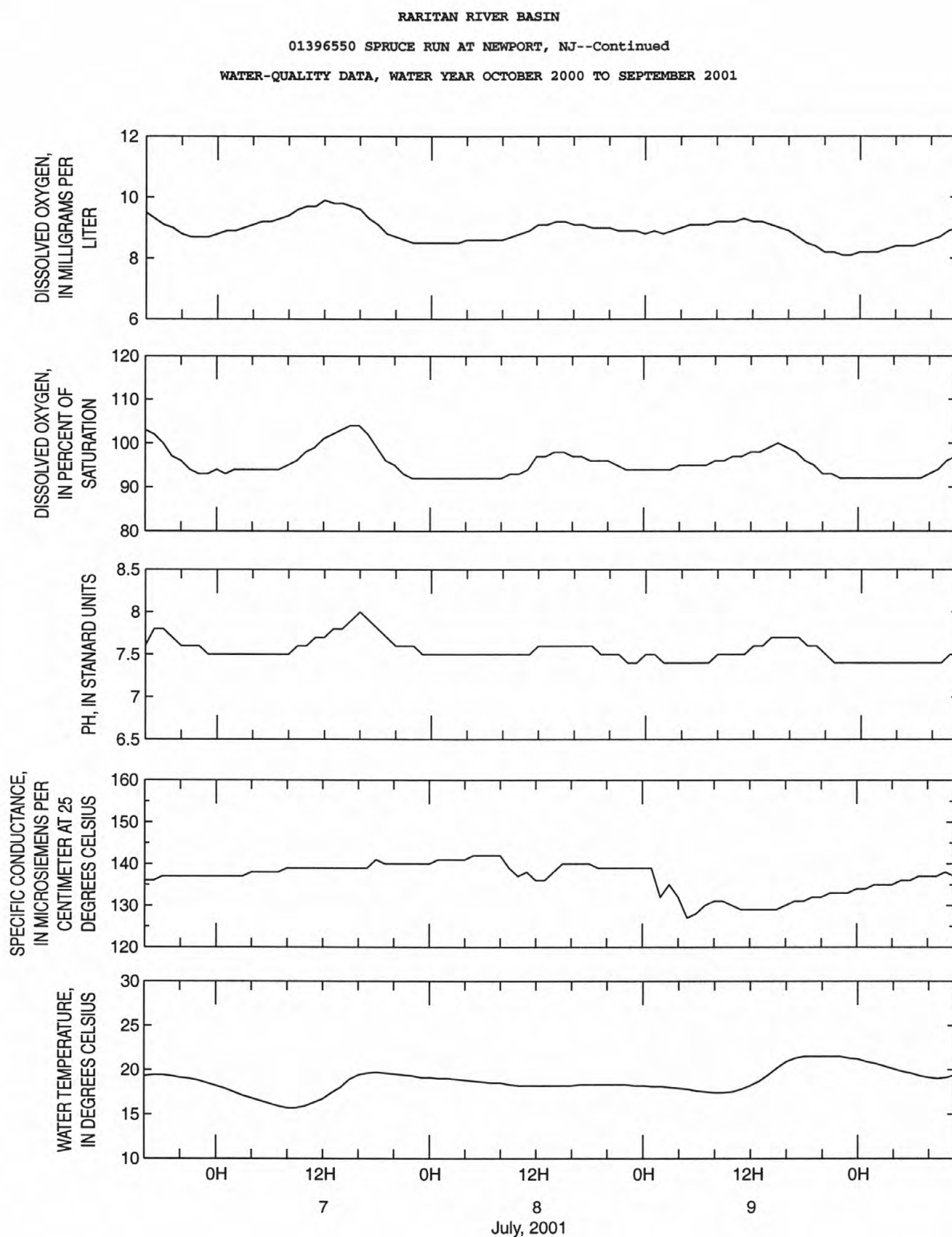


Figure 42. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01396550 Spruce Run at Newport, water year 2001.

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ

LOCATION.--Lat 40°38'51", long 74°58'09", Hunterdon County, Hydrologic Unit 02030105, at bridge on Jutland Road, 0.2 mi south of Van Syckel, and 0.3 mi upstream from Spruce Run Reservoir, 0.8 mi north of Perryville.

DRAINAGE AREA.--11.8 mi².

PERIOD OF RECORD.--Water years 1976 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 1997 to August 1998.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CAC03) (00900) |
|-----------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 15... | 1100 | 8.0 | -- | .074 | .058 | 752 | 96 | 11.4 | 7.8 | 227 | -- | 7.5 | 83 |
| FEB 14... | 1120 | 19 | -- | .049 | .038 | 758 | 96 | 12.9 | 7.6 | 316 | 4.0 | 3.0 | 75 |
| MAY 31... | 1030 | 11 | 1.7 | .059 | .044 | 755 | 95 | 10.0 | 7.8 | 250 | 16.0 | 12.5 | 79 |
| AUG 22... | 1100 | 6.2 | .9 | .040 | .030 | 758 | 102 | 9.4 | 8.0 | 258 | 27.0 | 19.0 | 92 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|---|
| NOV 15... | 21.0 | 7.31 | 1.73 | 10.9 | 66 | 19.6 | E.1 | 15.4 | 13.7 | 138 | 132 | <.030 | .14 |
| FEB 14... | 19.5 | 6.43 | 1.42 | 27.6 | 46 | 52.3 | <.2 | 12.2 | 14.9 | 173 | 166 | <.030 | .10 |
| MAY 31... | 20.5 | 6.85 | 1.08 | 16.1 | 57 | 30.1 | <.2 | 14.6 | 13.6 | 161 | 141 | <.030 | .13 |
| AUG 22... | 23.2 | 8.32 | 1.35 | 11.8 | 75 | 24.2 | E.1 | 14.6 | 12.7 | 155 | 145 | <.030 | .20 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORGANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|--|---|---|--|-------------------------------------|--|--|---------------------------------------|---|--|--|---|
| NOV 15... | <.03 | .11 | .565 | <.003 | .71 | .67 | .034 | .009 | .010 | .3 | <.1 | 2.5 | .3 |
| FEB 14... | .07 | .13 | .990 | <.003 | 1.1 | 1.1 | .028 | .007 | .013 | .3 | <.1 | 1.7 | .3 |
| MAY 31... | <.03 | .12 | .925 | E.003 | 1.1 | 1.0 | .026 | .016 | .022 | .3 | <.1 | 1.8 | .3 |
| AUG 22... | <.03 | .10 | .860 | <.003 | 1.1 | .96 | .044 | .015 | .018 | .4 | <.1 | 1.4 | .4 |

| DATE | OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|---|--|---------------------------------------|--|
|------|---|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|----|
| NOV 15... | E2.2 | -- | E10 | 7 |
| FEB 14... | <1.0 | -- | 14 | <1 |
| MAY 31... | E1.4 | .700 | E8 | 3 |
| AUG 22... | <1.0 | 4.80 | E12 | 8 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 12... | 0900 | <20 | <100 | <10 | 02... | 0825 | <20 | <100 | <10 |
| 19... | 0900 | 700 | 600 | 460 | 09... | 0820 | 130 | 300 | 90 |
| 26... | 0900 | <20 | <100 | 220 | | | | | |

< Actual value is known to be less than the value shown.

01396900 CAPOOLONG CREEK AT LANSDOWNE, NJ

LOCATION.--Lat 40°36'28", long 74°54'58", Hunterdon County, Hydrologic Unit 02030105, at bridge on Lower Lansdowne Road, 0.5 mi west of Lansdowne, 0.4 mi above mouth, and 2.0 mi south of Clinton.

DRAINAGE AREA.--14.1 mi².

PERIOD OF RECORD.--May 1959 to October 1964 and December 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED AS (MG/L AS CA) (00915) |
|--------------|------|--|--|--|---|---|--|--|--|---|---|--|---|
| DEC 13... | 1030 | -- | .024 | .019 | 774 | 95 | 13.9 | 7.6 | 206 | 1.0 | .5 | 70 | 16.7 |
| FEB 22... | 0930 | -- | .025 | .019 | 770 | 101 | 14.1 | 7.8 | 179 | -2.5 | 2.0 | 55 | 13.3 |
| MAY 22... | 1030 | 28 | .134 | .105 | 751 | 90 | 9.2 | 7.6 | 160 | 17.0 | 13.5 | 52 | 12.9 |
| AUG 15... | 1000 | 1.7 | .060 | .046 | 757 | 100 | 9.1 | 7.7 | 185 | 25.0 | 19.5 | 62 | 15.0 |

| DATE | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
|--------------|---|--|---|--|--|---|--|--|---|--|--|--|---|
| DEC 13... | 6.75 | 1.45 | 9.4 | 53 | 12.8 | <.2 | 13.6 | 14.0 | 120 | 119 | <.030 | E.06 | .07 |
| FEB 22... | 5.30 | 1.44 | 10.1 | 33 | 14.4 | <.2 | 14.3 | 15.1 | 114 | 107 | <.030 | E.06 | .03 |
| MAY 22... | 4.81 | 1.95 | 8.8 | 39 | 12.0 | <.2 | 11.3 | 11.3 | 111 | 95 | .040 | .35 | .07 |
| AUG 15... | 5.92 | 2.07 | 9.4 | 48 | 12.5 | <.2 | 15.2 | 12.7 | 115 | 110 | <.030 | .15 | <.03 |

| DATE | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
|--------------|---|--|--|--|--|---|--|---|--|---|---|--|---|
| DEC 13... | E.07 | 2.93 | <.003 | -- | -- | <.022 | .014 | .014 | .1 | <.1 | .91 | .1 | <1.0 |
| FEB 22... | .09 | 2.94 | <.003 | -- | 3.0 | <.022 | .013 | .018 | .2 | <.1 | .95 | .2 | <1.0 |
| MAY 22... | .58 | 1.81 | .011 | 2.2 | 2.4 | .202 | .050 | .113 | 1.8 | <.1 | 4.3 | 1.7 | 3.5 |
| AUG 15... | .19 | 1.98 | <.003 | 2.1 | 2.2 | <.022 | .037 | .041 | .2 | <.1 | 1.8 | .2 | <1.0 |

| DATE | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) |
|--------------|---|---|---|
| DEC 13... | -- | 17 | 3 |
| FEB 22... | -- | 14 | 4 |
| MAY 22... | 11.5 | E11 | 24 |
| AUG 15... | 1.90 | E13 | <1 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01396900 CAPOOLONG CREEK AT LANSLOWNE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|--------------|------|--|--|--|--|--|---|--|--|--|--|--|--|
| AUG 15... | 1000 | <2 | 58.2 | <.06 | 17 | <.04 | <1 | 1.1 | 70 | <1 | 11 | <.01 | <1 |

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|--------------|---|--|--|
| AUG 15... | E.3 | <.05 | 3 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|--------------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|
| FEB 22... | 0930 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |

| DATE | TIME | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|--------------|------|--|---|---|--|---|---|---|--|---|---|---|---|--|
| FEB 22... | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|--------------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
| FEB 22... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|---|--|--|---|---|--|--|--|--|---|--|---|
| MAY 22... | 1030 | .008 | <.002 | <.005 | .030 | <.010 | E.007 | <.020 | <.005 | <.018 | <.003 | E.013 | .018 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

197

01396900 CAPOOLONG CREEK AT LANSDOWNE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|--|--|--|--|---|--|---|--|--|--|---|--|---|
| | | | | | | | | | | | | | |
| MAY 22... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.010 | <.006 | <.002 | E.002 | <.003 | <.010 | E.004 |
| DATE | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82661) | | | | |
| MAY 22... | | | | | E.003 | <.016 | <.034 | <.005 | <.009 | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 12... | 1015 | <20 | <100 | <10 | 02... | 0950 | 20 | <100 | 70 |
| 19... | 1000 | <20 | <100 | 10 | 09... | 0843 | 1300 | 600 | 580 |
| 26... | 1000 | <20 | <100 | 400 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01397950 THIRD NESHANIC RIVER AT COPPER HILL, NJ

LOCATION.--Lat 40°28'29", long 74°51'48", Hunterdon County, Hydrologic Unit 02030105, at bridge on State Route 31 at Copper Hill, 0.6 mi upstream of mouth, 2.3 mi south of Flemington, and 2.5 mi west of Reaville.

DRAINAGE AREA.--10.3 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|--|---|---|---|--|--|--|---|--|---|
| NOV 15... | 0930 | -- | .107 | .086 | 758 | 81 | 10.0 | 7.7 | 300 | -- | 6.0 | 120 | 29.0 | |
| MAR 01... | 0900 | -- | .051 | .038 | 758 | 108 | 15.2 | 7.8 | 235 | -1.0 | 1.0 | 80 | 19.6 | |
| MAY 16... | 0930 | 5.2 | .076 | .060 | 760 | 66 | 6.9 | 7.5 | 299 | 16.1 | 13.5 | 120 | 30.6 | |
| AUG 30... | 0900 | 14 | .077 | .060 | 762 | 58 | 5.4 | 7.5 | 399 | -- | 19.0 | 170 | 45.4 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AM- MONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AM- MONIA TOTAL (MG/L AS N) (00610) |
| NOV 15... | 10.7 | 2.60 | 11.3 | 89 | 13.8 | E.1 | 8.9 | 36.2 | 179 | 169 | <.030 | .24 | .42 | |
| MAR 01... | 7.45 | 1.43 | 11.8 | 39 | 17.6 | <.2 | 11.9 | 26.6 | 136 | 134 | <.030 | .22 | .03 | |
| MAY 16... | 9.93 | 1.67 | 13.0 | 72 | 12.6 | E.1 | 12.0 | 46.9 | 200 | 176 | .030 | .40 | .04 | |
| AUG 30... | 13.1 | 2.07 | 14.3 | 94 | 14.5 | <.2 | 3.9 | 80.8 | 247 | 230 | .060 | .27 | .09 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 15... | .33 | .654 | <.003 | .89 | .98 | <.022 | .017 | .023 | .3 | <.1 | 3.4 | .3 | 3.0 | |
| MAR 01... | .21 | 3.25 | <.003 | 3.5 | 3.5 | .064 | .037 | .039 | .6 | <.1 | 1.7 | .6 | E1.4 | |
| MAY 16... | .48 | 1.41 | .057 | 1.8 | 1.9 | .063 | .047 | .064 | .5 | <.1 | 2.7 | .5 | 2.1 | |
| AUG 30... | .31 | E.617 | .006 | -- | -- | .080 | .016 | .038 | .5 | <.1 | 2.4 | .5 | <1.0 | |
| | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530) | | | | | | |
| | | | | | | NOV 15... | -- | 42 | 2 | | | | | |
| | | | | | | MAR 01... | -- | 21 | 8 | | | | | |
| | | | | | | MAY 16... | 3.30 | 54 | <1 | | | | | |
| | | | | | | AUG 30... | 4.50 | 115 | 3 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01397950 THIRD NESHANIC RIVER AT COPPER HILL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L) AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L) AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L) AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L) AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L) AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L) AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L) AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L) AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L) AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L) AS NI) (01067) |
|--------------|------|---|---|---|---|---|--|---|---|---|---|---|---|
| AUG 30... | 0900 | E2 | 69.8 | <.06 | 103 | E.03 | 2 | 2.1 | 250 | <1 | 78 | <.01 | 1 |

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L) AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L) AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN) (01092) |
|--------------|--|---|---|
| AUG 30... | <.4 | <.05 | 7 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,3-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|
|------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|

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|--------------|------|------|------|------|-----|------|------|------|------|------|------|------|------|
| MAR 01... | 0900 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
|--------------|------|------|------|------|-----|------|------|------|------|------|------|------|------|

| DATE | TIME | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- BROMO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER TOTAL (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER TOTAL (UG/L) (81576) | ETHER TERT- BUTYL WATER UNFLTRD RECOVER TOTAL (UG/L) (50004) | ETHER TERT- PENTYL METHYL WATER UNFLTRD RECOVER TOTAL (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|------|------|---|---|---|---|---|--|---|--|---|---|---|--|
|------|------|---|---|---|---|---|--|---|--|---|---|---|--|

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|--------------|------|-----|------|------|------|-----|-----|-----|------|-----|------|------|-----|
| MAR 01... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
|--------------|------|-----|------|------|------|-----|-----|-----|------|-----|------|------|-----|

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|--------------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
| MAR 01... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|--|--|--|---|---|--|--|--|--|---|--|---|
| MAY 16... | 0930 | <.004 | <.002 | <.005 | .021 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.019 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01397950 THIRD NESHANIC RIVER AT COPPER HILL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER (UG/L) (39415) | METRI- BUZIN WATER (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|--|---|--|---|--|---|---|--|---|---|---|---|---|
| | | | | | | | | | | | | | |
| MAY 16... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.004 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| | | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | |
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WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 12... | 1140 | <20 | <100 | <10 | 02... | 1035 | <20 | <100 | <10 |
| 19... | 1035 | 20 | <100 | 20 | 09... | 0955 | 170 | <100 | 230 |
| 26... | 1045 | <20 | <100 | 5000 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01398000 NESHANIC RIVER AT REAVILLE, NJ

LOCATION.--Lat 40°28'22", long 74°49'40", Hunterdon County, Hydrologic Unit 02030105, at bridge on Everitts Road, 0.6 mi southwest of Reaville, 1.5 mi downstream from Third Neshanic River, and 2.2 mi upstream from Back Brook.

DRAINAGE AREA.--25.7 mi².

PERIOD OF RECORD.--Water years 1957, 1962, 1979 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1997 to August 1998.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|--|--|--|--|--|---|---|---|---|
| | | | | | | | | | | | | | | |
| NOV 21... | 1000 | 3.3 | -- | .061 | .049 | 759 | 80 | 11.2 | 7.9 | 350 | -- | 1.5 | 140 | |
| FEB 07... | 1000 | 8.1 | -- | .133 | .104 | 768 | 102 | 14.2 | 7.9 | 485 | 3.8 | 2.0 | 93 | |
| MAY 15... | 1000 | 3.1 | 3.6 | .094 | .073 | 758 | 82 | 8.3 | 7.7 | 336 | 18.0 | 14.5 | 120 | |
| AUG 22... | 1000 | 3.5 | 2.2 | .076 | .058 | 764 | 103 | 9.2 | 8.5 | 310 | 24.0 | 21.0 | 120 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| | | | | | | | | | | | | | | |
| NOV 21... | 34.3 | 12.1 | 1.88 | 15.0 | 97 | 20.0 | <.2 | 8.2 | 42.6 | 210 | 196 | <.030 | .19 | |
| FEB 07... | 24.3 | 7.81 | 2.16 | 50.4 | 37 | 101 | <.2 | 9.1 | 20.9 | 268 | 247 | .030 | .22 | |
| MAY 15... | 31.5 | 10.6 | 2.12 | 17.8 | 82 | 23.3 | E.1 | 10.1 | 41.8 | 206 | 190 | .040 | .47 | |
| AUG 22... | 29.9 | 10.6 | 2.33 | 14.8 | 83 | 19.0 | E.1 | 2.3 | 42.4 | 175 | 173 | <.030 | .29 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| | | | | | | | | | | | | | | |
| NOV 21... | .07 | .21 | .920 | <.003 | 1.1 | 1.1 | <.022 | <.050 | <.060 | .2 | <.1 | 2.2 | .2 | |
| FEB 07... | .03 | .33 | 1.95 | <.003 | 2.2 | 2.3 | .091 | E.041 | E.049 | .5 | <.1 | 3.8 | .5 | |
| MAY 15... | .07 | .49 | .752 | .052 | 1.2 | 1.2 | .032 | E.044 | .062 | .4 | M | 2.9 | E.4 | |
| AUG 22... | <.03 | .29 | .422 | .004 | .72 | .71 | .072 | <.050 | <.060 | .3 | <.1 | 3.1 | .3 | |
| DATE | | | | | | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | |
| | | | | | | | | | | | | | | |
| NOV 21... | | | | | | E1.7 | -- | 54 | <1 | | | | | |
| FEB 07... | | | | | | E2.0 | -- | 17 | 8 | | | | | |
| MAY 15... | | | | | | 3.0 | 3.20 | 56 | 3 | | | | | |
| AUG 22... | | | | | | E1.6 | 8.60 | 60 | 9 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

RARITAN RIVER BASIN

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 12... | 1100 | <20 | <100 | <10 | 02... | 1100 | <20 | <100 | <10 |
| 19... | 1100 | 20 | <100 | 10 | 09... | 0915 | 110 | <100 | 150 |
| 26... | 1100 | <20 | <100 | 430 | | | | | |

< Actual value is known to be less than the value shown.

01398102 SOUTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ

LOCATION.--Lat 40°32'48", long 74°41'48", Somerset County, Hydrologic Unit 02030105, at bridge on Studdiford Drive at South Branch, 0.8 mi upstream from mouth, and 2.7 mi southeast of Readington.

DRAINAGE AREA.--265 mi².

PERIOD OF RECORD.--Water years 1976-83, 1998 to current year.

REMARKS.--Physical parameters measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.-- Watershed Integrator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTDR (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
|------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|

| | | | | | | | | | | | | | | |
|-----|-------|------|-----|-----|------|------|-----|-----|------|-----|-----|------|------|-----|
| NOV | 13... | 1315 | 112 | -- | .104 | .082 | 762 | 103 | 11.5 | 7.9 | 296 | 13.0 | 10.5 | 100 |
| FEB | 15... | 1110 | 524 | -- | .056 | .043 | 758 | 98 | 12.5 | 7.5 | 306 | 7.0 | 5.0 | 83 |
| MAY | 21... | 1200 | 153 | 9.4 | .058 | .044 | 762 | 85 | 8.3 | 7.9 | 321 | 14.5 | 16.5 | 110 |
| AUG | 28... | 1130 | 63 | 3.9 | .060 | .044 | 757 | 125 | 10.5 | 7.8 | 270 | 25.0 | 23.5 | 89 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
|------|---|---|--|---|---|--|---|---|-------------------------------|--|---|---|---|
|------|---|---|--|---|---|--|---|---|-------------------------------|--|---|---|---|

| | | | | | | | | | | | | | | |
|-----|-------|------|------|------|------|----|------|-----|-----|------|-----|-----|-------|-----|
| NOV | 13... | 24.0 | 9.97 | 2.75 | 16.3 | 75 | 28.4 | E.1 | 6.5 | 21.3 | 162 | 160 | <.030 | .35 |
| FEB | 15... | 20.5 | 7.69 | 1.75 | 21.6 | 50 | 40.7 | <.2 | 9.5 | 20.5 | 170 | 162 | .220 | .17 |
| MAY | 21... | 25.9 | 10.4 | 2.05 | 19.5 | 78 | 33.4 | E.1 | 8.2 | 20.8 | 184 | 174 | .070 | .30 |
| AUG | 28... | 21.5 | 8.67 | 2.09 | 16.1 | 66 | 32.0 | E.1 | 4.9 | 16.3 | 154 | 141 | <.030 | .28 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORGANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689) |
|------|--|--|---|---|---|--------------------------------------|---|--|---------------------------------------|---|--|--|---|
|------|--|--|---|---|---|--------------------------------------|---|--|---------------------------------------|---|--|--|---|

| | | | | | | | | | | | | | | |
|-----|-------|------|-----|-------|------|-----|-----|------|------|------|----|-----|-----|----|
| NOV | 13... | .03 | .35 | 1.24 | .004 | 1.6 | 1.6 | .040 | .074 | .086 | .3 | <.1 | 3.8 | .3 |
| FEB | 15... | .23 | .18 | 2.28 | .010 | 2.5 | 2.5 | .082 | .023 | .035 | .4 | <.1 | 2.1 | .4 |
| MAY | 21... | .06 | .39 | 1.47 | .030 | 1.8 | 1.9 | .132 | .078 | .115 | .8 | <.1 | 2.7 | .8 |
| AUG | 28... | <.03 | .32 | E.486 | .004 | -- | -- | .067 | .051 | .063 | .5 | <.1 | 2.6 | .5 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | | |
|-----|-------|------|------|----|----|
| NOV | 13... | 2.3 | -- | 40 | 5 |
| FEB | 15... | E1.1 | -- | 22 | 8 |
| MAY | 21... | 2.4 | 8.30 | 37 | 14 |
| AUG | 28... | E1.4 | 4.50 | 31 | 1 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01398102 SOUTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 0930 | >24000 | 6200 | 4300 | 06... | 0920 | 790 | 200 | 150 |
| 30... | 1010 | 5400 | 300 | 400 | 13... | 0905 | 310 | 300 | 90 |
| | | | | | 19... | 0905 | 3500 | 1700 | 460 |

E Estimated value.

< Actual value is known to be less than the value shown.

> Actual value is known to be greater than the value shown.

01398102 SOUTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

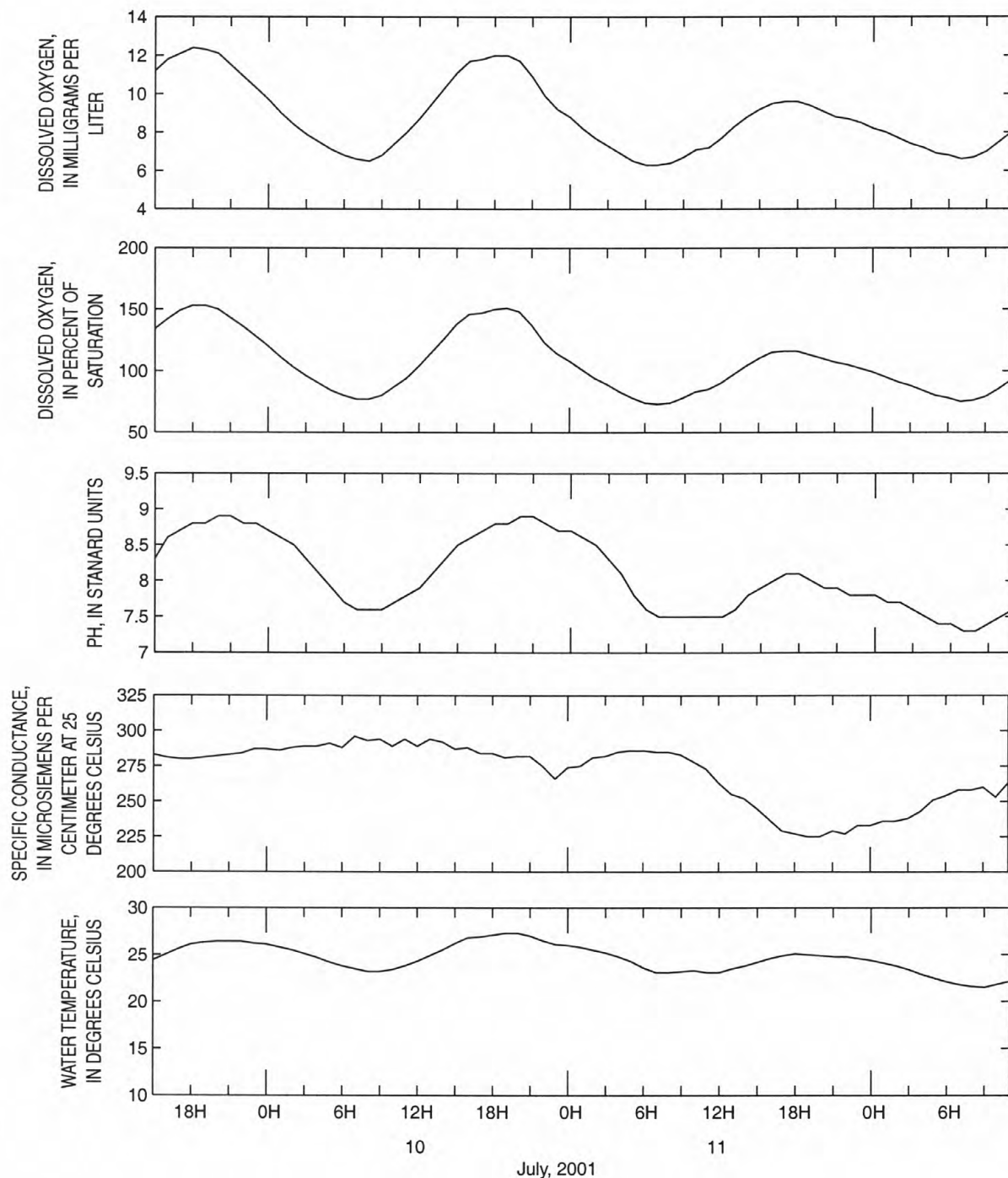


Figure 43. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01398102 South Branch Raritan River at South Branch, water year 2001.

RARITAN RIVER BASIN

01399780 LAMINGTON RIVER AT BURNT MILLS, NJ

LOCATION.--Lat 40°38'04", long 74°41'13", Somerset County, Hydrologic Unit 02030105, at bridge on Burnt Mills Road in Burnt Mills, 1,400 ft upstream from mouth, and 2.4 mi southwest of Greater Cross Roads.

DRAINAGE AREA.--100 mi².

PERIOD OF RECORD.--Water years 1964, 1976 to current year.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) OF (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 08... | 1050 | 43 | -- | .078 | .061 | 760 | 109 | 13.4 | 8.3 | 309 | -- | 6.5 | 100 |
| FEB 08... | 1220 | 195 | -- | .124 | .097 | 772 | 103 | 14.6 | 7.8 | 331 | 4.0 | 1.5 | 77 |
| MAY 03... | 1040 | 94 | 3.2 | .110 | .086 | 765 | 126 | 11.8 | 8.2 | 275 | 30.0 | 18.5 | 85 |
| AUG 14... | 1420 | 279 | 34 | .249 | .195 | 757 | 169 | 14.1 | 7.9 | 192 | 29.5 | 24.0 | 61 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|-------------------------------|---|---|---|--|
| NOV 08... | 24.9 | 9.88 | 2.37 | 16.6 | 79 | 30.9 | E.1 | 12.0 | 18.4 | 172 | 169 | .050 | .20 |
| FEB 08... | 19.9 | 6.61 | 1.91 | 31.5 | 42 | 62.3 | <.2 | 11.3 | 15.8 | 187 | 179 | .030 | .23 |
| MAY 03... | 21.2 | 7.91 | 1.69 | 16.7 | 66 | 32.5 | E.1 | 7.9 | 15.1 | 154 | 146 | <.030 | .26 |
| AUG 14... | 15.3 | 5.45 | 2.63 | 12.2 | 45 | 19.9 | E.1 | 11.5 | 12.4 | 108 | 110 | <.030 | .38 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|---|---|---|--|-------------------------------------|---|--|---------------------------------------|---|---|--|--|
| NOV 08... | .03 | .24 | 1.38 | <.003 | 1.6 | 1.6 | .050 | .145 | .159 | .3 | <.1 | 2.5 | .3 |
| FEB 08... | .04 | .35 | .916 | .006 | 1.1 | 1.3 | .065 | .030 | .049 | .6 | <.1 | 3.5 | .6 |
| MAY 03... | <.03 | .35 | .804 | .016 | 1.1 | 1.2 | .074 | .053 | .067 | E.5 | <.1 | 2.9 | E.5 |
| AUG 14... | <.03 | .54 | .755 | .007 | 1.1 | 1.3 | .170 | .076 | .133 | 1.3 | <.1 | 5.7 | 1.3 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|----|---|
| NOV 08... | E1.2 | -- | 49 | 8 |
| FEB 08... | E1.4 | -- | 24 | 4 |
| MAY 03... | E1.3 | 7.30 | 36 | 5 |
| AUG 14... | E1.0 | 10.8 | 41 | 7 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01399780 LAMINGTON RIVER AT BURNT MILLS, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 1010 | 5400 | 4100 | 6500 | 06... | 1010 | 330 | 400 | 170 |
| 30... | 1040 | 490 | 400 | 290 | 13... | 0950 | 230 | 200 | 140 |
| | | | | | 19... | 0940 | 490 | 800 | 230 |

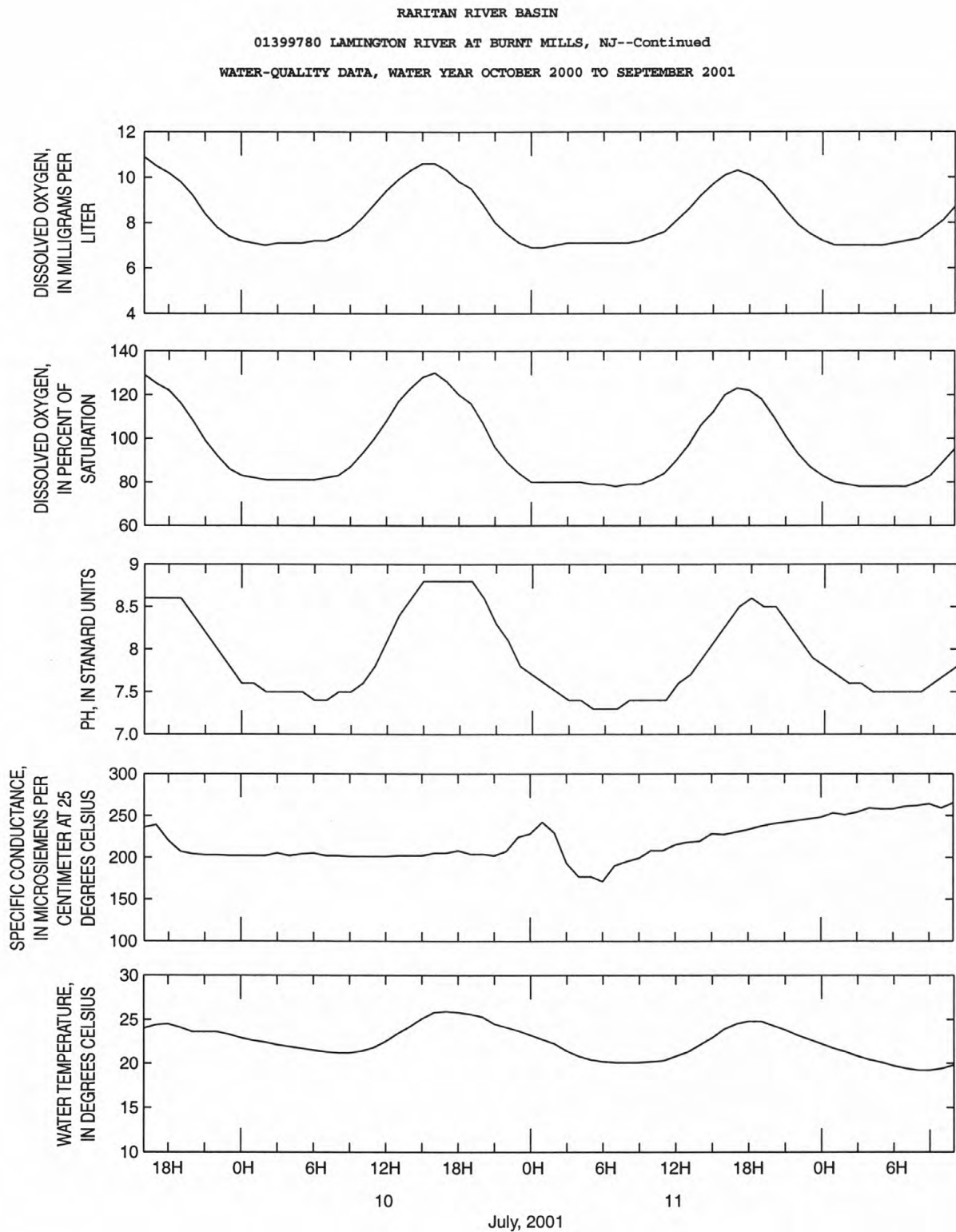


Figure 44. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01399780 Lamington River at Burnt Mills, water year 2001.

RARITAN RIVER BASIN

209

01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ

LOCATION.--Lat 40°34'10", long 74°40'45", Somerset County, Hydrologic Unit 02030105, 400 ft upstream from U.S. Highway 202, 1.4 mi upstream from confluence with South Branch, and 2.7 mi west of Raritan.

DRAINAGE AREA.--190 mi².

PERIOD OF RECORD.--Water years 1923-25, 1960-76, 1978-80, 1997 to current year.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|---|--|--|--|--|---|---|---|--|
| | | | | | | | | | | | | | | |
| NOV 15... | 1030 | 145 | -- | .116 | .092 | 760 | 100 | 11.9 | 7.8 | 304 | -- | 7.5 | 97 | |
| FEB 07... | 1030 | 426 | -- | .144 | .113 | 768 | 97 | 13.3 | 7.5 | 536 | 7.0 | 2.5 | 93 | |
| MAY 30... | 1030 | 274 | 13 | .164 | .127 | 759 | 101 | 9.8 | 7.8 | 265 | 17.0 | 16.5 | 78 | |
| AUG 28... | 1000 | 48 | 2.2 | .087 | .066 | 758 | 83 | 7.1 | 8.3 | 305 | -- | 22.5 | 110 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AM-MONIA, DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 15... | 24.1 | 8.82 | 2.76 | 17.6 | 69 | 33.7 | E.1 | 12.4 | 20.9 | 177 | 166 | <.030 | .24 | |
| FEB 07... | 24.8 | 7.55 | 2.18 | 60.8 | 40 | 121 | <.2 | 10.3 | 17.2 | 293 | 273 | <.030 | .22 | |
| MAY 30... | 19.6 | 7.13 | 1.53 | 19.5 | 52 | 34.3 | E.1 | 13.1 | 14.3 | 163 | 144 | .040 | .32 | |
| AUG 28... | 26.2 | 9.82 | 2.17 | 19.6 | 76 | 37.3 | <.2 | 8.0 | 20.6 | 186 | 173 | .030 | .32 | |
| DATE | | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + NO2+NO3 DIS-SOLVED (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 15... | <.03 | .34 | 1.10 | .004 | 1.3 | 1.4 | .048 | .080 | .092 | .5 | <.1 | 3.5 | .5 | |
| FEB 07... | <.03 | .37 | .986 | .005 | 1.2 | 1.4 | .041 | E.033 | E.046 | .5 | <.1 | 4.1 | .5 | |
| MAY 30... | .03 | .39 | .823 | .009 | 1.1 | 1.2 | .104 | <.050 | .076 | .8 | <.1 | 4.8 | .8 | |
| AUG 28... | <.03 | .33 | .858 | .005 | 1.2 | 1.2 | .060 | .064 | .065 | .3 | <.1 | 2.7 | .3 | |
| DATE | | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | | | | | |
| NOV 15... | E1.5 | -- | 60 | 6 | | | | | | | | | | |
| FEB 07... | E1.2 | -- | 32 | 9 | | | | | | | | | | |
| MAY 30... | E1.5 | 3.00 | 45 | 10 | | | | | | | | | | |
| AUG 28... | 2.2 | 4.70 | 57 | 1 | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 0950 | 9200 | 6100 | 5100 | 06... | 0940 | 490 | 200 | 150 |
| 30... | 1025 | 330 | 900 | 320 | 13... | 0925 | 700 | 200 | 140 |
| | | | | | 19... | 0920 | 1300 | 700 | 200 |

RARITAN RIVER BASIN

211

01400530 MILLSTONE RIVER AT BAIRD ROAD, NEAR PERRINEVILLE, NJ

LOCATION.--Lat 40°14'28", long 74°24'07", Monmouth County, Hydrologic Unit 02030105, at bridge on Baird Road, 1.2 mi south of Manalapan, 2.1 mi northeast of Perrineville Lake, and 2.2 mi northeast of Perrineville.

DRAINAGE AREA.--4.58 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | TUR- BID- ITY | UV ABSORB- ANCE | UV ABSORB- ANCE | BARO- METRIC | OXYGEN, DIS- SOLVED | OXYGEN, DIS- SOLVED (MG/L) | PH WATER WHOLE | SPE- CIFIC | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | | |
|--------------|---|---|--|--|--|--|---|---|--|---|--|--|--|------|
| | | | FIELD | 254 NM, | 280 NM, | SURE | (PER- CENT | | (STAND- ARD | CON- DUCT- ANCE | | | | |
| | | | UNFLTRD (NTU) (61028) | WTR FLT (UNITS /CM) (50624) | WTR FLT (UNITS /CM) (61726) | (MM OF HG) (00025) | (PER- CENT SATUR- ATION) (00301) | | (MG/L) | (US/CM) (00095) | | | | |
| NOV 08... | 1000 | ENVIRONMENTAL | -- | .086 | .072 | 761 | 87 | 10.4 | 7.0 | 112 | -- | 7.5 | | |
| FEB 08... | 1030 | ENVIRONMENTAL | -- | .098 | .082 | 772 | 90 | 12.4 | 6.6 | 130 | 3.0 | 2.5 | | |
| MAY 09... | 1030 | ENVIRONMENTAL | 15 | .101 | .083 | 763 | 93 | 9.6 | 7.0 | 112 | 19.5 | 14.0 | | |
| AUG 15... | 1030 | ENVIRONMENTAL | 28 | .146 | .122 | 759 | 87 | 7.7 | 7.0 | 122 | 26.0 | 21.0 | | |
| DATE | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | |
| | NOV 08... | 28 | 5.46 | 3.57 | 2.37 | 6.9 | 14 | 13.2 | E.1 | 9.8 | 7.7 | 64 | 63 | .040 |
| | FEB 08... | 25 | 5.14 | 2.96 | 2.24 | 9.8 | 8 | 18.3 | E.1 | 8.0 | 12.0 | 74 | 69 | .090 |
| MAY 09... | 29 | 5.62 | 3.72 | 2.18 | 7.4 | 13 | 14.4 | E.1 | 8.1 | 8.1 | 75 | 64 | .080 | |
| AUG 15... | 30 | 5.72 | 3.85 | 2.73 | 8.4 | 18 | 16.1 | E.1 | 8.9 | 6.9 | 71 | 67 | .050 | |
| DATE | NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, PAR- TICULATE WAT FLT TOTAL (MG/L AS N) (00600) | NITRO- GEN, PAR TICULATE WAT FLT SUSP DIS- SOLVED (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | |
| | NOV 08... | .17 | .06 | .21 | 1.14 | <.003 | 1.3 | 1.4 | .108 | .008 | .052 | .8 | <.1 | 1.7 |
| | FEB 08... | .14 | .09 | .31 | 1.26 | .007 | 1.4 | 1.6 | .142 | .005 | .092 | 1.3 | <.1 | 1.5 |
| MAY 09... | .27 | .09 | .40 | 1.60 | .010 | 1.9 | 2.0 | .101 | .007 | .081 | 1.2 | <.1 | 1.9 | |
| AUG 15... | .25 | .11 | .38 | .862 | .013 | 1.1 | 1.2 | .100 | .040 | .184 | 1.1 | <.1 | 2.7 | |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01400530 MILLSTONE RIVER AT BAIRD ROAD, NEAR PERRINEVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | | BORON, DIS- SOLVED (UG/L AS B) (01020) | | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) | | | | | | | | | | | |
|-------|------|--|--|--|---|---|--|---|---|--|---|---|---|---|--|--|--|--|--|--|--|--|
| DATE | | | NOV 08... | | FEB 08... | | MAY 09... | | AUG 15... | | | | | | | | | | | | | |
| | | | .8 | | <1.0 | | -- | | E13 | | 10 | | | | | | | | | | | |
| | | | 1.2 | | E1.8 | | -- | | E9 | | 12 | | | | | | | | | | | |
| | | | 1.2 | | <1.0 | | 5.40 | | E11 | | 8 | | | | | | | | | | | |
| | | | 1.1 | | <1.0 | | 5.20 | | 15 | | 25 | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | PH SED BED MAT (STD UNITS) (70310) | | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | | CARBON, INOR- GANIC, TOT IN BOT MAT (UG/L AS C) (00686) | | ARSENIC TOTAL (UG/L AS AS) (01002) | | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | |
| DATE | TIME | SAMPLE TYPE | | | | | | | | | | | | | | | | | | | | |
| AUG | | | | | | | | | | | | | | | | | | | | | | |
| 15... | 1000 | FIELD BLANK | | | | | | | | | | | | | | | | | | | | |
| 15... | 1030 | ENVIRONMENTAL | | | | | | | | | | | | | | | | | | | | |
| 15... | 1030 | BED MATERIAL | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| DATE | TIME | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71890) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL (UG/L AS SE) (01147) | | | | | | | | |
| AUG | | | | | | | | | | | | | | | | | | | | | | |
| 15... | -- | -- | <.2 | -- | -- | <.08 | -- | -- | <.01 | -- | <.06 | -- | -- | -- | -- | | | | | | | |
| 15... | .06 | 1 | -- | .9 | 4670 | -- | <1 | 86 | -- | <.01 | -- | 6 | <.4 | -- | -- | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| DATE | TIME | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) | COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL AS FE) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01053) | MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) | | | | | | | | |
| AUG | | | | | | | | | | | | | | | | | | | | | | |
| 15... | -- | <1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | | | | |
| 15... | <.05 | -- | 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | | | | |
| 15... | -- | -- | -- | 2 | .1 | 13 | 1.9 | <2 | 14000 | 3.4 | 46 | <.01 | 3.7 | -- | -- | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| DATE | TIME | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148) | ZINC, FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN THRENE SED, BM WS, <2MM (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM (UG/KG) (49399) | ACENAPH THENE SED, BM WS, <2MM (UG/KG) (49429) | ACENAPH THYLENE SED, BM WS, <2MM (UG/KG) (49428) | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM (UG/KG) (49434) | BENZ (A) ANTHRA- CENE SED, BM WS, <2MM (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM (UG/KG) (49458) | BENZO (G) HI) PERY LENE SED, BM WS, <2MM (UG/KG) (49408) | | | | | | | | |
| AUG | | | | | | | | | | | | | | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | | | | | |
| 15... | <1 | 20 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01400530 MILLSTONE RIVER AT BAIRD ROAD, NEAR PERRINEVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS <2MM REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403) | NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPTHAL ENE, 2- ETHYL- SED BM WS, <2MM DW REC (UG/KG) (49948) | NAPHTH- ALENE, BM SED, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) |
|-------|--|---|---|--|--|--|---|---|--|---|--|--|---|
| AUG | | | | | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 15... | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <5 |

| DATE | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | BED MAT. FALL DIAM. % FINER THAN (80157) | BED MAT. SIEVE DIAM. % FINER THAN (80164) |
|-------|--|--|--|--|--|--|---|
| AUG | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- |
| 15... | -- | -- | -- | -- | -- | -- | -- |
| 15... | <50 | <50 | <50 | <50 | <50 | 2 | 3 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|-------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|
| FEB | | | | | | | | | | | | | |
| 08... | 1030 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |

| DATE | TIME | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- FORM TOTAL (UG/L) (32105) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER REC (UG/L) (78032) |
|-------|------|---|---|---|---|---|---|--|---|---|---|---|---|
| FEB | | | | | | | | | | | | | |
| 08... | | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|-------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
| FEB | | | | | | | | | | |
| 08... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED REC (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|-------|------|--|--|--|---|---|--|--|---|--|---|--|---|
| MAY | | | | | | | | | | | | | |
| 09... | 1030 | <.004 | <.002 | <.005 | E.002 | <.010 | E.010 | E.006 | <.005 | <.018 | <.003 | <.006 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01400530 MILLSTONE RIVER AT BAIRD ROAD, NEAR PERRINEVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|--|---|--|---|---|---|---|
| | MAY 09... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.011 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| MAY 09... | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| AUG 02... | 1015 | 490 | 100 | 280 | AUG 23... | 1005 | 270 | 600 | 310 |
| 09... | 1025 | 110 | 200 | 470 | 30... | 1040 | 230 | <100 | 200 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

215

01400640 MILLSTONE RIVER NEAR GROVERS MILL, NJ

LOCATION.--Lat 40°18'48", long 74°35'22", Mercer County, Hydrologic Unit 02030105, at bridge on Cranbury Road near Grovers Mill, 1.4 mi southeast of Plainsboro and 2.0 mi upstream from Cranbury Brook.

DRAINAGE AREA.--43.4 mi².

PERIOD OF RECORD.--Water years 1999 to current year. Site location was 01400650 during water years 1976-95, 1997-98.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) |
|------|------|-------------|---|---|--|--|--|---|-----------------------------------|--|---|----------------------------------|
|------|------|-------------|---|---|--|--|--|---|-----------------------------------|--|---|----------------------------------|

| | | | | | | | | | | | | |
|-------|------|----------------------|----|-----|------|------|-----|----|------|-----|-----|------|
| DEC | | | | | | | | | | | | |
| 13... | 0910 | ENVIRONMENTAL | 34 | -- | .067 | .053 | 775 | 87 | 12.1 | -- | 259 | -2.0 |
| 13... | 0910 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | 259 | -- |
| 13... | 0911 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | 258 | -- |
| FEB | | | | | | | | | | | | |
| 28... | 1330 | ENVIRONMENTAL | 68 | -- | .058 | .043 | 761 | 97 | 11.7 | 7.1 | 370 | 4.0 |
| JUN | | | | | | | | | | | | |
| 12... | 0940 | ENVIRONMENTAL | 24 | 6.0 | .104 | .080 | 757 | 82 | 7.3 | 7.3 | 327 | 28.5 |
| 12... | 0940 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12... | 0941 | CONCURRENT REPLICATE | -- | 5.5 | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | | |
| 07... | 1040 | ENVIRONMENTAL | 16 | 2.9 | .112 | .084 | 761 | 85 | 7.0 | 6.8 | 250 | 31.5 |

| DATE | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD LAB TIT 4.5 AS CACO3 (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) |
|------|------------------------------------|---|---|---|--|---|--|--|---|---|--|---|---|
|------|------------------------------------|---|---|---|--|---|--|--|---|---|--|---|---|

| | | | | | | | | | | | | | |
|-------|------|----|------|------|------|------|----|------|-----|------|------|-----|-----|
| DEC | | | | | | | | | | | | | |
| 13... | 2.5 | 50 | 11.4 | 5.26 | 4.06 | 22.9 | 28 | 29.4 | .2 | 10.2 | 25.5 | 148 | 144 |
| 13... | -- | 70 | 16.0 | 7.30 | 2.90 | 15.0 | 35 | 32.0 | .1 | -- | 19.0 | 150 | 125 |
| 13... | -- | 70 | 16.0 | 7.30 | 2.90 | 15.0 | 35 | 33.0 | .1 | -- | 19.0 | 150 | 126 |
| FEB | | | | | | | | | | | | | |
| 28... | 7.0 | 54 | 13.4 | 5.12 | 3.32 | 45.9 | 20 | 71.4 | E.1 | 8.7 | 26.1 | 204 | 200 |
| JUN | | | | | | | | | | | | | |
| 12... | 20.5 | 58 | 13.4 | 6.01 | 4.17 | 39.5 | 58 | 35.2 | .2 | 8.2 | 25.7 | 193 | 185 |
| 12... | -- | 56 | 13.0 | 5.70 | 4.70 | 39.0 | 56 | 37.0 | .3 | -- | 27.0 | 200 | 177 |
| 12... | -- | 56 | 13.0 | 5.70 | 4.70 | 38.0 | 57 | 37.0 | .3 | -- | 27.0 | 200 | 176 |
| AUG | | | | | | | | | | | | | |
| 07... | 25.0 | 51 | 12.2 | 4.88 | 4.80 | 23.0 | 25 | 33.0 | .2 | 7.9 | 24.5 | 135 | 139 |

| DATE | NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AM-MONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULTE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) |
|------|--|--|---|---|---|---|---|--------------------------------------|---|--|---|---|---------------------------------------|
|------|--|--|---|---|---|---|---|--------------------------------------|---|--|---|---|---------------------------------------|

| | | | | | | | | | | | | | |
|-------|-------|-----|------|-----|------|-------|-----|-----|------|-------|------|------|-------|
| DEC | | | | | | | | | | | | | |
| 13... | .130 | .38 | .14 | .49 | 4.05 | .012 | 4.4 | 4.5 | .095 | .032 | -- | -- | .074 |
| 13... | <.050 | .15 | <.05 | .21 | 2.60 | <.050 | 2.8 | 2.8 | -- | <.030 | -- | -- | <.030 |
| 13... | <.050 | .15 | <.05 | .15 | 2.60 | <.050 | 2.8 | 2.8 | -- | <.030 | -- | -- | <.030 |
| FEB | | | | | | | | | | | | | |
| 28... | .090 | .29 | .09 | .34 | 3.12 | .012 | 3.4 | 3.5 | .089 | .011 | -- | -- | .061 |
| JUN | | | | | | | | | | | | | |
| 12... | .060 | .40 | .05 | .43 | 4.00 | .019 | 4.4 | 4.4 | .070 | .091 | .060 | .080 | .142 |
| 12... | .089 | .32 | .09 | .60 | 3.60 | .025 | 3.9 | 4.2 | -- | .080 | .036 | .039 | .120 |
| 12... | .090 | .65 | .09 | .55 | 3.50 | .023 | 4.2 | 4.0 | -- | .070 | .036 | .049 | .130 |
| AUG | | | | | | | | | | | | | |
| 07... | .040 | .39 | .05 | .40 | 3.11 | .008 | 3.5 | 3.5 | -- | .069 | -- | -- | .091 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01400640 MILLSTONE RIVER NEAR GROVERS MILL, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|-------|--|---|---|--|---|---|---|--|
| DEC | | | | | | | | |
| 13... | .8 | <.1 | 2.4 | .8 | 2.0 | -- | 42 | <1 |
| 13... | -- | -- | 1.7 | -- | -- | -- | 23 | <10 |
| 13... | -- | -- | 1.8 | -- | -- | -- | 24 | <10 |
| FEB | | | | | | | | |
| 28... | .7 | <.1 | 2.2 | .7 | <1.0 | -- | 21 | 6 |
| JUN | | | | | | | | |
| 12... | .4 | <.1 | 3.5 | .4 | <1.0 | 2.20 | 64 | 12 |
| 12... | -- | -- | 2.8 | -- | -- | -- | 62 | <10 |
| 12... | -- | -- | 2.7 | -- | -- | -- | 62 | <10 |
| AUG | | | | | | | | |
| 07... | -- | -- | 3.5 | -- | <1.0 | 1.60 | 66 | <1 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 01... | 1040 | 700 | 800 | 580 | 15... | 1040 | 70 | 100 | 110 |
| 08... | 1045 | 790 | 60 | 100 | 22... | 1000 | 130 | 100 | 70 |
| | | | | | 29... | 0945 | 1300 | <100 | 340 |

< Actual value is known to be less than the value shown.

01401400 HEATHCOTE BROOK AT KINGSTON, NJ

LOCATION.--Lat 40°22'10", long 74°36'59", Middlesex County, Hydrologic Unit 02030105, at bridge on Mapleton Road, at abandoned railroad bridge, 0.3 mi south of Kingston, and 0.4 mi upstream from mouth.

DRAINAGE AREA.--9.0 mi².

PERIOD OF RECORD.--Water years 1976-82, 1998 to current year.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was determined by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. Environmental Protection Agency, Region II, Division of Environmental Science and Assessment.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | |
|-------|--|--|---|---|--|--|--|---|--|--|---|--|---|
| DATE | TIME | SAMPLE TYPE | | | | | | | | | | | |
| DEC | | | | | | | | | | | | | |
| 13... | 0910 | ENVIRONMENTAL | 1.8 | -- | .084 | .066 | 777 | 85 | 12.0 | 6.6 | 245 | .00 | |
| 13... | 0910 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | 6.6 | 245 | -- | |
| 13... | 0911 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | -- | 6.6 | 248 | -- | |
| FEB | | | | | | | | | | | | | |
| 28... | 1020 | ENVIRONMENTAL | 10 | -- | .128 | .097 | 763 | 98 | 12.7 | 7.2 | 447 | 3.0 | |
| JUN | | | | | | | | | | | | | |
| 12... | 0900 | ENVIRONMENTAL | 12 | 68 | .234 | .169 | 757 | 74 | 6.8 | 7.0 | 262 | 23.0 | |
| 12... | 0900 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | 7.0 | 262 | -- | |
| 12... | 0901 | CONCURRENT REPLICATE | -- | 67 | -- | -- | -- | -- | -- | 7.0 | 264 | -- | |
| AUG | | | | | | | | | | | | | |
| 07... | 0900 | ENVIRONMENTAL | 1.7 | 2.0 | .073 | .056 | 762 | 78 | 7.2 | 6.7 | 240 | 18.5 | |
| DATE | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB AS CACO3 (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) |
| DEC | | | | | | | | | | | | | |
| 13... | 2.0 | 70 | 16.5 | 7.12 | 2.78 | 15.1 | 36 | 28.0 | <.2 | 14.1 | 18.4 | 149 | 141 |
| 13... | -- | 50 | 11.0 | 5.40 | 4.40 | 24.0 | 29 | 34.0 | .2 | -- | 26.0 | 150 | 134 |
| 13... | -- | 50 | 11.0 | 5.40 | 4.40 | 24.0 | 28 | 30.0 | .2 | -- | 27.0 | 140 | 130 |
| FEB | | | | | | | | | | | | | |
| 28... | 4.5 | 82 | 19.4 | 8.08 | 2.33 | 51.7 | 24 | 97.8 | <.2 | 11.6 | 29.1 | 259 | 240 |
| JUN | | | | | | | | | | | | | |
| 12... | 19.0 | 56 | 13.4 | 5.50 | 2.60 | 25.7 | 27 | 49.3 | E.1 | 8.1 | 13.3 | 169 | 141 |
| 12... | -- | 54 | 13.0 | 5.20 | 3.00 | 24.0 | 27 | 53.0 | .2 | -- | 14.0 | 180 | 135 |
| 12... | -- | 51 | 12.0 | 5.20 | 3.00 | 24.0 | 26 | 52.0 | .2 | -- | 14.0 | 190 | 133 |
| AUG | | | | | | | | | | | | | |
| 07... | 19.5 | 64 | 14.6 | 6.69 | 2.92 | 15.9 | 31 | 32.0 | <.2 | 11.1 | 9.9 | 129 | 134 |
| DATE | NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AM-MONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) |
| DEC | | | | | | | | | | | | | |
| 13... | .050 | .18 | <.03 | .24 | 3.99 | .004 | 4.2 | 4.2 | .048 | .007 | -- | -- | .015 |
| 13... | .140 | .41 | .14 | .30 | 2.50 | <.050 | 2.9 | 2.8 | -- | .030 | -- | -- | .070 |
| 13... | .140 | .29 | .14 | .52 | 2.50 | <.050 | 2.8 | 3.0 | -- | .030 | -- | -- | .070 |
| FEB | | | | | | | | | | | | | |
| 28... | <.030 | .19 | .03 | .24 | 1.37 | <.003 | 1.6 | 1.6 | .034 | .006 | -- | -- | .017 |
| JUN | | | | | | | | | | | | | |
| 12... | .290 | .74 | .32 | 1.1 | 1.61 | .035 | 2.3 | 2.7 | .238 | .026 | <.020 | .030 | .116 |
| 12... | .350 | .94 | .40 | 1.2 | 1.40 | .038 | 2.3 | 2.6 | -- | .010 | .013 | .023 | .110 |
| 12... | .350 | .98 | .40 | 1.1 | 1.40 | .038 | 2.4 | 2.5 | -- | .010 | .013 | .023 | .110 |
| AUG | | | | | | | | | | | | | |
| 07... | .050 | .17 | .05 | .21 | 5.11 | .005 | 5.3 | 5.3 | .045 | .010 | -- | -- | .017 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01401400 HEATHCOTE BROOK AT KINGSTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) AS C) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) AS B) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) |
|-------|--|---|---|--|--|--|---|---|
| DEC | | | | | | | | |
| 13... | .3 | <.1 | 2.4 | .3 | E1.4 | -- | 25 | <1 |
| 13... | -- | -- | 1.5 | -- | -- | -- | 43 | <10 |
| 13... | -- | -- | 1.4 | -- | -- | -- | 43 | <10 |
| FEB | | | | | | | | |
| 28... | .3 | <.1 | 3.6 | .3 | <1.0 | -- | 23 | 4 |
| JUN | | | | | | | | |
| 12... | 1.7 | <.1 | 8.2 | 1.7 | 4.9 | 3.90 | 31 | 46 |
| 12... | -- | -- | 7.8 | -- | -- | -- | 29 | 32 |
| 12... | -- | -- | 7.8 | -- | -- | -- | 29 | 32 |
| AUG | | | | | | | | |
| 07... | <.1 | <.1 | 2.1 | <.1 | <1.0 | 7.50 | 19 | <1 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 01... | 1010 | 330 | 200 | 260 | 15... | 1010 | 170 | 400 | 240 |
| 08... | 1010 | 230 | 200 | 230 | 22... | 1020 | 790 | 900 | 130 |
| | | | | | 29... | 0940 | 1100 | 500 | 850 |

E Estimated value.

< Actual value is known to be less than the value shown.

01401560 ROCK BROOK AT ZION, NJ

LOCATION.--Lat 40°26'22", long 74°44'23", Somerset County, Hydrologic Unit 02030105, at bridge on Long Hill Road at Zion, 0.9 mi northeast of Amwell, and 2.8 mi upstream of Sylvan Lake.

DRAINAGE AREA.--3.19 mi².

PERIOD OF RECORD.--November 2000 to September 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|--|---|---|---|--|--|--|---|--|---|
| NOV 30... | 1015 | -- | .235 | .191 | 752 | 95 | 11.8 | 7.6 | 119 | 5.5 | 5.5 | 44 | 9.44 | |
| FEB 07... | 1100 | -- | .156 | .123 | 760 | 97 | 13.7 | 7.2 | 112 | 5.0 | 1.0 | 31 | 6.73 | |
| MAY 24... | 1045 | 4.3 | .231 | .180 | 752 | 91 | 9.2 | 7.5 | 121 | 17.5 | 14.5 | 45 | 10.0 | |
| SEP 06... | 1030 | 5.5 | .117 | .090 | 760 | 80 | 7.9 | 7.9 | 165 | 24.5 | 16.0 | 67 | 14.1 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| NOV 30... | 4.98 | .93 | 4.5 | 29 | 6.8 | <.2 | 21.8 | 14.7 | 87 | 81 | <.030 | .28 | <.03 | |
| FEB 07... | 3.47 | .57 | 7.7 | 16 | 12.5 | <.2 | 15.5 | 13.2 | 79 | 70 | .030 | .10 | <.03 | |
| MAY 24... | 4.93 | .98 | 5.3 | 32 | 6.6 | <.2 | 23.4 | 14.2 | 101 | 85 | .030 | .33 | <.03 | |
| SEP 06... | 7.62 | 1.41 | 5.9 | 56 | 8.5 | E.1 | 24.9 | 12.0 | 117 | 109 | .030 | .17 | <.03 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 30... | .23 | .085 | <.003 | .37 | .32 | .027 | .006 | .016 | .4 | <.1 | 6.0 | .4 | E1.2 | |
| FEB 07... | .25 | .159 | <.003 | .26 | .41 | .022 | .008 | .014 | .3 | <.1 | 3.9 | .2 | <1.0 | |
| MAY 24... | .38 | .092 | .003 | .42 | .47 | .027 | .017 | .029 | .4 | <.1 | 6.0 | .4 | E1.2 | |
| SEP 06... | .19 | .250 | <.003 | .42 | .44 | .045 | .013 | .020 | .2 | <.1 | 3.1 | .2 | E1.1 | |
| DATE | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | |
| NOV 30... | | | | | | -- | 13 | 2 | | | | | | |
| FEB 07... | | | | | | -- | 14 | 2 | | | | | | |
| MAY 24... | | | | | | 1.70 | 22 | 2 | | | | | | |
| SEP 06... | | | | | | 4.90 | 39 | 2 | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01401560 ROCK BROOK AT ZION, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|--------------|------|---|--|--|---|---|---|---|---|--|--|--|--|
| SEP 06... | 1030 | <2 | 12.6 | <.06 | 36 | <.04 | <1 | 2.0 | 290 | <1 | 16 | <.01 | <1 |
| DATE | TIME | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | | | | | | | | | |
| SEP 06... | | E.3 | <.05 | 2 | | | | | | | | | |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BROMO- FORM TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
| FEB 07... | 1100 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
| DATE | TIME | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- BROMO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL WATER UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL WATER UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
| FEB 07... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (85795) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (77135) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | |
| FEB 07... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|--|--|--|---|---|--|--|--|--|---|--|---|
| MAY 24... | 1045 | <.004 | <.002 | <.005 | .008 | <.010 | <.041 | <.030 | <.005 | <.018 | <.003 | <.006 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

221

01401560 ROCK BROOK AT ZION, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER (UG/L) (39415) | METRI- BUZIN WATER FLTRD 0.7 U GF, REC (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|--|--|--|---|---|---|---|
| MAY 24... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.004 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| MAY 24... | <.011 | <.016 | <.034 | <.005 | <.009 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|
| MAY 23... | 0900 | 3500 | 1600 | 1700 |
| 30... | 0945 | 50 | <100 | 70 |
| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
| JUN 06... | 0850 | 20 | 100 | 130 |
| 13... | 0840 | 20 | 100 | 50 |
| 19... | 0835 | 1300 | 100 | 330 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ

LOCATION.--Lat 40°28'30", long 74°34'34", Somerset County, Hydrologic Unit 02030105, at highway bridge at Blackwells Mills, and 0.3 mi downstream from Six Mile Run.

DRAINAGE AREA.--258 mi².

PERIOD OF RECORD.--Water years 1962-69, 1973, 1976-80, 1991 to current year.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|---|---|---|---|--|--|--|--|---|---|--|--|
| NOV 28... | 1000 | 503 | -- | .213 | .171 | 761 | 89 | 10.9 | 7.6 | 244 | -- | 6.5 | 68 | |
| FEB 21... | 1000 | 314 | -- | .092 | .071 | 764 | 98 | 12.5 | 8.1 | 334 | 7.0 | 5.0 | 70 | |
| MAY 30... | 1000 | 399 | 16 | .264 | .206 | 760 | 70 | 6.6 | 7.3 | 229 | 16.0 | 18.0 | 54 | |
| AUG 29... | 1000 | 160 | 7.8 | .170 | .128 | 762 | 55 | 4.6 | 7.2 | 242 | 20.0 | 24.5 | 60 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AM-MONIA + DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| NOV 28... | 16.2 | 6.73 | 4.58 | 15.9 | 43 | 25.6 | E.1 | 8.0 | 22.8 | 149 | 134 | .070 | .55 | |
| FEB 21... | 16.6 | 6.91 | 2.96 | 32.3 | 31 | 56.6 | E.1 | 10.4 | 25.9 | 184 | 181 | .120 | .31 | |
| MAY 30... | 12.6 | 5.53 | 3.10 | 20.1 | 32 | 26.3 | E.2 | 9.0 | 18.7 | 129 | 122 | .120 | .64 | |
| AUG 29... | 13.9 | 6.21 | 4.35 | 20.9 | 35 | 30.2 | .2 | 6.9 | 24.1 | 144 | 128 | .060 | .58 | |
| DATE | | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00625) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 28... | .19 | .65 | 1.85 | .008 | 2.4 | 2.5 | .177 | .133 | .195 | 1.1 | <.1 | 6.1 | 1.1 | |
| FEB 21... | .18 | .39 | 2.44 | .019 | 2.7 | 2.8 | .067 | .138 | .174 | .5 | <.1 | 2.9 | .5 | |
| MAY 30... | .17 | .81 | 1.77 | .040 | 2.4 | 2.6 | .088 | .161 | .228 | .8 | <.1 | 6.5 | .8 | |
| AUG 29... | .06 | .60 | E1.69 | .023 | -- | -- | .086 | .286 | .296 | .5 | <.1 | 5.2 | .5 | |
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E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 1150 | 5400 | <100 | 3600 | 06... | 1150 | 330 | 500 | 100 |
| 30... | 1220 | 1700 | 300 | 570 | 13... | 1125 | 110 | <100 | 50 |
| | | | | | 19... | 1130 | 1400 | 900 | 480 |

< Actual value is known to be less than the value shown.

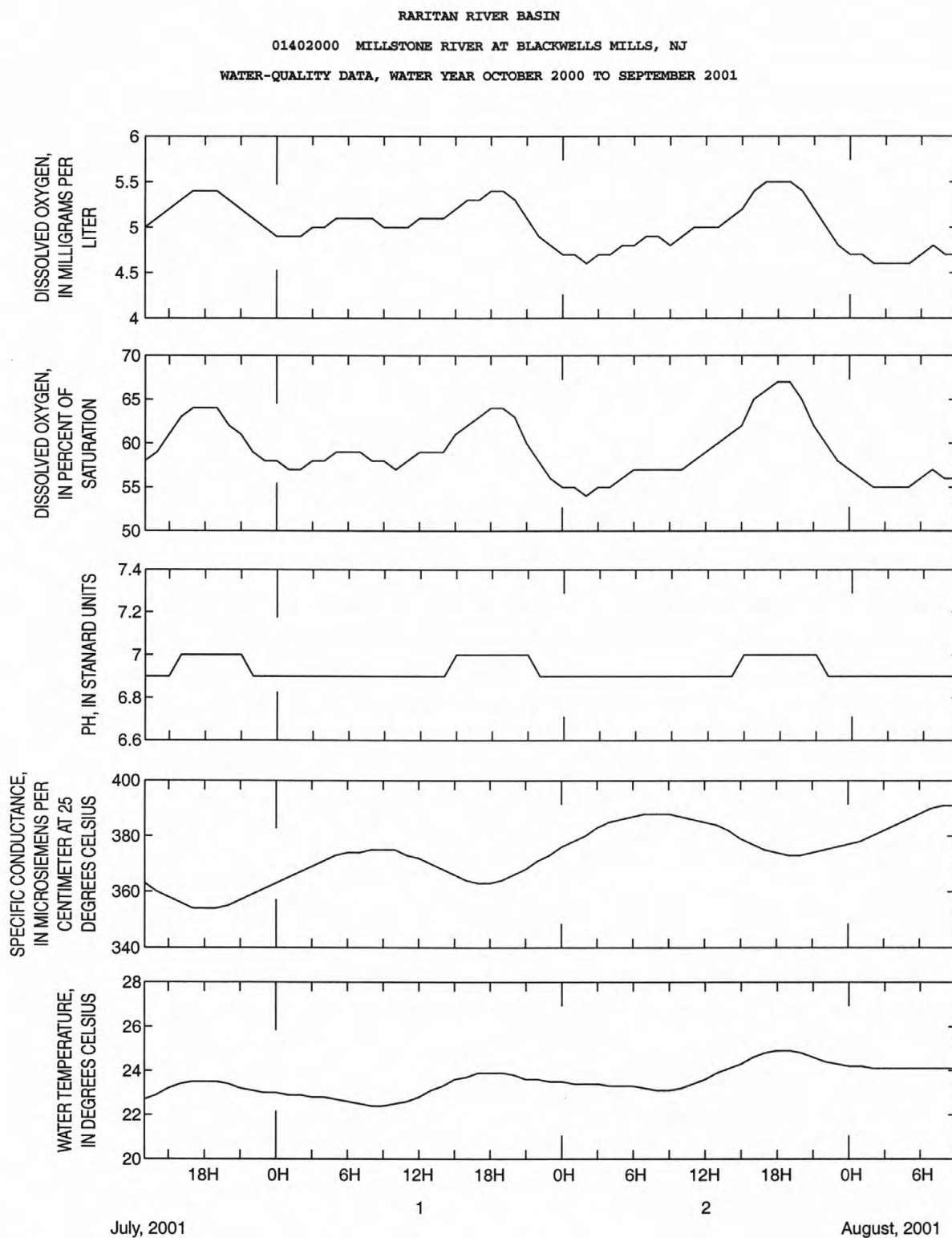


Figure 45. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01402000 Millstone River at Blackwells Mills, water year 2001.

RARITAN RIVER BASIN

225

01403171 WEST BRANCH MIDDLE BROOK AT CHIMNEY ROCK ROAD, AT MARTINSVILLE, NJ

LOCATION.--Lat 40°35'21", long 74°33'49", Somerset County, Hydrologic Unit 02030105, at bridge on Chimney Rock Road, 0.1 mi downstream of Washington Valley Reservoir, and 0.8 mi south of Martinsville.

DRAINAGE AREA.--6.29 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) |
|-----------|------|---------------|---|--|--|---|--|--|--|--|---|---|
| NOV 29... | 1030 | ENVIRONMENTAL | -- | .335 | .277 | 763 | 96 | 12.0 | 7.7 | 188 | 8.0 | 6.0 |
| FEB 01... | 1000 | ENVIRONMENTAL | -- | .215 | .174 | 760 | 98 | 13.5 | 7.5 | 294 | 5.0 | 2.0 |
| MAY 24... | 1000 | ENVIRONMENTAL | 4.2 | .145 | .113 | 759 | 89 | 8.6 | 7.9 | 268 | 18.0 | 16.9 |
| AUG 14... | 1045 | ENVIRONMENTAL | 6.7 | .124 | .092 | 758 | 100 | 8.1 | 8.1 | 241 | 22.0 | 25.6 |

| DATE | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) |
|-----------|--|--|--|---|--|--|---|--|--|---|---|--|---|
| NOV 29... | 67 | 16.9 | 5.92 | 2.29 | 9.0 | 52 | 13.0 | <.2 | 12.6 | 13.7 | 129 | 106 | .050 |
| FEB 01... | 67 | 16.6 | 6.28 | 1.36 | 24.9 | 33 | 53.2 | <.2 | 11.6 | 15.3 | 165 | 153 | .050 |
| MAY 24... | 91 | 23.1 | 8.08 | 1.19 | 15.1 | 67 | 29.3 | <.2 | 12.9 | 17.5 | 160 | 148 | .070 |
| AUG 14... | 87 | 22.0 | 7.68 | 1.50 | 13.1 | 70 | 23.7 | <.2 | 10.5 | 12.6 | 142 | 133 | <.030 |

| DATE | NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN,PAR-TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) |
|-----------|---|--|--|---|---|---|---|---|---|--|---|--|--|
| NOV 29... | .44 | .05 | .70 | .426 | .006 | .87 | 1.1 | .234 | .015 | .081 | 1.3 | <.1 | 8.9 |
| FEB 01... | .32 | .06 | .36 | .800 | .004 | 1.1 | 1.2 | .091 | .013 | .035 | .8 | <.1 | 5.4 |
| MAY 24... | .41 | .08 | .60 | .201 | .008 | .61 | .80 | .149 | .017 | .039 | .7 | <.1 | 4.4 |
| AUG 14... | .28 | <.03 | .57 | .063 | <.003 | .34 | .64 | .241 | .007 | .032 | 1.7 | <.1 | 4.2 |

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01403171 WEST BRANCH MIDDLE BROOK AT CHIMNEY ROCK ROAD, AT MARTINSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|------|-------------|---|---|--|---|--|
| | | | | | | | |
| NOV 29... | | | 1.3 | 4.9 | -- | 130 | <1 |
| FEB 01... | | | .8 | 2.0 | -- | 80 | 5 |
| MAY 24... | | | .7 | 2.5 | 18.9 | 118 | 2 |
| AUG 14... | | | 1.7 | 2.1 | 58.7 | 152 | <1 |

| DATE | TIME | SAMPLE TYPE | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007) | BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034) | COPPER, DIS-SOLVED (UG/L AS CU) (01040) | COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045) | LEAD, DIS-SOLVED (UG/L AS PB) (01049) |
|-----------|------|---------------|---|---|---|---|---|--|--|---|---|--|
| | | | | | | | | | | | | |
| AUG 14... | 0930 | FIELD BLANK | -- | -- | -- | -- | -- | -- | <.2 | -- | -- | <.08 |
| 14... | 1045 | ENVIRONMENTAL | E2 | 27.8 | <.06 | 140 | <.04 | <1 | -- | 1.2 | 310 | -- |

| DATE | TIME | SAMPLE TYPE | LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051) | MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055) | MERCURY DIS-SOLVED (UG/L AS HG) (71890) | MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900) | NICKEL, DIS-SOLVED (UG/L AS NI) (01065) | NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067) | SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077) | ZINC, DIS-SOLVED (UG/L AS ZN) (01090) | ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092) |
|-----------|------|-------------|---|---|--|---|--|---|--|---|--|---|
| | | | | | | | | | | | | |
| AUG 14... | -- | -- | <.01 | -- | <.06 | -- | -- | -- | -- | -- | <1 | -- |
| 14... | <1 | 95 | -- | <.01 | -- | <1 | <.4 | <.05 | -- | 3 | | |

| DATE | TIME | SAMPLE TYPE | 1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506) | 1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496) | 1,1-DI-ETHYL-ENE TOTAL (UG/L) (34501) | 1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103) | 1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541) | TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO-FORM TOTAL (UG/L) (32104) | CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102) |
|-----------|------|-------------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|
| | | | | | | | | | | | | | | |
| FEB 01... | 1000 | | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |

| DATE | TIME | SAMPLE TYPE | CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (34301) | CHLORO-BROMO-FORM TOTAL (UG/L) (32105) | CIS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (77093) | BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101) | DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668) | DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT-BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | BENZENE ETHYL-BENZENE TOTAL (UG/L) (34371) | FREON-113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|-----------|------|-------------|---|---|--|---|--|--|---|---|---|--|---|---|
| | | | | | | | | | | | | | | |
| FEB 01... | | | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | .4 |

| DATE | TIME | SAMPLE TYPE | METHYL ENE CHLORIDE REC (UG/L) (34423) | META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795) | O-XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180) | TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488) | VINYL CHLORIDE TOTAL (UG/L) (39175) |
|-----------|------|-------------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
| | | | | | | | | | | | |
| FEB 01... | | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 |

E Estimated value.

< Actual value is known to be less than the value shown.

01403171 WEST BRANCH MIDDLE BROOK AT CHIMNEY ROCK ROAD, AT MARTINSVILLE, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|--------------|------|---|---|--|---|---|---|---|--|--|---|--|---|---|
| | | | | | | | | | | | | | | |
| MAY 24... | 1000 | <.004 | <.002 | <.005 | .007 | <.010 | E.009 | <.020 | <.005 | <.018 | <.003 | E.005 | .054 | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | | | | | | | | | | | | | |
| MAY 24... | | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.002 | <.006 | <.002 | <.007 | <.003 | <.010 | .031 |
| DATE | TIME | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| | | | | | | | | | | | | | | |
| MAY 24... | | E.003 | <.016 | <.034 | <.005 | E.003 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| MAY 23... | 1105 | 2200 | 2000 | 2400 | JUN 06... | 1115 | 110 | 200 | 30 |
| 30... | 1135 | 230 | <100 | 10 | 13... | 1050 | 20 | 100 | 20 |
| | | | | | 19... | 1100 | 130 | 100 | 50 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, NJ

LOCATION.--Lat 40°33'34", long 74°31'41", Somerset County, Hydrologic Unit 02030105, at Queens Bridge on Main street in Bound Brook, 1.7 mi upstream from Fieldsville Dam.

DRAINAGE AREA.--804 mi².

PERIOD OF RECORD.--Water years 1964-69, 1971-73, 1978, 1981 to current year. Published as "at Bound Brook" (station 01403000) 1964-66, and as "below Calco Dam at Bound Brook" (station 01403060) 1967-69.

REMARKS.--Data collected as part of the Long Island-New Jersey National Water-Quality Assessment Program (LINJ NAWQA). Instantaneous discharges are determined at Raritan River below Calco Dam at Bound Brook (station 01403060). For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Explanation of the Records, Quality-Control Data" in the "Introduction". Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table. Site is in New Jersey Department of Environmental Protection Watershed Management Area 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (000061) | BARO-METRIC PRES-SURE (MM OF HG) (000025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | | |
|-----------|-------|---|--|---|--|--|--|---|---|--|--|---|--|--------------------------------------|
| DATE | TIME | SAMPLE TYPE | | | | | | | | | | | | |
| OCT 26... | 1020 | ENVIRONMENTAL | 181 | 764 | 90 | 9.4 | 7.2 | 412 | -- | 13.5 | 110 | 27.6 | | |
| NOV 29... | 0950 | ENVIRONMENTAL | 761 | 758 | 99 | 12.0 | 7.5 | 252 | 7.5 | 7.0 | 72 | 17.9 | | |
| DEC 28... | 1020 | ENVIRONMENTAL | 577 | 758 | 98 | 14.3 | 7.8 | 320 | -4.0 | .00 | 90 | 22.2 | | |
| FEB 01... | 1010 | ENVIRONMENTAL | 3660 | 767 | | -- | 7.3 | -- | 6.0 | 2.0 | 65 | 16.5 | | |
| 28... | 1000 | ENVIRONMENTAL | 1830 | 764 | | 13.5 | 7.4 | -- | .5 | 5.0 | 82 | 20.7 | | |
| MAR 29... | 0840 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 29... | 0920 | ENVIRONMENTAL | 978 | 763 | 111 | 13.6 | 7.4 | 287 | -- | 6.5 | 78 | 19.5 | | |
| APR 25... | 1040 | ENVIRONMENTAL | 677 | 766 | 101 | 9.7 | 7.7 | 295 | 14.0 | 17.5 | 89 | 22.1 | | |
| 25... | 1041 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | 88 | 21.9 | | |
| 25... | 1042 | SEQUENTIAL REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MAY 30... | 1020 | ENVIRONMENTAL | 1190 | 763 | 94 | 9.0 | 7.2 | 251 | 16.0 | 17.5 | 70 | 17.5 | | |
| JUL 02... | 1020 | ENVIRONMENTAL | 2000 | 767 | 91 | 7.8 | 7.3 | 227 | -- | 23.5 | 66 | 16.3 | | |
| AUG 03... | 0845 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | .01 | | |
| 03... | 1000 | ENVIRONMENTAL | 105 | 757 | 91 | 7.5 | 7.5 | 456 | 28.0 | 24.5 | 120 | 32.7 | | |
| 28... | 1000 | ENVIRONMENTAL | 187 | 757 | 98 | 8.2 | 7.8 | 409 | -- | 24.0 | 120 | 30.1 | | |
| SEP 27... | 1010 | ENVIRONMENTAL | 199 | 764 | 91 | 8.6 | 7.8 | 370 | -- | 18.0 | 100 | 25.7 | | |
| | | | | | | | | | | | | | | |
| DATE | | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086) | BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, TOTAL (MG/L AS N) (00600) |
| OCT 26... | 9.76 | 4.63 | 30.5 | 71 | 87 | 41.5 | .2 | 7.8 | 51.5 | 2.1 | 2.5 | 1.58 | 4.5 | |
| NOV 29... | 6.60 | 3.72 | 16.1 | 44 | 54 | 23.0 | E.1 | 8.4 | 25.4 | .48 | .75 | .064 | 2.8 | |
| DEC 28... | 8.47 | 2.68 | 21.2 | 49 | 60 | 38.1 | E.1 | 11.7 | 26.6 | .44 | .54 | .158 | 3.0 | |
| FEB 01... | 5.78 | 2.51 | 30.5 | 30 | 37 | 57.8 | E.1 | 8.3 | 17.6 | .42 | .70 | .087 | 2.3 | |
| 28... | 7.35 | 2.15 | 37.3 | 38 | 46 | 67.0 | E.1 | 9.3 | 21.8 | .26 | .36 | .053 | 2.0 | |
| MAR 29... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 29... | 7.10 | 1.87 | 23.3 | 42 | 50 | 44.2 | E.1 | 8.0 | 24.1 | .28 | .38 | E.028 | 2.1 | |
| APR 25... | 8.22 | 2.35 | 23.2 | 47 | 58 | 39.6 | E.1 | 6.2 | 27.9 | .41 | .54 | E.021 | 2.1 | |
| 25... | 8.21 | 2.39 | 22.6 | 50 | 61 | 40.9 | E.1 | 6.4 | 27.4 | .38 | .54 | <.041 | 2.1 | |
| 25... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 30... | 6.42 | 2.47 | 19.1 | 44 | 54 | 30.1 | E.1 | 10.3 | 19.7 | .47 | .62 | .129 | 2.3 | |
| JUL 02... | 6.20 | 2.72 | 15.9 | 43 | 52 | 25.5 | E.1 | 7.4 | 18.1 | .59 | .93 | .071 | 2.2 | |
| AUG 03... | <.008 | <.09 | M | -- | -- | E.1 | <.2 | .5 | <.1 | <.10 | <.08 | <.040 | -- | |
| 03... | 10.5 | 4.75 | 38.4 | 59 | 72 | 52.4 | .2 | 6.7 | 56.1 | .83 | .95 | .041 | 5.5 | |
| 28... | 9.98 | 3.98 | 30.9 | 54 | 66 | 47.5 | .2 | 7.1 | 48.5 | .52 | .48 | <.040 | -- | |
| SEP 27... | 8.80 | 4.40 | 32.6 | 41 | 49 | 43.8 | .2 | 7.8 | 49.4 | .55 | .69 | E.025 | 4.0 | |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

229

01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) |
|--------------|---|--|--|---|---|--|--|--|--|---|---|--|---|
| OCT 26... | 4.1 | 2.00 | .019 | .95 | .170 | .540 | .504 | .626 | .9 | <.1 | 4.1 | .9 | 235 |
| NOV 29... | 2.5 | 2.06 | .010 | .68 | .102 | .125 | .107 | .185 | .9 | <.1 | 6.3 | .9 | 154 |
| DEC 28... | 2.9 | 2.42 | .013 | .38 | .078 | .122 | .104 | .165 | .5 | <.1 | 3.0 | .5 | 178 |
| FEB 01... | 2.1 | 1.63 | .008 | .61 | .201 | .076 | .070 | .153 | 1.1 | <.1 | 4.6 | 1.1 | 173 |
| 28... | 1.9 | 1.68 | .008 | .31 | .110 | .054 | .048 | .085 | .6 | <.1 | 3.2 | .6 | 209 |
| MAR 29... | -- | -- | -- | -- | .059 | -- | -- | -- | .2 | <.1 | <.15 | .2 | -- |
| 29... | 2.0 | 1.71 | .012 | -- | .122 | .080 | .068 | .116 | .5 | <.1 | 3.1 | .5 | 170 |
| APR 25... | 2.0 | 1.58 | .020 | -- | .180 | .137 | .109 | .176 | .8 | <.1 | 3.1 | .8 | 200 |
| 25... | 1.9 | 1.54 | .020 | -- | -- | .130 | .103 | .175 | -- | -- | -- | -- | 187 |
| 25... | -- | -- | -- | -- | .118 | -- | -- | -- | .8 | <.1 | 3.1 | .8 | -- |
| MAY 30... | 2.1 | 1.66 | E.004 | .49 | .149 | .120 | .104 | .173 | .7 | <.1 | 4.8 | .7 | 149 |
| JUL 02... | 1.9 | 1.27 | E.003 | .86 | .380 | .155 | .163 | .285 | 3.3 | <.1 | 5.6 | 3.2 | 134 |
| AUG 03... | -- | .048 | <.006 | -- | -- | <.006 | <.020 | <.004 | -- | -- | -- | -- | <10 |
| 03... | 5.3 | 4.50 | .027 | .91 | .113 | .747 | .713 | .785 | .6 | <.1 | 4.7 | .6 | 278 |
| 28... | -- | E4.55 | .014 | -- | .114 | E.721 | E.688 | .780 | .4 | <.1 | 3.9 | .4 | 253 |
| SEP 27... | 3.9 | 3.35 | .007 | -- | .066 | .365 | .345 | .420 | .9 | <.1 | 4.2 | .8 | 232 |
| DATE | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155) | SEDI- MENT, SUS- PENDED (MG/L) (80154) | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) |
| OCT 26... | 229 | 119 | 70 | 230 | 3.1 | 6 | <.004 | <.002 | <.005 | .017 | <.010 | <.041 | <.020 |
| NOV 29... | 137 | 59 | 110 | 45.8 | 23 | 11 | <.004 | <.002 | <.005 | .012 | <.010 | <.041 | <.020 |
| DEC 28... | 172 | 49 | 80 | 57.7 | 10 | 6 | <.004 | .011 | <.005 | .024 | <.010 | <.041 | <.020 |
| FEB 01... | 165 | 34 | 70 | 58.2 | 425 | 43 | <.004 | <.002 | <.005 | .008 | <.010 | <.041 | <.020 |
| 28... | 196 | 33 | 70 | 49.3 | 44 | 9 | <.004 | <.002 | <.005 | .012 | <.010 | <.041 | <.020 |
| MAR 29... | -- | -- | -- | -- | -- | -- | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| 29... | 161 | 48 | 90 | 53.0 | 16 | 6 | <.004 | <.002 | <.005 | .010 | <.010 | <.041 | <.020 |
| APR 25... | 166 | 57 | 110 | 28.6 | 7.3 | 4 | <.004 | E.003 | <.005 | .014 | <.010 | E.004 | <.020 |
| 25... | 167 | 59 | 110 | 27.9 | -- | 4 | <.004 | <.002 | <.005 | E.005 | <.010 | <.041 | <.020 |
| 25... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 30... | 140 | 54 | 140 | 39.9 | 48 | 15 | .081 | .012 | <.005 | .612 | <.010 | E.019 | <.020 |
| JUL 02... | 124 | 49 | 50 | 17.0 | 475 | 88 | .008 | .009 | <.005 | .181 | <.010 | E.146 | <.020 |
| AUG 03... | -- | <13 | <10 | <3.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03... | 260 | 160 | 50 | 25.5 | 2.6 | 9 | <.004 | <.002 | <.005 | .058 | <.010 | E.016 | <.020 |
| 28... | 211 | 148 | 50 | 30.9 | 7.6 | 15 | <.004 | <.002 | <.005 | .040 | <.010 | <.041 | <.020 |
| SEP 27... | 213 | 130 | 40 | 86.8 | 5.4 | 10 | <.004 | <.002 | <.005 | .015 | <.010 | E.160 | <.020 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL | | | | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) |
|-----------|--|---|---|---|---|---|--|---|---|--|---|---|--|
| | | | | ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | | | | | | |
| OCT 26... | <.005 | <.018 | <.003 | E.017 | E.003 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .016 | <.006 |
| NOV 29... | <.005 | <.018 | <.003 | E.019 | .015 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .017 | <.006 |
| DEC 28... | <.005 | <.018 | <.003 | E.027 | .007 | <.005 | <.002 | <.007 | <.035 | <.027 | <.050 | .021 | <.006 |
| FEB 01... | <.005 | <.018 | <.003 | E.012 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .013 | <.006 |
| 28... | <.005 | <.018 | <.003 | E.015 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.009 | <.006 |
| MAR 29... | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 |
| 29... | <.005 | <.018 | <.003 | E.010 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.012 | <.006 |
| APR 25... | <.005 | <.018 | <.003 | E.015 | E.003 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .014 | <.006 |
| 25... | <.005 | <.018 | <.003 | E.005 | .009 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.002 | <.006 |
| 25... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 30... | <.005 | <.018 | <.003 | E.046 | .015 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .236 | <.006 |
| JUL 02... | E.004 | E.007 | <.003 | E.033 | .177 | <.005 | <.005 | <.004 | <.035 | E.004 | <.050 | .112 | <.006 |
| AUG 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03... | <.005 | <.018 | <.003 | E.016 | .012 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .033 | <.006 |
| 28... | <.005 | <.018 | <.003 | E.017 | .017 | <.005 | <.006 | <.004 | <.035 | <.027 | <.050 | .022 | <.006 |
| SEP 27... | <.005 | <.018 | <.003 | E.015 | .011 | <.005 | <.007 | <.004 | <.035 | <.027 | <.050 | .023 | <.006 |
| DATE | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | PENDI- METH- ALIN P, P' DDE DISSOLV (UG/L) (34653) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
| OCT 26... | <.002 | <.007 | <.003 | <.010 | E.011 | E.005 | <.016 | <.034 | <.005 | <.009 | | | |
| NOV 29... | <.002 | <.007 | <.003 | <.010 | .030 | <.011 | <.016 | <.034 | <.005 | E.003 | | | |
| DEC 28... | <.002 | <.007 | <.003 | <.010 | <.015 | E.004 | <.016 | <.034 | <.005 | <.009 | | | |
| FEB 01... | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | | | |
| 28... | <.002 | <.007 | <.003 | <.010 | E.007 | E.003 | <.016 | <.034 | <.005 | <.009 | | | |
| MAR 29... | <.002 | <.007 | <.005 | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | | | |
| 29... | <.002 | <.007 | <.003 | <.010 | E.005 | <.011 | <.016 | <.034 | <.005 | <.009 | | | |
| APR 25... | <.002 | <.007 | <.003 | <.010 | E.004 | .014 | <.016 | <.034 | <.005 | <.009 | | | |
| 25... | <.002 | <.007 | <.003 | E.014 | .032 | E.004 | <.016 | <.034 | <.005 | <.009 | | | |
| 25... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| MAY 30... | <.002 | <.007 | <.003 | E.009 | .021 | .017 | <.016 | <.034 | <.005 | E.003 | | | |
| JUL 02... | <.002 | <.007 | <.003 | E.006 | .037 | E.009 | <.016 | <.034 | <.005 | <.009 | | | |
| AUG 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 03... | <.002 | <.007 | <.003 | <.010 | .021 | <.011 | <.016 | <.034 | <.005 | <.009 | | | |
| 28... | <.002 | <.007 | <.003 | <.010 | .035 | <.011 | <.016 | <.034 | <.005 | <.009 | | | |
| SEP 27... | <.002 | <.007 | <.003 | <.010 | .025 | E.004 | <.016 | <.034 | <.005 | <.009 | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, NJ--Continued

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020/2021 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | 1,1,1-TRI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHENE | ACETONE WATER WHOLE | 1,2,3-TRI-CHLORO-BENZENE | BENZENE 1,2,4-TRI-CHLORO-BENZENE | BENZENE 124-TRI-METHYL UNFLT RECOVER | BENZENE 135-TRI-METHYL UNFLT REC | BENZENE 1,3-DI-CHLORO-WATER UNFLT REC | BENZENE 1,4-DI-CHLORO-WATER UNFLT REC | |
|-----------|---|--|---|--|--|--------------------------------------|---|---|---|---|---|--|---|
| | | | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (81552) | TOTAL (UG/L) (77613) | TOTAL (UG/L) (34551) | TOTAL (UG/L) (77222) | TOTAL (UG/L) (77226) | TOTAL (UG/L) (34566) | TOTAL (UG/L) (34571) | |
| NOV 29... | 0950 | ENVIRONMENTAL | <.03 | <.04 | <.04 | 1810 | E.1 | E.1 | <.06 | E.01 | E.09 | E.05 | |
| FEB 28... | 0930 | FIELD BLANK | <.03 | <.04 | <.04 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | |
| FEB 28... | 1000 | ENVIRONMENTAL | <.03 | <.04 | <.04 | E2 | E.1 | .3 | <.06 | E.01 | E.07 | E.05 | |
| MAY 30... | 1020 | ENVIRONMENTAL | <.03 | <.04 | <.04 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | |
| AUG 28... | 1000 | ENVIRONMENTAL | <.03 | <.04 | <.04 | <7 | E.1 | E.1 | <.06 | <.04 | E.07 | E.02 | |
| DATE | ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223) | BENZENE O-DI-CHLORO-WATER UNFLT REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO-FORM TOTAL (UG/L) (32104) | CARBON DI-SULFIDE WATER WHOLE TOTAL (UG/L) (77041) | CHLORO-BENZENE TOTAL (UG/L) (34301) | CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105) | CHLORO-FORM TOTAL (UG/L) (32106) | CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093) | BROMO-CHLORO-METHANE TOTAL (UG/L) (32101) | DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668) | ETHER ETHYL-WATER UNFLT RECOVER (UG/L) (81576) | ETHER TERT-PENTYL-METHYL UNFLT RECOVER (UG/L) (50005) |
| NOV 29... | E.02 | .29 | 5.12 | <.06 | <.07 | E.04 | M | .49 | E.07 | .15 | <.3 | .2 | <.1 |
| FEB 28... | <.03 | <.03 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 | <.2 | <.1 |
| FEB 28... | <.03 | .32 | 4.64 | <.06 | <.07 | E.05 | <.2 | .30 | E.01 | E.09 | <.3 | <.2 | <.1 |
| MAY 30... | <.03 | E.03 | E.09 | <.06 | <.07 | E.02 | E.1 | .54 | <.04 | .19 | <.3 | <.2 | <.1 |
| AUG 28... | <.03 | .24 | 1.69 | E.06 | <.07 | E.02 | .7 | 5.48 | <.04 | 2.02 | <.3 | <.2 | <.1 |
| DATE | ETHYL-BENZENE TOTAL (UG/L) (34371) | FREON-113 WATER UNFLT REC (UG/L) (77652) | FURAN, TETRA-HYDRO-ETHYL-WATER UNFLT RECOVER (UG/L) (81607) | METHYL-TERT-BUTYL-ETHER WAT UNF REC (UG/L) (78032) | METHYL-CHLORIDE TOTAL (UG/L) (34418) | METHYL-CHLORIDE TOTAL (UG/L) (34423) | META-PARA-XYLENE WATER UNFLT REC (UG/L) (85795) | O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275) | O-XYLENE WATER WHOLE TOTAL (UG/L) (77135) | P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356) | TETRA-CHLORO-ETHYL-TOLUENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI-CHLORO-ETHYL-TOLUENE TOTAL (UG/L) (39180) |
| NOV 29... | .42 | <.06 | <2 | .3 | <.2 | M | 1.83 | E.02 | .57 | E.03 | E.1 | .26 | E.03 |
| FEB 28... | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 |
| FEB 28... | E.01 | <.06 | <2 | .2 | <.2 | E.1 | E.03 | .36 | E.02 | <.07 | M | .19 | E.03 |
| MAY 30... | <.03 | <.06 | <2 | .2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | M | E.06 | <.04 |
| AUG 28... | <.03 | <.06 | <2 | E.1 | <.2 | M | <.06 | <.03 | <.04 | <.07 | M | E.04 | <.04 |
| DATE | TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488) | | | | | | | | | | | | |
| NOV 29... | <.09 | | | | | | | | | | | | |
| FEB 28... | <.09 | | | | | | | | | | | | |
| FEB 28... | <.09 | | | | | | | | | | | | |
| MAY 30... | <.09 | | | | | | | | | | | | |
| AUG 28... | <.09 | | | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ

LOCATION.--Lat 40°34'51", long 74°29'58", Middlesex County, Hydrologic Unit 02030105, at bridge on State Route 28, 0.3 mi upstream from Green Brook, 0.9 mi northeast of Middlesex, and 2.4 mi west of the intersection of State Route 28 and Washington Avenue in Dunellen.

DRAINAGE AREA.--23.9 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARK.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLT RD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|--|--|--|--|--|---|---|---|---|
| NOV 13... | 0940 | 7.8 | -- | .261 | .204 | 760 | 51 | 5.7 | 7.2 | 250 | 9.0 | 10.5 | 80 | |
| FEB 12... | 1150 | 19 | -- | .140 | .104 | 778 | 94 | 13.1 | 7.8 | 719 | 1.5 | 2.5 | 150 | |
| MAY 21... | 0850 | 4.5 | 10 | .140 | .101 | 764 | 46 | 4.6 | 7.4 | 651 | 13.0 | 15.5 | 230 | |
| AUG 15... | 1000 | 14 | 5.1 | .205 | .150 | 761 | 58 | 4.9 | 6.8 | 220 | 28.5 | 23.5 | 64 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLT RD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| NOV 13... | 23.9 | 4.97 | 3.40 | 11.1 | 57 | 17.6 | E.1 | 7.8 | 29.8 | 156 | 137 | .160 | .63 | |
| FEB 12... | 44.3 | 8.54 | 2.53 | 81.9 | 73 | 143 | E.1 | 10.4 | 37.3 | 402 | 379 | .130 | .43 | |
| MAY 21... | 69.7 | 14.8 | 3.06 | 33.1 | 143 | 62.0 | E.1 | 12.8 | 83.4 | 404 | 367 | .300 | .76 | |
| AUG 15... | 19.3 | 3.74 | 2.11 | 15.1 | 38 | 20.4 | <.2 | 6.9 | 25.7 | 135 | 120 | .080 | .47 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 13... | .17 | .69 | .957 | .011 | 1.6 | 1.6 | .046 | .089 | .111 | .3 | <.1 | 7.3 | .3 | |
| FEB 12... | .16 | .49 | 1.45 | .015 | 1.9 | 1.9 | .103 | .018 | .077 | 1.2 | <.1 | 4.3 | 1.2 | |
| MAY 21... | .35 | .85 | .510 | .045 | 1.3 | 1.4 | .050 | .052 | .164 | .6 | <.1 | 4.8 | .6 | |
| AUG 15... | .15 | .46 | .875 | .016 | 1.3 | 1.3 | .023 | .119 | .153 | .6 | <.1 | 5.3 | .6 | |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01403385 BOUND BROOK AT ROUTE 28, AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|--------------|---|---|---|--|
| NOV 13... | 2.6 | -- | 80 | 2 |
| FEB 12... | E1.7 | -- | 95 | 8 |
| MAY 21... | E1.8 | 5.70 | 187 | 18 |
| AUG 15... | <1.0 | 2.10 | 89 | 4 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| AUG 01... | 1015 | 140 | 200 | 200 | AUG 15... | 1023 | 490 | 200 | 480 |
| 08... | 1001 | 1100 | <100 | 260 | 22... | 0940 | 230 | 200 | 310 |
| | | | | | 29... | 1045 | 210 | <100 | 120 |

E Estimated value.

< Actual value is known to be less than the value shown.

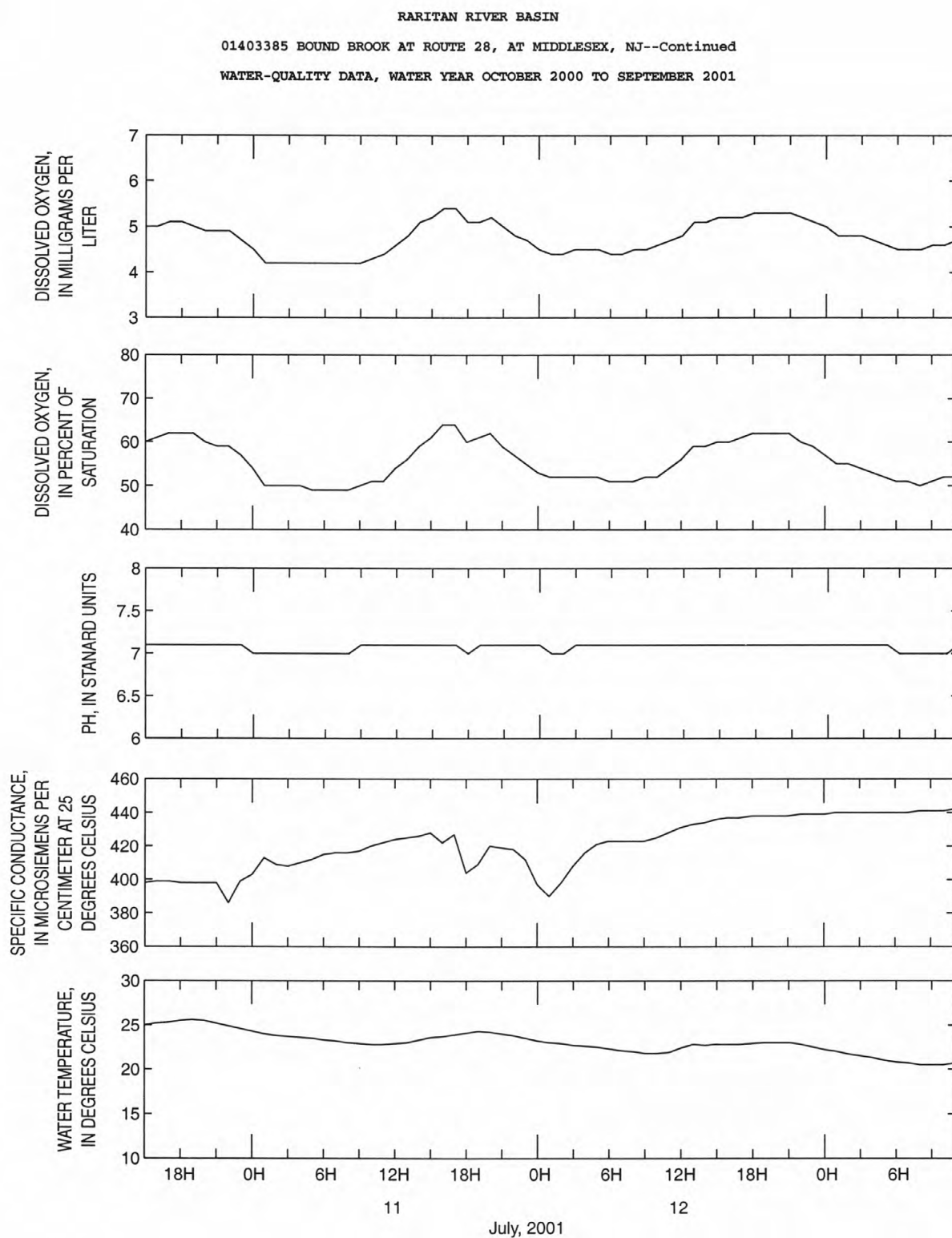


Figure 46. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01403385 Bound Brook at Route 28, at Middlesex, water year 2001.

RARITAN RIVER BASIN

235

01403900 BOUND BROOK AT MIDDLESEX, NJ

LOCATION.--Lat 40°35'06", long 74°30'29", Somerset County, Hydrologic Unit 02030105, at bridge on Sebring Mill Road, 0.4 mi downstream from mouth of Green Brook, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--48.4 mi².

PERIOD OF RECORD.--Water years 1996-98, February to September 2001.

REMARKS.--Data collected as part of the Long Island-New Jersey National Water-Quality Assessment Program (LINJ NAWQA). For the definitions of the type of quality-control data listed under SAMPLE TYPE, refer to "Explanation of the Records, Quality-Control Data" in the "Introduction". Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table. Site is in New Jersey Department of Environmental Protection Watershed Management Area 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STANDARD) (00400) | SPE-CIFIC CON-DUCTANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) |
|-------|------|----------------------|--|---|--|--|-----------------------------------|---|--|----------------------------------|------------------------------------|---|---|
| DATE | TIME | SAMPLE TYPE | | | | | | | | | | | |
| FEB | | | | | | | | | | | | | |
| 01... | 1420 | ENVIRONMENTAL | | 105 | 768 | -- | -- | 7.5 | -- | 8.0 | 4.0 | 120 | 33.7 |
| 28... | 1350 | ENVIRONMENTAL | | 54 | 760 | -- | 15.3 | 7.8 | -- | 5.0 | 6.0 | 140 | 39.0 |
| MAR | | | | | | | | | | | | | |
| 29... | 1150 | FIELD BLANK | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 29... | 1220 | ENVIRONMENTAL | | 44 | 763 | 118 | 14.5 | 7.6 | 540 | -- | 6.5 | 150 | 42.0 |
| APR | | | | | | | | | | | | | |
| 25... | 1500 | ENVIRONMENTAL | | 32 | 767 | 139 | 13.9 | 8.0 | 520 | 18.0 | 15.5 | 170 | 48.7 |
| MAY | | | | | | | | | | | | | |
| 30... | 1310 | ENVIRONMENTAL | | 46 | 762 | 87 | 8.2 | 7.2 | 387 | 20.0 | 18.0 | 110 | 31.0 |
| 30... | 1311 | SPLIT REPLICATE | | -- | -- | -- | -- | -- | -- | -- | -- | 110 | 31.2 |
| 30... | 1312 | SEQUENTIAL REPLICATE | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | | | | |
| 02... | 1330 | ENVIRONMENTAL | | 58 | 767 | 96 | 8.4 | 7.3 | 330 | 25.0 | 22.5 | 110 | 30.6 |
| AUG | | | | | | | | | | | | | |
| 03... | 1250 | ENVIRONMENTAL | | 8.7 | 757 | 105 | 9.0 | 7.4 | 516 | 30.0 | 22.5 | 180 | 50.1 |
| 28... | 1300 | FIELD BLANK | | -- | -- | -- | -- | -- | -- | -- | -- | -- | E.01 |
| 28... | 1400 | ENVIRONMENTAL | | 20 | 756 | 88 | 7.3 | 7.9 | 438 | -- | 24.5 | 150 | 46.5 |
| SEP | | | | | | | | | | | | | |
| 27... | 1340 | ENVIRONMENTAL | | 15 | 764 | 87 | 8.6 | 7.7 | 320 | -- | 16.0 | 100 | 29.7 |
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E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605) | NITRO- GEN, PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) |
|-------|--|--|--|---|---|--|--|---|--|---|---|--|---|
| FEB | | | | | | | | | | | | | |
| 01... | 1.6 | 1.33 | .006 | .39 | .095 | .023 | E.014 | .058 | .5 | <.1 | 4.4 | .5 | 343 |
| 28... | 1.4 | 1.19 | .008 | -- | .042 | .011 | <.018 | .036 | .6 | <.1 | 3.4 | .6 | 416 |
| MAR | | | | | | | | | | | | | |
| 29... | -- | -- | -- | -- | .043 | -- | -- | -- | .2 | <.1 | E.18 | .2 | -- |
| 29... | 1.5 | 1.30 | .013 | .26 | .300 | .011 | <.018 | .036 | .7 | <.1 | 2.7 | .7 | 293 |
| APR | | | | | | | | | | | | | |
| 25... | .89 | .629 | .018 | -- | .113 | .017 | E.010 | .042 | .5 | <.1 | 3.1 | .5 | 319 |
| MAY | | | | | | | | | | | | | |
| 30... | 1.3 | .894 | .011 | .39 | .106 | .050 | .038 | .123 | .9 | <.1 | 4.9 | .9 | 213 |
| 30... | 1.3 | .903 | .009 | .39 | -- | .049 | .035 | .124 | -- | -- | -- | -- | 217 |
| 30... | -- | -- | -- | -- | .110 | -- | -- | -- | .9 | <.1 | 4.9 | .9 | -- |
| JUL | | | | | | | | | | | | | |
| 02... | 1.1 | .772 | E.004 | .41 | .103 | .058 | .063 | .113 | 10 | <.1 | 5.6 | 10 | 207 |
| AUG | | | | | | | | | | | | | |
| 03... | 1.00 | .724 | .014 | -- | .091 | .031 | .020 | .060 | .7 | <.1 | 2.8 | .7 | 310 |
| 28... | -- | <.050 | <.006 | -- | -- | <.006 | <.020 | <.004 | -- | -- | -- | -- | 10 |
| 28... | -- | E.491 | .015 | -- | .229 | .040 | E.012 | .087 | 1.3 | <.1 | 4.6 | 1.3 | 269 |
| SEP | | | | | | | | | | | | | |
| 27... | 1.1 | .837 | .007 | .27 | <.022 | .056 | .044 | <.060 | .4 | <.1 | 3.9 | .4 | 186 |

| DATE | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155) | SEDI- MENT, SUS- PENDE (MG/L) (80154) | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, SOLVED (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLTRD GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) |
|-------|---|---|---|---|--|--|---|--|---|---|--|---|---|
| FEB | | | | | | | | | | | | | |
| 01... | 315 | 73 | 100 | 81.1 | 3.9 | 14 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| 28... | 382 | 72 | 80 | 95.4 | .78 | 5 | <.004 | <.002 | <.005 | E.003 | <.010 | <.041 | <.020 |
| MAR | | | | | | | | | | | | | |
| 29... | -- | -- | -- | -- | -- | -- | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| 29... | 290 | 100 | 20 | 116 | .34 | 3 | <.004 | <.002 | <.005 | E.003 | <.010 | <.041 | <.020 |
| APR | | | | | | | | | | | | | |
| 25... | 285 | 117 | 120 | 110 | .14 | 2 | <.004 | .004 | <.005 | .015 | <.010 | E.004 | <.020 |
| MAY | | | | | | | | | | | | | |
| 30... | 203 | 93 | 70 | 111 | 3.0 | 24 | .011 | <.007 | <.005 | .047 | <.010 | E.038 | <.020 |
| 30... | 205 | 95 | 60 | 112 | -- | 24 | .012 | <.009 | <.005 | .046 | <.010 | E.036 | <.020 |
| 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | | | | |
| 02... | 180 | 100 | 50 | 50.7 | 2.8 | 18 | -- | -- | -- | E.030 | -- | E.044 | -- |
| AUG | | | | | | | | | | | | | |
| 03... | 282 | 145 | 60 | 74.8 | .19 | 8 | <.004 | <.002 | <.005 | .009 | <.010 | <.041 | <.020 |
| 28... | -- | <13 | <10 | <3.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | 244 | 139 | 60 | 57.3 | .27 | 5 | <.004 | <.002 | <.005 | .008 | <.010 | <.041 | <.020 |
| SEP | | | | | | | | | | | | | |
| 27... | 179 | 106 | 40 | 50.5 | .16 | 4 | <.004 | <.002 | <.005 | E.004 | <.010 | E.119 | <.020 |

| DATE | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD GF, REC (UG/L) (82666) | METHYL AZIN- PHOS WAT FLTRD GF, REC (UG/L) (39532) | MALA- THION, DIS- SOLVED (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) |
|-------|--|--|--|--|---|--|--|--|--|--|--|---|--|
| FEB | | | | | | | | | | | | | |
| 01... | <.005 | <.018 | <.003 | <.006 | .013 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 |
| 28... | <.005 | <.018 | <.003 | E.003 | E.004 | <.005 | <.002 | <.004 | <.035 | E.005 | <.050 | <.013 | <.006 |
| MAR | | | | | | | | | | | | | |
| 29... | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 |
| 29... | <.005 | <.018 | <.003 | E.003 | E.003 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 |
| APR | | | | | | | | | | | | | |
| 25... | <.005 | <.018 | <.003 | E.017 | E.003 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .016 | <.006 |
| MAY | | | | | | | | | | | | | |
| 30... | E.003 | <.018 | <.003 | E.010 | .062 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.011 | <.006 |
| 30... | E.003 | <.018 | <.003 | E.011 | .063 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.011 | <.006 |
| 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | | | | |
| 02... | E.008 | E.009 | -- | -- | E.459 | -- | -- | -- | -- | -- | -- | E.011 | -- |
| AUG | | | | | | | | | | | | | |
| 03... | <.005 | <.018 | <.003 | E.006 | .013 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.004 | <.006 |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | <.005 | <.018 | <.003 | E.004 | .068 | <.005 | <.002 | <.004 | <.035 | E.008 | <.050 | E.005 | <.006 |
| SEP | | | | | | | | | | | | | |
| 27... | <.005 | <.018 | <.003 | <.006 | .073 | <.005 | <.007 | <.004 | <.035 | <.027 | <.050 | E.004 | <.006 |

E Estimated value.

< Actual value is known to be less than the value shown.

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-------|--|---|---|---|---|---|---|--|---|---|
| FEB | | | | | | | | | | |
| 01... | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 |
| 28... | <.002 | <.007 | <.003 | <.010 | .018 | E.006 | <.016 | <.034 | <.005 | <.009 |
| MAR | | | | | | | | | | |
| 29... | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 |
| 29... | <.002 | <.007 | <.003 | <.010 | E.010 | <.011 | <.016 | <.034 | <.005 | <.009 |
| APR | | | | | | | | | | |
| 25... | <.002 | <.007 | <.003 | E.011 | E.005 | .016 | <.016 | <.034 | <.005 | <.009 |
| MAY | | | | | | | | | | |
| 30... | <.002 | <.007 | <.003 | .017 | .059 | .024 | <.016 | <.034 | <.005 | E.003 |
| 30... | <.002 | <.007 | <.003 | .016 | .062 | .024 | .020 | <.034 | <.005 | E.003 |
| 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | |
| 02... | -- | -- | -- | E.013 | E.074 | E.010 | E.018 | -- | -- | -- |
| AUG | | | | | | | | | | |
| 03... | <.002 | <.007 | <.003 | <.010 | .024 | <.011 | E.015 | <.034 | <.005 | <.009 |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | <.002 | <.007 | <.003 | <.010 | .047 | <.011 | .019 | <.034 | <.005 | <.009 |
| SEP | | | | | | | | | | |
| 27... | <.002 | <.007 | <.003 | <.010 | .023 | E.003 | <.025 | <.034 | <.005 | <.009 |

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020/2021 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | SAMPLE TYPE | 1,1,1- TRI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHYL- ENE | ACETONE WATER WHOLE | 1,2,3- TRI- CHLORO BENZENE WAT, WH | BENZENE 1,2,4- TRI- CHLORO- WAT UNF | BENZENE 124-TRI METHYL UNFLTRD RECOVER | BENZENE 135-TRI METHYL WATER UNFLTRD REC | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC | |
|--------------|--|---|--|--|--|---|--|---|---|---|---|--|---|
| | | | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (81552) | TOTAL (UG/L) (77613) | TOTAL (UG/L) (34551) | TOTAL (UG/L) (77222) | TOTAL (UG/L) (77226) | TOTAL (UG/L) (34566) | TOTAL (UG/L) (34571) | |
| FEB 28... | 1350 | ENVIRONMENTAL | E.01 | <.04 | E.01 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | |
| MAR 29... | 1150 | FIELD BLANK | <.03 | <.04 | <.04 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | |
| 29... | 1220 | ENVIRONMENTAL | E.02 | <.04 | E.01 | E1 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | |
| AUG 28... | 1400 | ENVIRONMENTAL | <.03 | <.04 | <.04 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | |
| DATE | ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) |
| FEB 28... | <.03 | <.03 | E.01 | <.06 | <.07 | .14 | <.2 | E.06 | E.10 | <.05 | <.3 | <.2 | .1 |
| MAR 29... | <.03 | <.03 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 | <.2 | <.1 |
| 29... | <.03 | <.03 | E.02 | <.06 | <.07 | .22 | <.2 | E.06 | .10 | <.05 | <.3 | <.2 | .2 |
| AUG 28... | <.03 | <.03 | <.04 | <.06 | <.07 | E.07 | <.2 | E.05 | <.04 | <.05 | <.3 | <.2 | <.1 |
| DATE | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL- CHLO- RIDE TOTAL (UG/L) (34418) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- CHLORO- TOLUENE WATER TOTAL (UG/L) (77275) | O- XYLENE WATER TOTAL (UG/L) (77135) | P-ISO- PROPYL- TOLUENE WATER TOTAL (UG/L) (77356) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) |
| FEB 28... | <.03 | <.06 | <2 | 33.0 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | E.1 | E.04 | .10 |
| MAR 29... | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | M | <.05 | <.04 |
| 29... | <.03 | <.06 | <2 | 44.2 | <.2 | M | <.06 | <.03 | <.04 | <.07 | E.1 | E.06 | E.10 |
| AUG 28... | <.03 | <.06 | <2 | 21.3 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | M | E.02 | <.04 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

RARITAN RIVER BASIN

01403900 BOUND BROOK AT MIDDLESEX, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) |
|-------|---|
| FEB | |
| 28... | <.09 |
| MAR | |
| 29... | <.09 |
| 29... | <.09 |
| AUG | |
| 28... | <.09 |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

239

01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ

LOCATION.--Lat 40°17'46", long 74°23'53", Middlesex County, Hydrologic Unit 02030105, at bridge on Federal Road, 2.6 mi north of Manalapan, 3.1 mi southwest of Matchaponix, 3.3 mi downstream from Still House Brook, and 4.1 mi northeast of Applegarth.

DRAINAGE AREA.--20.9 mi².

PERIOD OF RECORD.--Water years 1976 to current year.

REMARKS.--For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator and Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT OF SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | | | |
|-----------|------------------------------------|----------------------|---|--|--|---|---|--|--|--|--|--|---|---|---------------------------------------|
| DATE | TIME | SAMPLE TYPE | | | | | | | | | | | | | |
| NOV 21... | 0950 | ENVIRONMENTAL | 16 | -- | .083 | .070 | 760 | 91 | 12.1 | 6.8 | 185 | 5.0 | | | |
| FEB 15... | 0900 | ENVIRONMENTAL | 30 | -- | .043 | .037 | 757 | 96 | 12.0 | 5.9 | 199 | 7.0 | | | |
| MAY 21... | 1010 | ENVIRONMENTAL | 13 | 13 | .082 | .065 | 764 | 89 | 9.2 | 6.7 | 231 | 14.0 | | | |
| AUG 21... | 0950 | ENVIRONMENTAL | 5.2 | 7.6 | .095 | .074 | 758 | 84 | 7.4 | 6.8 | 227 | -- | | | |
| 21... | 0950 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 21... | 0951 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| | | | HARD-NESS TOTAL (MG/L AS CAC03) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD LAB TIT 4.5 (MG/L AS CAC03) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | |
| DATE | TEMPER-ATURE WATER (DEG C) (00010) | | | | | | | | | | | | | | |
| NOV 21... | 3.5 | 38 | 9.25 | 3.67 | 2.90 | 14.4 | 8 | 30.4 | .2 | 12.5 | 20.7 | 107 | 102 | | |
| FEB 15... | 5.5 | 38 | 9.27 | 3.60 | 2.61 | 16.4 | 4 | 33.0 | E.2 | 10.4 | 24.4 | 115 | 108 | | |
| MAY 21... | 14.0 | 43 | 10.2 | 4.19 | 2.64 | 23.4 | 10 | 43.5 | .2 | 9.6 | 17.8 | 134 | 122 | | |
| AUG 21... | 21.5 | 41 | 9.66 | 4.14 | 3.48 | 21.9 | 14 | 46.8 | .2 | 9.8 | 16.6 | 134 | 123 | | |
| 21... | -- | 41 | 9.70 | 4.10 | 3.70 | 24.0 | 12 | 45.0 | .3 | -- | 16.0 | 160 | 112 | | |
| 21... | -- | 42 | 9.90 | 4.20 | 3.80 | 24.0 | 11 | 45.0 | .4 | -- | 16.0 | 150 | 112 | | |
| | | | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) |
| NOV 21... | .080 | .23 | .06 | .28 | .723 | <.003 | .95 | 1.0 | .065 | E.002 | -- | -- | -- | .057 | |
| FEB 15... | .220 | .28 | .17 | .26 | 1.26 | .006 | 1.5 | 1.5 | .186 | E.002 | -- | -- | -- | .051 | |
| MAY 21... | .090 | .24 | .10 | .37 | 1.07 | .013 | 1.3 | 1.4 | .114 | E.003 | -- | -- | -- | .075 | |
| AUG 21... | <.030 | .22 | <.03 | .27 | .525 | <.003 | .74 | .80 | .077 | .008 | <.020 | <.020 | <.020 | .064 | |
| 21... | .059 | .33 | .04 | .29 | .380 | <.050 | .71 | .67 | -- | .014 | .014 | .017 | .017 | .052 | |
| 21... | .042 | .40 | .05 | .45 | .390 | <.050 | .79 | .84 | -- | .039 | .015 | .016 | .016 | .044 | |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORGANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC, PARTICULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY CORR. (MG/L) (00310) | CHLORO-PHYLL A FLUOROMETRIC METHOD (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530) | | | | | |
|-----------|-------|--|--|---|--|--|--|---|---|---|--|--|---|---|
| DATE | | NOV 21... | .8 | <.1 | 1.9 | .8 | 2.3 | -- | 21 | 7 | | | | |
| FEB 15... | | .9 | <.1 | 1.2 | .9 | <1.0 | -- | 13 | 12 | | | | | |
| MAY 21... | | 1.2 | <.1 | 1.7 | 1.2 | E1.4 | 4.90 | 21 | 10 | | | | | |
| AUG 21... | | .5 | <.1 | 2.9 | .5 | E1.4 | 2.00 | 25 | 5 | | | | | |
| 21... | | -- | -- | 2.1 | -- | -- | -- | 36 | 6 | | | | | |
| 21... | | -- | -- | 2.2 | -- | -- | -- | 47 | 6 | | | | | |
| | | | | | | | | | | | | | | |
| DATE | TIME | SAMPLE TYPE | PH SED BED MAT (STD UNITS) (70310) | NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO-GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007) | BERYL-LIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOVERABLE (UG/L AS B) (01022) | | |
| AUG | | | | | | | | | | | | | | |
| 21... | 0950 | ENVIRONMENTAL | -- | -- | -- | -- | -- | -- | <2 | 27.3 | E.03 | 26 | | |
| 21... | 0950 | BED MATERIAL | 5.60 | 210 | 1.2 | 1700 | 4.0 | .3 | -- | -- | -- | -- | | |
| 21... | 0950 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | <2 | 30.0 | <1.30 | 42 | | |
| 21... | 0951 | CONCURRENT REPLICATE | -- | -- | -- | -- | -- | -- | <2 | 30.0 | <1.30 | 42 | | |
| | | | | | | | | | | | | | | |
| DATE | TIME | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051) | MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067) | SELENIUM, TOTAL RECOVERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003) | CADMIUM RECOVER. FM BOTTOM MATERIAL (UG/G AS CD) (01028) |
| AUG | | | | | | | | | | | | | | |
| 21... | E.02 | <1 | .8 | 1200 | <1 | 46 | <.01 | 3 | <.4 | <.05 | 6 | -- | -- | -- |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | 3.4 |
| 21... | <1.00 | <2 | <2.5 | 1300 | <2 | 50 | -- | <5 | <1.8 | <1.50 | <8 | -- | -- | -- |
| 21... | <1.00 | <2 | <2.5 | 1300 | <2 | 51 | -- | <5 | <1.8 | <1.50 | <8 | -- | -- | -- |
| | | | | | | | | | | | | | | |
| DATE | TIME | CHROMIUM, RECOVER. FM BOTTOM MATERIAL (UG/G AS CO) (01029) | COBALT, RECOVER. FM BOTTOM MATERIAL (UG/G AS CO) (01038) | COPPER, RECOVER. FM BOTTOM MATERIAL (UG/G AS CU) (01043) | IRON, RECOVER. FM BOTTOM MATERIAL (UG/G AS FE) (01170) | LEAD, RECOVER. FM BOTTOM MATERIAL (UG/G AS PB) (01052) | MANGANESE, RECOVER. FM BOTTOM MATERIAL (UG/G AS MN) (01053) | MERCURY RECOVER. FM BOTTOM MATERIAL (UG/G AS HG) (71921) | NICKEL, RECOVER. FM BOTTOM MATERIAL (UG/G AS NI) (01068) | SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS SE) (01148) | ZINC, RECOVER. FM BOTTOM MATERIAL (UG/G AS ZN) (01093) | 4HCYPHENANTHRENE, RECOVER. FM BOTTOM MATERIAL (UG/KG) (49411) | 9H-FLUORENE, 1METHYLBED MAT DRY WGT REC (UG/KG) (49398) | 9H-FLUORENE, SED, BM WS, <2MM DW, REC (UG/KG) (49399) |
| AUG | | | | | | | | | | | | | | |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | 17 | 2.5 | 6 | 38000 | 7.0 | 71 | <.01 | .1 | <1 | 40 | <50 | <50 | <50 | <50 |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | | | | | | | | | | | | |
| DATE | TIME | ACENAPHTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPHTHYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) | ANTHRACENE, 2-METHYLBED MAT DRY WGT REC (UG/KG) (49435) | ANTHRACENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ(A)ANTHRACENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO(A)PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB(FLUORANTHENE) SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO(G)PERYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO(K)FLUORANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRYSENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ(AH),ANTHRACENE SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUORANTHENE BED MAT DRY WGT REC (UG/KG) (49466) | INDENO(123-CD)PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) |
| AUG | | | | | | | | | | | | | | |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | <50 | <50 | <50 | <50 | E10 | M | M | M | M | M | E10 | E10 | E10 | E10 |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

RARITAN RIVER BASIN

241

01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403) | NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | |
|--------------|--|---|---|--|---|--|---|---|---|---|---|--|--|--|
| AUG 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 21... | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <5 | <50 | <50 | <50 | <50 | <50 | |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | |
| FEB 15... | 0900 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |
| DATE | TIME | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
| FEB 15... | | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | |
| FEB 15... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

RARITAN RIVER BASIN

01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD | ALA- CHLOR, WATER, DISS, | ALPHA BHC DIS- | ATRA- ZINE, WATER, DISS, | BEN- FLUR- ALIN WAT FLT | CAR- BARYL WATER FLTRD | CARBO- FURAN WATER FLTRD | CHLOR- PYRIFOS DIS- | CYANA- ZINE, WATER, DISS, | DCPA WATER FLTRD | DEETHYL ATRA- ZINE, WATER, DISS, | DI- AZINON, DIS- | |
|--------------|------|--|------------------------------------|---------------------------------|------------------------------------|----------------------------------|------------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|--|------------------------------------|--|
| | | REC | REC, | SOLVED | REC | GF, REC | GF, REC | GF, REC | SOLVED | REC | GF, REC | REC | SOLVED | |
| | | (UG/L) (49260) | (UG/L) (46342) | (UG/L) (34253) | (UG/L) (39632) | (UG/L) (82673) | (UG/L) (82680) | (UG/L) (82674) | (UG/L) (38933) | (UG/L) (04041) | (UG/L) (82682) | (UG/L) (04040) | (UG/L) (39572) | |
| MAY 21... | 1010 | <.004 | <.002 | <.005 | .008 | <.010 | E.277 | <.020 | <.005 | <.018 | <.003 | E.003 | <.005 | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED | EPTC WATER FLTRD | LINDANE DIS- | LIN- URON WATER FLTRD | MALA- THION, DIS- | METHYL AZIN- PHOS WAT FLT | METO- LACHLOR WATER | METRI- BUZIN SENCOR WATER | MOL- INATE WATER FLTRD | NAPROP- AMIDE WATER FLTRD | P,P' DDE DISSOLV | PENDI- METH- ALIN WAT FLT | PRO- METON, WATER, DISS, REC |
| | | (UG/L) (39381) | GF, REC (UG/L) (82668) | SOLVED (UG/L) (39341) | GF, REC (UG/L) (82666) | SOLVED (UG/L) (39532) | GF, REC (UG/L) (82686) | DISSOLV (UG/L) (39415) | DISSOLV (UG/L) (82630) | GF, REC (UG/L) (82671) | GF, REC (UG/L) (82684) | DISSOLV (UG/L) (34653) | GF, REC (UG/L) (82683) | (UG/L) (04037) |
| | | MAY 21... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.011 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DATE | TIME | SI- MAZINE, WATER, DISS, REC | TEBU- THIURON WATER FLTRD | TER- BACIL WATER FLTRD | THIO- BENCARB WATER FLTRD | TRI- FLUR- ALIN WAT FLT | | | | | | | | |
| | | (UG/L) (04035) | GF, REC (UG/L) (82670) | GF, REC (UG/L) (82665) | GF, REC (UG/L) (82681) | GF, REC (UG/L) (82661) | | | | | | | | |
| | | MAY 21... | <.011 | <.016 | E.014 | <.005 | <.009 | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| AUG 01... | 0945 | 330 | 100 | 310 | AUG 15... | 0930 | 330 | 400 | 470 |
| 08... | 0940 | 170 | 200 | 470 | 22... | 0930 | 170 | 200 | 410 |
| | | | | | 29... | 0900 | 330 | 200 | 700 |

E Estimated value.

< Actual value is known to be less than the value shown.

01407617 WHALE POND BROOK AT LARCHWOOD AVENUE, AT OAKHURST, NJ

LOCATION.--Lat 40°16'31", long 74°00'37", Monmouth County, Hydrologic Unit 02030104, at bridge on Larchwood Avenue at Oakhurst, 0.6 mi upstream of Lake Takanassee, and 1.1 mi south of West Long Branch.

DRAINAGE AREA.--5.25 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|--|---|--|---|--|--|--|---|--|---|
| NOV 15... | 0945 | -- | .073 | .064 | 761 | 79 | 9.0 | 6.8 | 134 | -- | 9.5 | 30 | 9.10 | |
| FEB 07... | 0930 | -- | .026 | .020 | 770 | 83 | 10.7 | 6.2 | 465 | 3.5 | 5.0 | 39 | 11.5 | |
| MAY 17... | 1000 | 11 | .018 | .013 | 766 | 93 | 9.9 | 6.7 | 157 | 15.0 | 13.0 | 36 | 10.9 | |
| AUG 28... | 1000 | 7.0 | .075 | .060 | 762 | 75 | 7.2 | 6.6 | 149 | 26.0 | 17.5 | 39 | 12.1 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AM- MONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AM- MONIA TOTAL (MG/L AS N) (00610) |
| NOV 15... | 1.83 | 2.26 | 8.5 | 14 | 15.8 | E.1 | 13.4 | 14.1 | 83 | 75 | <.030 | .12 | <.03 | |
| FEB 07... | 2.52 | 2.96 | 62.8 | 5 | 115 | <.2 | 9.9 | 15.5 | 247 | 225 | .050 | E.09 | .06 | |
| MAY 17... | 2.14 | 2.33 | 10.9 | 16 | 22.5 | <.2 | 14.1 | 14.6 | 118 | 90 | .040 | .14 | .05 | |
| AUG 28... | 2.01 | 2.65 | 9.1 | 20 | 19.7 | <.2 | 15.0 | 12.6 | 100 | 85 | .040 | .18 | .05 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR- TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 15... | .38 | .460 | <.003 | .58 | .84 | .053 | E.003 | .024 | .7 | <.1 | 2.1 | .7 | E1.3 | |
| FEB 07... | .30 | .498 | <.003 | -- | .80 | .123 | E.002 | .049 | 2.0 | <.1 | 1.3 | 2.0 | <1.0 | |
| MAY 17... | .24 | .560 | <.003 | .70 | .80 | .050 | .004 | .038 | .7 | <.1 | .97 | .7 | <1.0 | |
| AUG 28... | .21 | E.574 | .004 | -- | -- | .046 | E.003 | .033 | .6 | <.1 | 1.5 | .6 | E1.3 | |
| DATE | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530) | | | | | | |
| NOV 15... | | | | | | -- | 27 | 10 | | | | | | |
| FEB 07... | | | | | | -- | 18 | 12 | | | | | | |
| MAY 17... | | | | | | .700 | 15 | 2 | | | | | | |
| AUG 28... | | | | | | .500 | 25 | 3 | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

WHALE POND BROOK BASIN

01407617 WHALE POND BROOK AT LARCHWOOD AVENUE, AT OAKHURST, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | |
|--------------|------|--|--|---|---|---|---|---|---|---|--|--|--|---|
| AUG 28... | 1000 | -- | -- | -- | -- | -- | -- | <2 | 31.0 | .17 | 27 | .14 | <1 | |
| 28... | 1000 | 6.80 | 190 | .6 | 910 | 5.1 | <.2 | -- | -- | -- | -- | -- | -- | |
| DATE | TIME | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) |
| AUG 28... | .7 | 1520 | <1 | 55 | <.01 | 7 | <.4 | <.05 | 30 | -- | -- | -- | -- | |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | .3 | 46 | 2.1 | |
| DATE | TIME | COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS MN) (01053) | MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G AS SE) (01148) | ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH- THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH- THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) |
| AUG 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 28... | 4 | 29000 | 23 | 23 | <.01 | 9.0 | <1 | 70 | E30 | <50 | E20 | M | M | |
| DATE | TIME | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO(G HI) PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS, <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403) |
| AUG 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 28... | E10 | E50 | 210 | 220 | 240 | 150 | 230 | 280 | E40 | 600 | 170 | <50 | <50 | |
| DATE | TIME | NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) |
| AUG 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 28... | M | <50 | M | <50 | <50 | E4 | <50 | E20 | 280 | <50 | E10 | 440 | 2 | |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | |
| FEB 07... | 0930 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

WHALE POND BROOK BASIN

245

01407617 WHALE POND BROOK AT LARCHWOOD AVENUE, AT OAKHURST, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHER ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|--------------|--|---|---|--|---|---|---|---|---|---|--|---|--|
| FEB 07... | <.10 | <.2 | <.10 | .80 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | 1.3 |
| DATE | CHLORO- BENZENE TOTAL (UG/L) (34423) | METHYL CHLO- RIDE TOTAL (UG/L) (34423) | METHYL CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | |
| FEB 07... | | | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | 5.88 | <.20 | <.2 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|------|------|---|---|---|---|---|---|---|--|---|---|--|---|---|
| | | MAY 17... | 1000 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER FLTRD 0.7 U DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER FLTRD 0.7 U DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | MAY 17... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DATE | TIME | | | | DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
| | | | | | | MAY 17... | <.011 | <.016 | <.034 | <.005 | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| AUG 02... | 0830 | 230 | 200 | 320 | AUG 23... | 0900 | 230 | 400 | 640 |
| 09... | 0835 | 490 | 200 | 580 | 30... | 0840 | 230 | 200 | 330 |

< Actual value is known to be less than the value shown.

SHARK RIVER BASIN

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ

LOCATION.--Lat 40°12'13", long 74°03'58", Monmouth County, Hydrologic Unit 02030104, 60 ft downstream from dam on Jumping Brook Reservoir, 0.8 mi upstream from mouth, and 1.4 mi west of Neptune City.

DRAINAGE AREA.--6.46 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | |
|-----------|------|--|--|---|---|--|--|---|--|--|---|---|---|--|
| | | | | | | | | | | | | | | |
| NOV 29... | 1100 | 8.6 | -- | .172 | .134 | 764 | 85 | 10.4 | 6.5 | 185 | 14.0 | 7.0 | 40 | |
| FEB 08... | 1020 | 8.2 | -- | .145 | .112 | 774 | 93 | 12.8 | 6.7 | 552 | 7.0 | 3.0 | 45 | |
| MAY 01... | 0910 | 4.5 | -- | .113 | .088 | 765 | 94 | 9.9 | 6.7 | 257 | 25.5 | 13.0 | 42 | |
| AUG 14... | 0900 | 14 | 34 | .284 | .220 | 757 | 91 | 7.8 | 6.4 | 158 | 24.5 | 22.5 | 28 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC UNFLTRD LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 29... | 12.2 | 2.46 | 2.92 | 14.0 | 13 | 21.9 | E.1 | 8.7 | 25.7 | 110 | 97 | .260 | .58 | |
| FEB 08... | 13.7 | 2.73 | 3.31 | 78.1 | 8 | 139 | <.2 | 6.1 | 23.8 | 290 | 273 | .130 | .28 | |
| MAY 01... | 12.3 | 2.71 | 2.63 | 28.8 | 10 | 48.1 | <.2 | 7.1 | 25.1 | 149 | 135 | .070 | .21 | |
| AUG 14... | 8.23 | 1.74 | 2.77 | 15.2 | 6 | 23.6 | <.2 | 5.1 | 21.6 | 87 | 84 | .080 | .41 | |
| DATE | | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + NO2+NO3 DIS-SOLVED (MG/L AS N) (00625) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 29... | .28 | .67 | .191 | <.003 | .77 | .86 | .132 | <.050 | <.060 | 1.8 | <.1 | 4.1 | 1.8 | |
| FEB 08... | .12 | .35 | .385 | .004 | .66 | .74 | .101 | .004 | .023 | 1.5 | <.1 | 3.7 | 1.5 | |
| MAY 01... | .08 | .26 | .413 | <.003 | .62 | .68 | .124 | E.002 | .018 | 1.1 | <.1 | 3.0 | 1.1 | |
| AUG 14... | .09 | .63 | .436 | .004 | .85 | 1.1 | .172 | .016 | .071 | 1.7 | <.1 | 6.7 | 1.7 | |
| | | | | | DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | |
| | | | | | NOV 29... | E1.5 | -- | 39 | 5 | | | | | |
| | | | | | FEB 08... | <1.0 | -- | 17 | 8 | | | | | |
| | | | | | MAY 01... | E1.7 | 9.60 | 25 | 10 | | | | | |
| | | | | | AUG 14... | E1.4 | 10.9 | 34 | 6 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

SHARK RIVER BASIN

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 02... | 0905 | 230 | 200 | 350 | 23... | 0930 | 700 | 900 | 210 |
| 09... | 0910 | 170 | 200 | 270 | 30... | 0910 | 230 | 400 | 70 |

WRECK POND BROOK BASIN

01407806 HANNABRAND BROOK AT OLD MILL ROAD, NEAR SPRING LAKE HEIGHTS, NJ

LOCATION.--Lat 40°08'36", long 74°03'14", Monmouth County, Hydrologic Unit 02030104, at bridge on Old Mill Road, 650 ft upstream from mouth, and 1.0 mi southwest of Spring Lake Heights.

DRAINAGE AREA.--3.13 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

REMARK.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Field data and sample for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|---|--|---|--|---|---|--|--|--|--|---|--|---|--|
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| NOV 14... | 1000 | -- | .139 | .111 | 761 | 88 | 9.6 | 6.5 | 148 | -- | 11.5 | 33 | 7.83 | |
| FEB 01... | 1000 | -- | .129 | .103 | 763 | 89 | 11.4 | 7.3 | 227 | 5.0 | 5.0 | 34 | 8.36 | |
| MAY 17... | 1000 | 1.9 | .091 | .072 | 765 | 89 | 9.3 | 6.8 | 180 | 18.0 | 13.5 | 36 | 8.72 | |
| AUG 14... | 0900 | 17 | .345 | .269 | 760 | 83 | 7.3 | 6.1 | 130 | 23.5 | 21.5 | 24 | 5.81 | |
| DATE | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AM- MONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AM- MONIA TOTAL (MG/L AS N) (00610) | |
| | | | | | | | | | | | | | | |
| NOV 14... | 3.27 | 2.53 | 11.1 | 13 | 18.6 | <.2 | 7.1 | 15.1 | 81 | 79 | .080 | .28 | .07 | |
| FEB 01... | 3.24 | 2.44 | 24.4 | 11 | 41.9 | <.2 | 5.9 | 15.2 | 113 | 115 | .100 | .18 | .14 | |
| MAY 17... | 3.54 | 2.09 | 15.9 | 12 | 28.4 | <.2 | 5.6 | 16.0 | 121 | 94 | .050 | .24 | .05 | |
| AUG 14... | 2.28 | 2.55 | 13.2 | 9 | 21.1 | <.2 | 4.7 | 11.5 | 76 | 69 | .060 | .42 | .06 | |
| DATE | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, PAR- TICULATE WAT FLT SUSP TOTAL (MG/L AS N) (00600) | NITRO- GEN, PAR- TICULATE WAT FLT SUSP TOTAL (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | |
| | | | | | | | | | | | | | | |
| NOV 14... | .26 | 1.26 | <.003 | 1.5 | 1.5 | .033 | .007 | .014 | .5 | <.1 | 3.2 | .5 | E1.3 | |
| FEB 01... | .30 | 1.59 | <.003 | 1.8 | 1.9 | .080 | .006 | .020 | .6 | <.1 | 3.0 | .6 | E1.3 | |
| MAY 17... | .34 | 1.40 | .004 | 1.6 | 1.7 | .067 | .006 | .021 | .6 | <.1 | 2.1 | .6 | E1.0 | |
| AUG 14... | .59 | .537 | <.003 | .95 | 1.1 | .104 | .020 | .067 | 1.3 | <.1 | 8.7 | 1.3 | E1.2 | |
| DATE | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| NOV 14... | -- | 17 | 4 | | | | | | | | | | | |
| FEB 01... | -- | E11 | <1 | | | | | | | | | | | |
| MAY 17... | 3.00 | 23 | <1 | | | | | | | | | | | |
| AUG 14... | 5.70 | 24 | 5 | | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

WRECK POND BROOK BASIN

249

01407806 HANNABRAND BROOK AT OLD MILL ROAD, NEAR SPRING LAKE HEIGHTS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN,NH4 + ORG. TOT IN (MG/KG AS N) (00626) | NITRO- GEN,NH4 TOT IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT. MAT. (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | | | |
|-------|-------|----------------|--|---|--|---|---|---|--|--|--|--|--|---|--|
| AUG | 14... | 0800 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | | | |
| 14... | 0900 | ENVIRONMENTAL | -- | -- | -- | -- | -- | -- | <2 | 33.7 | .13 | 23 | | | |
| 14... | 0900 | BED MATERIAL | 6.85 | 70 | .4 | 100 | 42 | <.2 | -- | -- | -- | -- | | | |
| | | | | | | | | | | | | | | | |
| DATE | TIME | SAMPLE TYPE | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01049) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71890) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL (UG/L AS SE) (01147) | |
| AUG | 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 14... | .23 | <1 | <.2 | 3.8 | 1050 | <.08 | 3 | 40 | <.01 | .03 | <.06 | 2 | <.4 | -- | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| | | | | | | | | | | | | | | | |
| DATE | TIME | SAMPLE TYPE | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) | COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (01053) | MERCURY FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) |
| AUG | 14... | -- | -- | <1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | <.05 | -- | -- | 36 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | -- | -- | -- | -- | <1 | .1 | 2.4 | .4 | 2 | 1100 | 190 | 10 | <.01 | .9 | -- |
| | | | | | | | | | | | | | | | |
| DATE | TIME | SAMPLE TYPE | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) (01148) | ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH- THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH- THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ (A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO (G HI) PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) |
| AUG | 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | <1 | 8 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | 70 | 80 | 70 | 60 | 60 |
| | | | | | | | | | | | | | | | |
| DATE | TIME | SAMPLE TYPE | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPTHAL ENE, 12 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49403) | NAPTHAL ENE, 16 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPTHAL ENE, 26 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) |
| AUG | 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | 70 | 100 | <50 | 180 | 60 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <5 |
| | | | | | | | | | | | | | | | |
| DATE | TIME | SAMPLE TYPE | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. FALL DIAM. % FINER THAN .004 MM (80157) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) | | | | | |
| AUG | 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | <50 | <50 | 100 | <50 | <50 | 130 | <1 | 1 | | | | | | | |

< Actual value is known to be less than the value shown.

WRECK POND BROOK BASIN

01407806 HANNABRAND BROOK AT OLD MILL ROAD, NEAR SPRING LAKE HEIGHTS, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1-TRI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHYL-ENE | 1,2-DI-CHLORO-ETHANE | 1,2-DI-CHLORO-PROPANE | TRANS-1,2-DI-CHLORO-ETHENE | BENZENE 1,3-DI-CHLORO-WATER | BENZENE 1,4-DI-CHLORO-WATER | BENZENE O-DI-CHLORO-WATER | BENZENE TOTAL (UG/L) (34030) | BROMO-FORM TOTAL (UG/L) (32104) | CARBON TETRA-CHLO-RIDE TOTAL (UG/L) (32102) | |
|-----------|------|-------------------------|------------------------------------|----------------------------|-------------------------|------------------------------|---|-----------------------------------|--|--|------------------------------------|--|--|--|
| | | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (32103) | TOTAL (UG/L) (34541) | TOTAL (UG/L) (34546) | UNFLTRD REC (UG/L) (34566) | UNFLTRD REC (UG/L) (34571) | UNFLTRD REC (UG/L) (34536) | | | | |
| | | | | | | | | | | | | | | |
| FEB 01... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |
| DATE | TIME | CHLORO-DI-BROMO-METHANE | CHLORO-BROMO-FORM | CIS-1,2-DI-CHLORO-ETHENE | BROMO-DI-CHLORO-METHANE | DI-CHLORO-DI-FLUORO-METHANE | DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER | ETHER ETHYL WATER UNFLTRD RECOVER | ETHER TERT-BUTYL ETHYL UNFLTRD RECOVER | ETHER TERT-PENTYL METHYL UNFLTRD RECOVER | ETHYL-BENZENE TOTAL (UG/L) (34371) | FREON-113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032) | |
| | | TOTAL (UG/L) (34301) | TOTAL (UG/L) (32105) | TOTAL (UG/L) (32106) | TOTAL (UG/L) (77093) | TOTAL (UG/L) (32101) | TOTAL (UG/L) (34668) | (UG/L) (81577) | (UG/L) (81576) | (UG/L) (50004) | (UG/L) (50005) | | | |
| | | | | | | | | | | | | | | |
| FEB 01... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | .5 | |
| DATE | TIME | METHYL-ENE-CHLO-RIDE | META/PARA-XYLENE WATER UNFLTRD REC | O-XYLENE WATER WHOLE TOTAL | STYRENE TOTAL | TETRA-CHLORO-ETHYL-ENE TOTAL | TOLUENE TOTAL | TRI-CHLORO-ETHYL-ENE TOTAL | TRI-CHLORO-FLUORO-METHANE TOTAL | VINYL-CHLO-RIDE TOTAL | BENZENE TOTAL (UG/L) (34030) | BROMO-FORM TOTAL (UG/L) (32104) | CARBON TETRA-CHLO-RIDE TOTAL (UG/L) (32102) | |
| | | TOTAL (UG/L) (34423) | TOTAL (UG/L) (85795) | TOTAL (UG/L) (77135) | TOTAL (UG/L) (77128) | TOTAL (UG/L) (34475) | TOTAL (UG/L) (34010) | TOTAL (UG/L) (39180) | TOTAL (UG/L) (34488) | TOTAL (UG/L) (39175) | | | | |
| | | | | | | | | | | | | | | |
| FEB 01... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DISS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|--------------|-------|--|---|--|---|---|---|--|---|---|---|--|---|---|
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| MAY 17... | 1000 | <.004 | <.002 | <.005 | E.006 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.005 | .026 | |
| DATE | | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| MAY 17... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 | E.011 | |
| DATE | | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| MAY 17... | | | | | .023 | <.016 | <.034 | <.005 | <.009 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

WRECK POND BROOK BASIN

01407806 HANNABRAND BROOK AT OLD MILL ROAD, NEAR SPRING LAKE HEIGHTS, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 02... | 0950 | 260 | 300 | 370 | 23... | 1000 | 110 | <100 | 70 |
| 09... | 0930 | 490 | 200 | 600 | 30... | 0940 | 330 | 300 | 520 |

< Actual value is known to be less than the value shown.

MANASQUAN RIVER BASIN

01408000 MANASQUAN RIVER AT SQUANKUM, NJ

LOCATION.--Lat 40°09'41", Long 74°09'18", revised, Monmouth County, Hydrologic Unit 02040301, 50 ft upstream from northbound bridge on County Highway 547 (Squankum Park Road) in Squankum, and 0.4 mi downstream from Marsh Bog Brook.

DRAINAGE AREA.--44.0 mi².

PERIOD OF RECORD.--Water years 1963-81, 1991 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1969 to September 1974.

pH: July 1969 to September 1974.

WATER TEMPERATURE: July 1969 to September 1974.

DISSOLVED OXYGEN: August 1969 to September 1974.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTDR (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|---|---|--|--|--|---|---|---|---|
| NOV 15... | 1000 | 51 | -- | .108 | .086 | 761 | 80 | 9.4 | 7.0 | 188 | -- | 8.5 | 58 | |
| FEB 28... | 0900 | 70 | -- | .043 | .034 | 764 | 85 | 10.6 | 7.2 | 295 | 1.0 | 6.0 | 66 | |
| MAY 16... | 1000 | 33 | 7.3 | .048 | .039 | 762 | 91 | 9.6 | 7.5 | 240 | 20.0 | 13.0 | 81 | |
| AUG 15... | 0900 | 28 | 9.4 | .105 | .081 | 762 | 88 | 8.0 | 7.4 | 206 | 23.0 | 20.0 | 68 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTDR TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| NOV 15... | 18.8 | 2.76 | 3.41 | 8.0 | 27 | 18.8 | .2 | 14.9 | 26.1 | 118 | 110 | <.030 | .18 | |
| FEB 28... | 20.8 | 3.40 | 2.59 | 27.2 | 21 | 49.6 | E.1 | 14.2 | 32.5 | 166 | 165 | .030 | .12 | |
| MAY 16... | 26.8 | 3.40 | 2.75 | 10.6 | 39 | 23.6 | .2 | 14.1 | 31.7 | 151 | 138 | <.030 | .17 | |
| AUG 15... | 22.8 | 2.60 | 3.08 | 8.9 | 38 | 17.4 | E.1 | 12.8 | 26.7 | 124 | 119 | <.030 | .24 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORGANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689) |
| NOV 15... | <.03 | .22 | .300 | <.003 | .48 | .52 | .088 | .004 | .063 | 1.0 | <.1 | 3.4 | 1.0 | |
| FEB 28... | .04 | .10 | .578 | <.003 | .70 | .67 | .040 | E.002 | .034 | .5 | <.1 | 1.4 | .5 | |
| MAY 16... | <.03 | .48 | .333 | <.003 | .50 | .82 | .076 | E.002 | .031 | .5 | <.1 | 1.4 | .5 | |
| AUG 15... | <.03 | .26 | .310 | <.003 | .55 | .57 | .048 | .011 | .065 | .6 | <.1 | 2.9 | .6 | |

E Estimated value.

< Actual value is known to be less than the value shown.

MANASQUAN RIVER BASIN

01408000 MANASQUAN RIVER AT SQUANKUM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|--------------|---|---|---|--|
| NOV 15... | 2.8 | -- | 26 | 8 |
| FEB 28... | <1.0 | -- | 19 | 5 |
| MAY 16... | E1.3 | 8.80 | 25 | 5 |
| AUG 15... | <1.0 | 7.80 | 30 | 10 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| AUG 02... | 0945 | 230 | <100 | 150 | AUG 23... | 0900 | 790 | 300 | 280 |
| 09... | 0920 | 490 | 100 | 530 | 30... | 0937 | 2200 | <100 | 310 |

E Estimated value.

< Actual value is known to be less than the value shown.

MANASQUAN RIVER BASIN

01408009 MINGAMAHONE BROOK NEAR EARLE, NJ

LOCATION.--Lat 40°12'45", long 74°10'07", Monmouth County, Hydrologic Unit 02040301, at bridge on Cranberry Bog Road, 0.6 mi upstream from Branch Mingamahone Brook, and 1.7 mi west of Earle.

DRAINAGE AREA.--3.32 mi².

PERIOD OF RECORD.--Water years 1971-74, 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | |
|-----------|------|--|--|---|---|--|--|--|--|---|---|---|--|--|
| NOV 14... | 1310 | 3.0 | -- | .436 | .364 | 752 | 75 | 8.4 | 6.6 | 128 | -- | 10.0 | 33 | |
| FEB 08... | 1300 | 10 | -- | .171 | .137 | 772 | 83 | 11.5 | 6.0 | 102 | 4.0 | 2.5 | 21 | |
| MAY 01... | 1020 | 4.5 | -- | .305 | .258 | 764 | 79 | 8.4 | 6.4 | 125 | 26.5 | 13.0 | 33 | |
| AUG 13... | 1140 | 2.5 | 59 | .249 | .205 | 760 | 76 | 7.0 | 6.2 | 127 | 27.0 | 19.5 | 38 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONTA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 14... | 10.6 | 1.52 | 1.94 | 5.6 | 12 | 11.8 | <.2 | 15.8 | 17.6 | 86 | 72 | <.030 | .14 | |
| FEB 08... | 6.09 | 1.38 | 1.28 | 6.2 | 4 | 11.3 | E.1 | 9.7 | 16.4 | 70 | 55 | .050 | E.09 | |
| MAY 01... | 10.4 | 1.60 | 1.90 | 6.5 | 10 | 12.0 | E.1 | 14.0 | 19.8 | 84 | 72 | .030 | .14 | |
| AUG 13... | 12.7 | 1.50 | 1.77 | 5.4 | 20 | 10.5 | <.2 | 16.7 | 16.4 | 93 | 78 | .060 | .20 | |
| DATE | | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | |
| NOV 14... | <.03 | .26 | .040 | <.003 | .18 | .30 | .382 | .012 | .097 | 12 | <.1 | 3.9 | 12 | |
| FEB 08... | .03 | .13 | .055 | <.003 | -- | .19 | .054 | .005 | .032 | .8 | <.1 | 3.6 | .8 | |
| MAY 01... | <.03 | .22 | E.019 | <.003 | -- | -- | .950 | .004 | .042 | 15 | <.1 | 2.9 | 15 | |
| AUG 13... | .09 | .32 | .043 | <.003 | .24 | .36 | .137 | E.002 | .065 | 3.1 | <.1 | 3.5 | 3.1 | |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|----|
| NOV 14... | <1.0 | -- | 16 | 30 |
| FEB 08... | 2.2 | -- | E13 | 3 |
| MAY 01... | E1.4 | 1.10 | 15 | 31 |
| AUG 13... | E1.6 | 1.10 | 24 | 21 |

E Estimated value.

< Actual value is known to be less than the value shown.

MANASQUAN RIVER BASIN

01408009 MINGAMAHONE BROOK NEAR EARLE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 02... | 1015 | 220 | 200 | 50 | 23... | 1035 | 790 | 500 | 100 |
| 09... | 0950 | 340 | 100 | 190 | 30... | 1000 | 330 | 300 | 120 |

METEDECONK RIVER BASIN

01408100 NORTH BRANCH METEDECONK RIVER AT LAKEWOOD, NJ

LOCATION.--Lat 40°06'35", long 74°13'10", Ocean County, Hydrologic Unit 02040301, at highway bridge on U.S. Route 9, 0.3 mi north of County Line Road in Lakewood, and 3.6 mi upstream from Muddy Ford Brook.

DRAINAGE AREA.--19.4 mi².

PERIOD OF RECORD.--Water years 1959-63, 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLT/RTD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) |
|-----------|------|---|---|---|---|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 14... | 1010 | 19 | -- | .288 | .227 | 755 | 80 | 9.0 | 6.5 | 124 | 11.5 | 10.0 | 28 |
| FEB 07... | 0900 | 68 | -- | .318 | .246 | 766 | 86 | 11.9 | 6.3 | 342 | 4.5 | 2.0 | 27 |
| MAY 01... | 1300 | 20 | -- | .240 | .189 | 765 | 102 | 10.1 | 7.1 | 161 | 33.0 | 16.0 | 32 |
| AUG 14... | 1140 | 33 | 9.6 | .297 | .232 | 757 | 66 | 5.7 | 6.6 | 128 | 30.0 | 22.5 | 27 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|--|
| NOV 14... | 8.41 | 1.59 | 2.23 | 9.3 | 11 | 17.2 | <.2 | 10 | 12.2 | 81 | 69 | <.030 | .28 |
| FEB 07... | 8.20 | 1.56 | 1.71 | 50.3 | 5 | 87.2 | <.2 | 5.6 | 11.3 | 192 | 170 | .070 | .23 |
| MAY 01... | 9.82 | 1.85 | 2.32 | 15.9 | 13 | 28.8 | <.2 | 5.6 | 13.5 | 102 | 89 | <.030 | .22 |
| AUG 14... | 8.29 | 1.51 | 2.13 | 10.9 | 10 | 17.9 | <.2 | 6.7 | 14.9 | 79 | 70 | .030 | .33 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|---|---|---|---|--------------------------------------|--|--|---------------------------------------|---|---|--|--|
| NOV 14... | <.03 | .62 | .253 | <.003 | .53 | .87 | .052 | .014 | .058 | 1.2 | <.1 | 6.3 | 1.2 |
| FEB 07... | <.03 | .33 | .303 | <.003 | .53 | .63 | .056 | .010 | .024 | .6 | <.1 | 7.5 | .5 |
| MAY 01... | <.03 | .32 | .646 | <.003 | .86 | .96 | .069 | .012 | .042 | .8 | <.1 | 4.7 | .8 |
| AUG 14... | .08 | .46 | .416 | <.003 | .75 | .87 | .075 | .016 | .055 | .9 | <.1 | 7.0 | .9 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, METHOD 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|---|--|---------------------------------------|--|
|------|---|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|----|
| NOV 14... | <1.0 | -- | 17 | 12 |
| FEB 07... | <1.0 | -- | E13 | 6 |
| MAY 01... | E1.8 | 5.40 | 24 | 9 |
| AUG 14... | <1.0 | 2.00 | 28 | <1 |

E Estimated value.

< Actual value is known to be less than the value shown.

METEDECONK RIVER BASIN

01408100 NORTH BRANCH METEDECONK RIVER AT LAKEWOOD, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 0730 | 5400 | 4500 | 2800 | 06... | 0830 | 790 | 100 | 380 |
| 30... | 0830 | 330 | 300 | 280 | 13... | 0815 | 460 | <100 | 260 |
| | | | | | 19... | 0810 | 2200 | 1400 | 530 |

< Actual value is known to be less than the value shown.

TOMS RIVER BASIN

01408300 TOMS RIVER AT WHITESVILLE, NJ

LOCATION.--Lat 40°03'42", long 74°16'29", Ocean County, Hydrologic Unit 02040301, at bridge on South Hope Chapel Road, 0.5 mi south of Whitesville, 0.6 mi downstream of Dove Mill Lake, and 3.7 mi southwest of Lakewood.

DRAINAGE AREA.--45.2 mi².

PERIOD OF RECORD.--December 2000 to September 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | | |
|--------------|------|---|--|--|--|---|---|---|--|--|--|--|--|---|------|
| | | DEC 13... | 0900 | -- | .220 | .173 | 778 | 89 | 12.3 | 5.8 | 95 | -4.0 | 3.0 | 16 | 4.08 |
| | | FEB 08... | 0900 | -- | .412 | .321 | 775 | 86 | 12.1 | 5.5 | 117 | 3.0 | 2.0 | 13 | 3.32 |
| MAY 23... | 0900 | 7.8 | .403 | .319 | 758 | 82 | 8.3 | 5.8 | 101 | 14.0 | 14.5 | 15 | 3.96 | | |
| SEP 13... | 0900 | 3.8 | .173 | .138 | 764 | 80 | 7.9 | 6.3 | 105 | 20.5 | 16.0 | 19 | 5.11 | | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | |
| DEC 13... | 1.29 | 2.01 | 8.2 | 4 | 14.1 | <.2 | 6.7 | 9.6 | 62 | 50 | .050 | .18 | .04 | | |
| FEB 08... | 1.16 | 1.06 | 12.1 | <1 | 20.6 | <.2 | 4.8 | 9.4 | 76 | -- | .120 | .22 | .05 | | |
| MAY 23... | 1.19 | 1.51 | 10.6 | 4 | 18.0 | <.2 | 4.7 | 9.0 | 80 | 52 | .040 | .40 | .03 | | |
| SEP 13... | 1.49 | 1.85 | 10.2 | 7 | 18.0 | <.2 | 6.5 | 8.3 | 63 | 58 | <.030 | .23 | <.03 | | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | |
| DEC 13... | .30 | .460 | <.003 | .64 | .76 | .121 | .010 | .018 | .9 | <.1 | 5.0 | .9 | E1.9 | | |
| FEB 08... | .25 | .245 | <.003 | .47 | .49 | .090 | .006 | .021 | 1.1 | <.1 | 9.2 | 1.1 | E1.9 | | |
| MAY 23... | .67 | .277 | <.003 | .67 | .94 | .151 | .015 | .061 | 2.0 | <.1 | 8.1 | 2.0 | 2.2 | | |
| SEP 13... | .25 | .438 | <.003 | .67 | .69 | <.022 | .014 | .031 | .6 | <.1 | 3.5 | .6 | E1.9 | | |
| DATE | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | | |
| DEC 13... | -- | | | | | | 17 | <1 | | | | | | | |
| FEB 08... | -- | | | | | | E10 | 1 | | | | | | | |
| MAY 23... | | | | | | 6.30 | 13 | 13 | | | | | | | |
| SEP 13... | | | | | | .800 | 15 | 4 | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

TOMS RIVER BASIN

259

01408300 TOMS RIVER AT WHITESVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | |
|--------------|------|--|---|--|---|---|--|---|---|---|---|--|--|--|
| SEP 13... | 0900 | -- | -- | -- | -- | -- | -- | <2 | 35.9 | E.04 | 16 | .06 | <1 | |
| SEP 13... | 0900 | 6.00 | 30 | .5 | 110 | 1.2 | <.2 | -- | -- | -- | -- | -- | -- | |
| DATE | TIME | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CR) (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) |
| SEP 13... | E.4 | 610 | <1 | 19 | <.01 | 1 | <.4 | <.05 | 5 | -- | -- | -- | -- | |
| SEP 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- | <1 | <.03 | 2.1 | .2 | |
| DATE | TIME | COPPER, FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/L AS FE) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS MN) (01053) | MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS NI) (01068) | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G AS SE) (01148) | ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1-METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH- THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH- THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) |
| SEP 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| SEP 13... | <2 | 1400 | 3.3 | 6.9 | <.01 | .9 | <1 | 6 | <50 | <50 | <50 | <50 | <50 | |
| DATE | TIME | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS, <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPHTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403) |
| SEP 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| SEP 13... | <50 | <50 | M | <50 | M | M | M | M | <50 | M | E10 | <50 | <50 | |
| DATE | TIME | NAPHTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPHTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPHTHAL ENE, 2 ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/L AS PC) (39519) | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN- THRENE 1-METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) |
| SEP 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| SEP 13... | <50 | <50 | <50 | <50 | <50 | <5 | <50 | <50 | <50 | <50 | <50 | M | <1 | |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | |
| FEB 08... | 0900 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

TOMS RIVER BASIN

01408300 TOMS RIVER AT WHITESVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | CHLORO- BENZENE | CHLORO- DI- BROMO- METHANE | CHLORO- FORM | CIS-1,2 -DI- CHLORO- ETHENE | BROMO- DI- CHLORO- METHANE | DI- CHLORO- DI- FLUORO- METHANE | DI-ISO- PROPYL- ETHER, WATER, | ETHER TERT- BUTYL ETHYL | ETHER TERT- PENTYL METHYL | ETHER TERT- PENTYL METHYL | FREON- 113 WATER | METHYL TERT- BUTYL ETHER |
|--------------|--------------------|-------------------------------------|--|--|---|---|---|----------------------------------|---|--|-----------------------------------|-----------------------------------|
| | TOTAL | TOTAL | TOTAL | TOTAL | TOTAL | TOTAL | UNFLTRD RECOVER | UNFLTRD RECOVER | UNFLTRD RECOVER | UNFLTRD RECOVER | UNFLTRD RECOVER | UNFLTRD REC |
| | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) |
| | (34301) | (32105) | (32106) | (77093) | (32101) | (34668) | (81577) | (81576) | (50004) | (50005) | (34371) | (77652) |
| FEB 08... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.2 |
| DATE | CHLORO- BENZENE | CHLORO- DI- BROMO- METHANE | METHYL PARA- XYLENE CHLORO- RIDE | META/ XYLENE WATER UNFLTRD REC | O- XYLENE WATER WHOLE TOTAL | STYRENE TOTAL | TETRA- CHLORO- ETHYL- ENE TOTAL | TOLUENE TOTAL | TRI- CHLORO- ETHYL- ENE TOTAL | TRI- CHLORO- FLUORO- METHANE TOTAL | VINYL CHLORO- RIDE TOTAL | |
| | | | | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | |
| | | | (34423) | (85795) | (77135) | (77128) | (34475) | (34010) | (39180) | (34488) | (39175) | |
| FEB 08... | | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|--------------|------|--|--|---|--|--|--|--|---|---|--|--|--|---|
| | | | | | | | | | | | | | | |
| MAY 23... | 0900 | E3.63 | E.016 | <.005 | 13.2 | <.010 | E.053 | <.020 | <.005 | <.018 | <.003 | E.401 | E.004 | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U (UG/L) (82686) | METO- LACHLOR WATER FLTRD DISSOLV (UG/L) (39415) | METRI- BUZIN WATER FLTRD DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | | | | | | | | | | | | | |
| MAY 23... | | <.005 | <.007 | E.002 | <.050 | <.027 | <.050 | 2.23 | .007 | <.002 | <.007 | <.005 | <.010 | E.123 |
| DATE | TIME | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82661) | | | | | | | | |
| | | | | | | | | | | | | | | |
| MAY 23... | | | | | 3.99 | <.016 | <.034 | <.005 | <.009 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

TOMS RIVER BASIN

01408300 TOMS RIVER AT WHITESVILLE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 0750 | 9200 | 3000 | 1900 | 06... | 0850 | 110 | <100 | 40 |
| 30... | 0900 | 330 | 300 | 100 | 13... | 0830 | 50 | <100 | 220 |
| | | | | | 19... | 0825 | 3500 | <100 | 250 |

< Actual value is known to be less than the value shown.

TOMS RIVER BASIN

01408500 TOMS RIVER NEAR TOMS RIVER, NJ

LOCATION.--Lat 39°59'11", long 74°13'25", revised, Ocean County, Hydrologic Unit 02040301, at bridge on State Route 527 (Oak Ridge Parkway), 1.9 mi downstream from Union Branch, and 2.6 mi northwest of community of Toms River.

DRAINAGE AREA.--123 mi².

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1974 to September 1981.

WATER TEMPERATURE: November 1963 to May 1966, November 1974 to September 1981.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|--|--|--|--|---|---|---|---|--|
| DEC 14... | 0800 | 151 | -- | .197 | .156 | 764 | 92 | 11.8 | 5.9 | 89 | 8.0 | 5.0 | 12 | |
| FEB 27... | 0900 | 236 | -- | .273 | .212 | 768 | 91 | 11.7 | 5.4 | 90 | 6.0 | 5.0 | 11 | |
| MAY 31... | 0900 | 149 | 3.9 | .302 | .241 | 763 | 85 | 8.6 | 6.0 | 91 | 14.0 | 15.0 | 13 | |
| AUG 16... | 0900 | 139 | 3.5 | .376 | .302 | 765 | 80 | 7.2 | 5.9 | 93 | 23.5 | 21.0 | 13 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AM-MONIA, DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| DEC 14... | 2.79 | 1.34 | 1.34 | 9.3 | 3 | 11.3 | <.2 | 5.7 | 10.6 | 54 | 47 | .270 | .42 | |
| FEB 27... | 2.71 | 1.15 | 1.08 | 9.5 | 2 | 13.7 | <.2 | 4.5 | 9.6 | 54 | 46 | .170 | .31 | |
| MAY 31... | 2.84 | 1.34 | 1.18 | 10.2 | 3 | 13.9 | <.2 | 4.7 | 9.1 | 85 | 48 | .190 | .48 | |
| AUG 16... | 2.99 | 1.42 | 1.59 | 10.0 | 3 | 13.7 | <.2 | 5.3 | 9.8 | 60 | 50 | .140 | .62 | |
| DATE | | NITRO-GEN, AM-MONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689) | |
| DEC 14... | .24 | .51 | .625 | <.003 | 1.0 | 1.1 | .173 | .006 | .020 | 2.0 | <.1 | 4.7 | 1.9 | |
| FEB 27... | .15 | .41 | .472 | <.003 | .78 | .89 | .050 | .005 | .013 | .7 | <.1 | 5.7 | .7 | |
| MAY 31... | .21 | .53 | .581 | .003 | 1.1 | 1.1 | .117 | .012 | .030 | 1.6 | <.1 | 5.2 | 1.6 | |
| AUG 16... | .70 | .57 | .630 | .009 | 1.3 | 1.2 | .114 | .013 | .029 | 1.2 | <.1 | 6.3 | 1.2 | |
| | | | | | | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | |
| | | DEC 14... | | | | <1.0 | -- | 18 | 7 | | | | | |
| | | FEB 27... | | | | E1.1 | -- | 16 | 3 | | | | | |
| | | MAY 31... | | | | E1.8 | 1.80 | 15 | 6 | | | | | |
| | | AUG 16... | | | | E1.9 | 1.50 | 17 | 2 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

TOMS RIVER BASIN

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 0820 | 3500 | 480 | 700 | 06... | 0915 | 40 | 100 | 50 |
| 30... | 0925 | 330 | 100 | 40 | 13... | 0850 | 170 | <100 | 190 |
| | | | | | 19... | 0855 | 2400 | <100 | 450 |

< Actual value is known to be less than the value shown.

TOMS RIVER BASIN

01408702 JAKES BRANCH AT DOVER ROAD, NEAR DOUBLE TROUBLE, NJ

LOCATION.--Lat 39°54'55", long 74°16'26", Ocean County, Hydrologic Unit 02040301, at bridge on Dover Road, 4.7 mi upstream of mouth, 3.0 mi northwest of Double Trouble, and 69 mi southeast of Whiting.

DRAINAGE AREA.--0.25 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) |
|--------------|------|---------------|--|--|--|---|---|--|--|--|---|---|
| NOV 20... | 1000 | ENVIRONMENTAL | -- | .563 | .441 | 761 | 44 | 5.5 | 3.8 | 61 | -- | 6.0 |
| FEB 21... | 1000 | ENVIRONMENTAL | -- | .688 | .537 | 760 | 51 | 6.4 | 4.1 | 77 | 8.5 | 5.5 |
| MAY 17... | 1100 | ENVIRONMENTAL | .7 | .480 | .382 | 760 | 19 | 2.0 | 3.7 | 47 | 15.3 | 12.5 |
| AUG 07... | 1000 | ENVIRONMENTAL | .6 | .239 | .194 | 760 | 21 | 2.0 | 4.1 | 40 | 24.0 | 17.5 |

| DATE | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
|--------------|--|---|---|--|---|--|---|--|--|---|--|--|---|
| NOV 20... | 2 | .26 | .376 | .12 | 3.9 | 6.6 | <.2 | 4.9 | 4.0 | 35 | <.030 | .23 | <.03 |
| FEB 21... | 3 | .36 | .421 | E.08 | 3.8 | 6.2 | <.2 | 3.6 | 6.0 | 40 | <.030 | .21 | .03 |
| MAY 17... | 1 | .16 | .237 | .10 | 3.0 | 6.0 | <.2 | 4.8 | 2.6 | 36 | <.030 | .13 | <.03 |
| AUG 07... | 1 | .11 | .195 | .15 | 2.9 | 5.1 | <.2 | 5.9 | 2.4 | 17 | .030 | .11 | .05 |

| DATE | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY CORR. (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) |
|--------------|---|--|--|---|--|---|--|---|---|--|--|---|---|
| NOV 20... | .29 | <.037 | <.003 | <.022 | E.003 | E.002 | .3 | <.1 | 11 | .3 | <1.0 | -- | E9 |
| FEB 21... | .24 | <.037 | <.003 | <.022 | E.003 | .004 | .5 | <.1 | 14 | .5 | <1.0 | -- | <13 |
| MAY 17... | .17 | <.037 | <.003 | .033 | .004 | .008 | .4 | <.1 | 8.2 | .4 | <1.0 | .700 | E8 |
| AUG 07... | .12 | <.037 | <.003 | .042 | <.004 | <.004 | <.1 | <.1 | 3.8 | <.1 | <1.0 | .100 | E7 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | | | | | |
|-----------------------|--------------|---|---|---|--|---|---|---|---|---|--|---|--|
| | | | DATE | | | | | | | | | | |
| | | | NOV 20... <1 | | | | | | | | | | |
| | | | FEB 21... 1 | | | | | | | | | | |
| | | | MAY 17... <1 | | | | | | | | | | |
| | | | AUG 07... 1 | | | | | | | | | | |
| DATE | TIME | SAMPLE TYPE | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | |
| AUG 07... 07... | 1000 1000 | ENVIRONMENTAL FIELD BLANK | <2 -- | 2.9 -- | <.06 -- | E7 -- | <.04 -- | <1 -- | -- <.2 | 2.5 -- | 240 -- | -- <.08 | |
| DATE | TIME | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY DIS- SOLVED (UG/L AS HG) (71890) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | | |
| AUG 07... 07... | | <1 -- | E2 -- | -- <.01 | <.01 -- | -- <.06 | <1 -- | 2.7 -- | <.05 -- | -- <1 | 6 -- | | |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
| FEB 21... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
| DATE | TIME | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
| FEB 21... | | <.10 | <.2 | .30 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.2 |
| DATE | TIME | METHYL ENE CHLO- RIDE UNFLTRD REC (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER TOTAL (UG/L) (77135) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | STYRENE TOTAL (UG/L) (77128) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | |
| FEB 21... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |

E Estimated value.
< Actual value is known to be less than the value shown.

TOMS RIVER BASIN

01408702 JAKES BRANCH AT DOVER ROAD, NEAR DOUBLE TROUBLE, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|--------------|-------|---|---|---|---|---|---|--|---|--|---|--|---|---|
| DATE | TIME | | | | | | | | | | | | | |
| MAY 17... | 1100 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 | |
| | | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| DATE | | | | | | | | | | | | | | |
| MAY 17... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | |
| | | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
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WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| MAY 23... | 0845 | 20 | <100 | <10 | JUN 06... | 1010 | <20 | <100 | <10 |
| 30... | 1015 | <20 | <100 | <10 | 13... | 1000 | <20 | <100 | 10 |
| | | | | | 19... | 1015 | 220 | <100 | 10 |

< Actual value is known to be less than the value shown.

CEDAR CREEK RIVER BASIN

267

01408830 CEDAR CREEK AT CEDAR CREST, NJ

LOCATION.--Lat 39°53'50", long 74°19'00", Ocean County, Hydrologic Unit 02040301, at bridge on Whiting-Lacey Road in Cedar Crest, 0.2 mi downstream from outlet of Bamber Lake, and 3.7 mi southeast of Keswick Grove.

DRAINAGE AREA.--20.1 mi².

PERIOD OF RECORD.--Water years 1977-78, 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) |
|------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
|------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|

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|-----------|------|----|-----|------|------|-----|----|------|-----|----|------|------|---|
| NOV 02... | 1000 | 30 | -- | .109 | .088 | 760 | 98 | 11.3 | 4.9 | 26 | 8.9 | 9.0 | 4 |
| FEB 07... | 1210 | 57 | -- | .334 | .265 | 767 | 95 | 12.2 | 4.5 | 37 | 10.0 | 5.0 | 4 |
| MAY 09... | 1100 | 45 | 1.6 | .163 | .131 | 767 | 94 | 9.1 | 4.8 | 28 | 18.0 | 17.5 | 3 |
| AUG 15... | 0950 | 47 | .8 | .296 | .234 | 761 | 97 | 8.3 | 4.9 | 29 | 25.5 | 23.0 | 4 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC UNFLTRD LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|------|---|---|--|---|---|--|---|---|--|---|---|---|--|
|------|---|---|--|---|---|--|---|---|--|---|---|---|--|

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|-----------|-----|------|-----|-----|----|-----|-----|-----|-----|----|----|-------|------|
| NOV 02... | .73 | .490 | .31 | 2.4 | 2 | 4.0 | <.2 | 5.6 | 2.5 | 22 | 17 | <.030 | <.10 |
| FEB 07... | .69 | .476 | .37 | 2.2 | -- | 3.6 | <.2 | 4.5 | 4.4 | 27 | -- | .030 | .16 |
| MAY 09... | .54 | .345 | .26 | 2.4 | <1 | 4.2 | <.2 | 2.5 | 2.5 | 28 | -- | <.030 | .11 |
| AUG 15... | .76 | .488 | .35 | 2.5 | 1 | 4.0 | <.2 | 5.5 | 2.7 | 29 | 17 | <.030 | .21 |

| DATE | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, PAR-TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC CORR. (UG/L) (32209) |
|------|--|---|---|---|--|--|---------------------------------------|---|---|--|--|--|---|
|------|--|---|---|---|--|--|---------------------------------------|---|---|--|--|--|---|

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|-----------|------|------|-------|-------|-------|-------|-------|----|-----|-----|----|------|------|
| NOV 02... | .04 | E.07 | <.037 | <.003 | <.022 | <.004 | <.004 | .2 | <.1 | 2.3 | .2 | 2.4 | -- |
| FEB 07... | .04 | .21 | E.019 | .007 | <.022 | E.002 | E.003 | .2 | <.1 | 6.6 | .2 | 2.5 | -- |
| MAY 09... | <.03 | .14 | <.037 | <.003 | .031 | <.004 | E.003 | .4 | <.1 | 3.4 | .4 | 2.3 | 1.10 |
| AUG 15... | <.03 | .17 | <.037 | <.003 | <.022 | E.003 | E.004 | .3 | <.1 | 6.5 | .3 | <1.0 | 1.00 |

| DATE | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|---------------------------------------|--|
|------|---------------------------------------|--|

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|-----------|-----|----|
| NOV 02... | E8 | 6 |
| FEB 07... | E10 | 4 |
| MAY 09... | E8 | <1 |
| AUG 15... | E8 | 10 |

E Estimated value.

< Actual value is known to be less than the value shown.

CEDAR CREEK RIVER BASIN

01408830 CEDAR CREEK AT CEDAR CREST, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 0915 | <20 | <100 | 10 | 06... | 0945 | <20 | <100 | 10 |
| 30... | 0955 | <20 | <100 | 10 | 13... | 0920 | <20 | <100 | 40 |
| | | | | | 19... | 0925 | 700 | 100 | 30 |

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

01409375 MULLICA RIVER NEAR ATCO, NJ

LOCATION.--Lat 39°47'08", long 74°51'38", Camden County, Hydrologic Unit 02040301, at bridge on Jackson-Medford Road, and 1.8 mi northeast of CONRAIL railroad tracks and Atco Street in Atco.

DRAINAGE AREA.--3.22 mi².

PERIOD OF RECORD.--Water years 1977-78, 1991 to current year.

REMARKS.--Field data and samples for laboratory analyses were collected as part of the New Jersey Pinelands Commission Network. Site is in New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CAC03) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) |
|-----------|------|---|---|---|--|---|---|---|---|---------------------------------------|---|---|---|
| NOV 06... | 1115 | .44 | -- | 760 | 95 | 11.0 | 6.9 | 101 | 10.0 | 9.0 | 17 | 3.92 | 1.79 |
| FEB 22... | 1220 | 2.5 | -- | 770 | 92 | 12.5 | 7.0 | 206 | 1.0 | 3.0 | 23 | 5.79 | 2.01 |
| JUN 07... | 1040 | 1.1 | 1.8 | 757 | 95 | 8.1 | 6.9 | 146 | 24.5 | 23.0 | 21 | 5.13 | 1.92 |
| SEP 18... | 0900 | .23 | -- | 758 | 84 | 7.6 | -- | 121 | 26.0 | 20.0 | 15 | 2.64 | 1.96 |
| DATE | | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | PHOS-THORUS, DIS-SOLVED (MG/L AS P) (00671) | PHOS-THORUS TOTAL (MG/L AS P) (00665) | | | |
| NOV 06... | | 17.8 | 8.6 | 66 | <.049 | .35 | .128 | .48 | <.018 | .007 | | | |
| FEB 22... | | 43.5 | 8.8 | 112 | <.049 | .30 | .464 | .77 | <.018 | .008 | | | |
| JUN 07... | | 28.2 | 7.8 | 90 | E.034 | .44 | .258 | .70 | <.020 | .017 | | | |
| SEP 18... | | 25.2 | 10.8 | 74 | .088 | .42 | .105 | .52 | <.020 | .014 | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ

LOCATION.--Lat 39°44'25", long 74°43'37", Burlington County, Hydrologic Unit 02040301, at bridge on U.S. Route 206 in Atsion, at outlet of Atsion Lake, and 0.2 mi upstream from Wesickaman Creek.

DRAINAGE AREA.--26.7 mi².

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTDR (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 28... | 1240 | 32 | -- | .175 | .137 | 761 | 95 | 11.4 | 4.8 | 35 | 15.0 | 7.5 | 5 |
| FEB 07... | 0940 | 104 | -- | .256 | .195 | 765 | 89 | 12.0 | 4.3 | 52 | 6.5 | 3.0 | 5 |
| MAY 07... | 1120 | 30 | 2.4 | .330 | .255 | 775 | 94 | 8.9 | 5.5 | 45 | 16.0 | 19.0 | 5 |
| AUG 15... | 1330 | 12 | 10 | .502 | .394 | 760 | 77 | 6.3 | 5.3 | 35 | 27.0 | 25.0 | 5 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTDR TIT 4.5 LAB AS CACO3 (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|--|--|---|---|--|---|---|---|--|
| NOV 28... | 1.01 | .546 | .64 | 2.5 | 1 | 4.9 | <.2 | 5.6 | 4.0 | 29 | 21 | <.030 | .14 |
| FEB 07... | 1.11 | .583 | .66 | 3.0 | -- | 5.3 | <.2 | 4.0 | 6.5 | 31 | -- | <.030 | .26 |
| MAY 07... | 1.17 | .561 | .73 | 3.3 | <1 | 6.2 | <.2 | 2.8 | 4.8 | 23 | -- | <.030 | .18 |
| AUG 15... | 1.19 | .598 | .63 | 2.7 | 2 | 4.3 | <.2 | 4.4 | 4.4 | 34 | 20 | .120 | .39 |

| DATE | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|---|---|---|---|--------------------------------------|--|--|---------------------------------------|---|---|--|--|
| NOV 28... | .03 | .17 | .143 | <.003 | .28 | .31 | .026 | E.003 | .007 | .7 | <.1 | 3.7 | .7 |
| FEB 07... | <.03 | .23 | .105 | <.003 | .36 | .33 | <.022 | E.003 | .005 | .4 | <.1 | 6.2 | .4 |
| MAY 07... | <.03 | .29 | .066 | <.003 | .24 | .36 | .184 | <.004 | .011 | E2.2 | <.1 | 6.3 | E2.2 |
| AUG 15... | .10 | .56 | .050 | <.003 | .44 | .61 | .276 | E.002 | .022 | 6.4 | <.1 | 8.5 | 6.4 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|--|--|---------------------------------------|--|
| NOV 28... | E1.3 | -- | 14 | 3 |
| FEB 07... | E1.1 | -- | 17 | 2 |
| MAY 07... | E1.7 | 4.80 | 13 | 5 |
| AUG 15... | <1.0 | 2.80 | E12 | 11 |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 1023 | <20 | <100 | <10 | JUL 09... | 0932 | 20 | <100 | 20 |
| | | | | | JUL 30... | 1040 | 120 | <100 | 20 |

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

0140940050 MULLICA RIVER AT CONSTABLE BRIDGE, NEAR BATSTO, NJ

LOCATION.--Lat 39°39'33", long 74°39'33", Burlington County, Hydrologic Unit 02040301, at Constable Bridge, 1.1 mi upstream of Sleeper Branch, and 1.3 mi north of Batsto.

DRAINAGE AREA.--47.0 mi².

PERIOD OF RECORD.--Water Years 1997 to 1998 and November 2000 to September 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|--------------|---|--|--|--|---|---|--|--|--|--|--|--|---|
| NOV 29... | 1100 | -- | .372 | .295 | 766 | 81 | 10.3 | 5.3 | 48 | 9.5 | 5.5 | 7 | 1.57 | |
| FEB 21... | 1045 | -- | .261 | .200 | 764 | 83 | 10.4 | 4.8 | 53 | 10.0 | 6.0 | 7 | 1.50 | |
| JUN 05... | 1030 | 3.9 | .353 | .274 | 762 | 84 | 7.6 | 5.1 | 48 | 22.0 | 20.0 | 6 | 1.32 | |
| SEP 05... | 1100 | 8.4 | .262 | .205 | 764 | 79 | 7.0 | 5.5 | 40 | 25.5 | 21.5 | 6 | 1.30 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| | NOV 29... | .861 | 1.00 | 4.0 | 1 | 6.0 | <.2 | 5.8 | 5.4 | 43 | 26 | E.030 | .20 | <.03 |
| | FEB 21... | .798 | .63 | 4.0 | <1 | 6.9 | <.2 | 4.0 | 6.7 | 35 | -- | .030 | .14 | .03 |
| | JUN 05... | .743 | .69 | 4.7 | 2 | 7.9 | <.2 | 3.6 | 3.8 | 39 | 24 | .030 | .24 | .03 |
| | SEP 05... | .765 | .64 | 3.6 | 2 | 6.1 | <.2 | 4.8 | 4.6 | 40 | 23 | <.030 | E.26 | .03 |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| | NOV 29... | .26 | .109 | <.003 | .31 | .37 | .078 | E.003 | .007 | 1.4 | <.1 | 7.4 | 1.4 | E1.6 |
| | FEB 21... | .21 | .110 | <.003 | .25 | .32 | .042 | E.002 | .005 | .8 | <.1 | 5.7 | .8 | <1.0 |
| | JUN 05... | .42 | .041 | <.003 | .28 | .46 | .225 | E.003 | .014 | 3.9 | <.1 | 7.5 | 3.9 | <1.0 |
| | SEP 05... | .47 | E.054 | <.003 | -- | -- | .319 | E.002 | .015 | 6.6 | <.1 | 4.9 | 6.6 | <1.0 |
| DATE | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) | | | | | | |
| | NOV 29... | -- | | | | | 14 | <1 | | | | | | |
| | FEB 21... | -- | | | | | 16 | 5 | | | | | | |
| | JUN 05... | 2.40 | | | | | 14 | 11 | | | | | | |
| | SEP 05... | 3.30 | | | | | E10 | 18 | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

0140940050 MULLICA RIVER AT CONSTABLE BRIDGE, NEAR BATSTO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|

SEP 05... 1100 M 15.2 <.06 13 E.02 <1 .7 5680 1 14 <.01 <1

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|------|---|--|--|
|------|---|--|--|

SEP 05... <.4 <.05 4

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYLENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHYLENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLORIDE TOTAL (UG/L) (32102) |
|------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|--|
|------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|--|

FEB 21... 1045 <.10 <.10 <.10 <.2 <.10 <.10 <.10 <.10 <.10 <.10 <.10 <.20 <.20

| DATE | TIME | CHLORO- DI- BROMO- ETHANE TOTAL (UG/L) (34301) | CHLORO- BROMO- FORM TOTAL (UG/L) (32105) | CHLORO- ETHYLENE WATER TOTAL (UG/L) (32106) | CIS-1,2- DI- CHLORO- ETHYLENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- ETHYLENE WATER TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|------|------|--|---|--|---|---|---|---|---|---|---|---|---|--|
|------|------|--|---|--|---|---|---|---|---|---|---|---|---|--|

FEB 21... <.10 <.2 <.10 <.10 <.10 <.2 <.2 <.2 <.10 <.2 <.10 <.10 <.2

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYLENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|------|------|--|--|---|---------------------------------------|---|---------------------------------------|--|---|--|
|------|------|--|--|---|---------------------------------------|---|---------------------------------------|--|---|--|

FEB 21... <.2 <.20 <.10 <.10 <.1 <.10 <.10 <.20 <.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC, (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|------|------|---|--|--|--|---|--|--|--|--|---|--|---|
|------|------|---|--|--|--|---|--|--|--|--|---|--|---|

JUN 05... 1030 <.004 <.002 <.005 E.004 <.010 <.041 <.020 .025 <.018 <.003 E.002 <.005

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

MULLICA RIVER BASIN

0140940050 MULLICA RIVER AT CONSTABLE BRIDGE, NEAR BATSTO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|---|--|--|---|---|---|---|
| | JUN 05... | <.005 | <.002 | <.004 | <.035 | <.027 | E.009 | E.005 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| JUN 05... | E.004 | <.016 | E.065 | <.005 | <.009 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|
| JUL 30... | 1010 | <20 | <100 | <10 |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

275

01409401 HAYS MILL CREEK AT ATCO, NJ

LOCATION.--Lat 39°45'32", long 74°53'02", Camden County, Hydrologic Unit 02040301, at bridge on U.S. Route 30, at outlet of Atco Lake in Atco, and 3.3 mi southeast of Berlin.

DRAINAGE AREA.--3.80 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

REMARKS.--Field data and samples for laboratory analyses were collected as part of the New Jersey Pinelands Commission Network. Site is in New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTDR (61028) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) |
|-----------|------|---|--|---|---|---|---|---|---|---------------------------------------|---|---|---|
| NOV 06... | 1030 | 1.6 | -- | 760 | 82 | 9.3 | 6.8 | 105 | 10.0 | 9.5 | 20 | 4.10 | 2.31 |
| FEB 22... | 1030 | 3.7 | -- | 770 | 90 | 11.9 | 6.9 | 190 | -2.0 | 4.0 | 27 | 6.33 | 2.74 |
| JUN 07... | 1010 | 2.8 | 4.4 | 757 | 73 | 6.3 | 6.6 | 131 | 23.5 | 22.0 | 25 | 5.71 | 2.57 |
| SEP 18... | 1000 | 1.9 | -- | 758 | 74 | 6.9 | -- | 105 | 26.5 | 18.5 | 21 | 4.08 | 2.60 |
| DATE | | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | | | |
| NOV 06... | | 19.0 | 6.2 | 61 | <.049 | .74 | .158 | .89 | <.018 | .027 | | | |
| FEB 22... | | 37.5 | 8.7 | 103 | <.049 | 1.6 | 1.26 | 2.8 | <.018 | .176 | | | |
| JUN 07... | | 23.1 | 6.9 | 84 | E.037 | .52 | .426 | .95 | <.020 | .024 | | | |
| SEP 18... | | 19.6 | 6.5 | 62 | E.035 | .36 | .108 | .47 | <.020 | .010 | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

0140940200 HAYS MILL CREEK NEAR CHESILHURST, NJ

LOCATION.--Lat 39°45'02", long 74°50'28", Camden County, Hydrologic Unit 02040301, at bridge on Tremont Avenue in Wharton State Forest, 0.3 mi northeast of Burnt Mill Road, and 2.0 mi northeast of Chesilhurst.

DRAINAGE AREA.--7.13 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

REMARKS.--Field data and samples for laboratory analyses were collected as part of the New Jersey Pinelands Commission Network. Site is in New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (MG/L) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STANDARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) |
|-----------|------|---|---|---|---|---|---|---|---|---------------------------------------|---|---|---|
| NOV 06... | 1240 | 5.9 | -- | 760 | 85 | 9.6 | 6.4 | 94 | 13.0 | 10.0 | 16 | 3.44 | 1.81 |
| FEB 22... | 1130 | 11 | -- | 770 | 91 | 11.9 | 6.4 | 134 | -2.0 | 4.5 | 19 | 4.23 | 1.95 |
| JUN 07... | 1150 | 9.1 | 2.0 | 758 | 86 | 8.4 | 6.6 | 112 | 25.5 | 16.5 | 18 | 4.18 | 1.95 |
| SEP 18... | 1100 | 4.3 | -- | 758 | 94 | 9.6 | -- | 94 | 26.5 | 14.0 | 17 | 3.49 | 1.90 |
| DATE | | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | | | |
| NOV 06... | | 15.6 | 5.2 | 57 | <.049 | .16 | 1.15 | 1.3 | <.018 | .006 | | | |
| FEB 22... | | 23.4 | 7.1 | 80 | E.040 | .24 | 1.45 | 1.7 | <.018 | .006 | | | |
| JUN 07... | | 18.7 | 5.3 | 69 | E.034 | .26 | 1.13 | 1.4 | <.020 | .013 | | | |
| SEP 18... | | 16.5 | 4.6 | 53 | <.050 | .14 | 1.10 | 1.2 | <.020 | .007 | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

0140940370 SLEEPER BRANCH NEAR ATSION, NJ

LOCATION.--Lat 39°43'42", long 74°46'12", Camden County, Hydrologic Unit 02040301, at bridge on Burnt House Road, 500 ft downstream from Saltars Ditch, and 2.3 mi west of Atsion.

DRAINAGE AREA.--16.1 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

REMARKS.--Field data and samples for laboratory analyses were collected as part of the New Jersey Pinelands Commission Network. Site is in New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT OF SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL AS (MG/L CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) |
|--------------|------|---|--|---|---|---|--|--|---|---|--|---|---|
| NOV 06... | 1400 | 12 | -- | 758 | 89 | 10.2 | 6.4 | 66 | 15.5 | 9.0 | 11 | 2.23 | 1.35 |
| FEB 22... | 1220 | 23 | -- | 771 | 87 | 11.5 | 4.7 | 75 | -3.5 | 4.0 | 11 | 2.37 | 1.27 |
| JUN 07... | 0920 | 16 | 3.1 | 760 | 86 | 8.4 | 6.5 | 68 | 21.0 | 16.5 | 12 | 2.45 | 1.41 |
| SEP 18... | 0940 | 9.1 | -- | 761 | 91 | 9.7 | 6.7 | 74 | 19.5 | 12.5 | 12 | 2.48 | 1.52 |
| DATE | | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | | | | |
| NOV 06... | | 10.3 | 3.8 | 41 | <.049 | .14 | .702 | .84 | <.018 | .005 | | | |
| FEB 22... | | 13.1 | 5.8 | 56 | <.049 | .25 | .784 | 1.0 | <.018 | .008 | | | |
| JUN 07... | | 11.8 | 3.7 | 52 | <.050 | .27 | .686 | .96 | <.020 | .013 | | | |
| SEP 18... | | 11.2 | 3.3 | 44 | <.050 | .12 | .775 | .90 | <.020 | .004 | | | |

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

0140940480 CLARK BRANCH NEAR ATSION, NJ

LOCATION.--Lat 39°42'53", long 74°46'25", Camden County, Hydrologic Unit 02040301, at railroad bridge, 0.2 mi downstream from Price Branch tributary, and 2.8 mi west of Atsion.

DRAINAGE AREA.--6.42 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

REMARKS.--Field data and samples for laboratory analyses were collected as part of the New Jersey Pinelands Commission Network. Site is in New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID- ITY FIELD WATER (NTU) (61028) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) |
|--------------|------|--|--|---|---|---|--|--|--|---|--|---|---|
| NOV 06... | 1300 | .21 | -- | 757 | 48 | 5.5 | 5.0 | 38 | 15.0 | 9.0 | 7 | 1.41 | .779 |
| FEB 22... | 1110 | 6.2 | -- | 771 | 77 | 10.9 | 4.5 | 62 | -3.0 | 1.5 | 12 | 2.47 | 1.40 |
| JUN 07... | 1030 | 2.4 | .6 | 760 | 54 | 5.3 | 4.9 | 48 | 22.0 | 16.0 | 8 | 1.61 | .863 |
| DATE | | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | | | |
| NOV 06... | | 5.3 | 2.9 | 46 | E.034 | .56 | <.037 | -- | <.018 | .020 | | | |
| FEB 22... | | 7.6 | 10.0 | 48 | <.049 | .21 | .140 | .35 | <.018 | .005 | | | |
| JUN 07... | | 8.9 | 3.2 | 47 | E.043 | .34 | E.026 | -- | <.020 | .006 | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

01409408 PUMP BRANCH NEAR WATERFORD WORKS, NJ

LOCATION.--Lat 39°41'59", long 74°50'40", Camden County, Hydrologic Unit 02040301, at bridge on Old White Horse Pike, 0.5 mi downstream from lake at Camp Ha-Lu-Wa-Sa, and 1.6 mi south of Waterford Works.

DRAINAGE AREA.--9.78 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

REMARKS.--Field data and samples for laboratory analyses were collected as part of the New Jersey Pinelands Commission Network. Site is in New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (MG/L) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STANDARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) |
|-----------|------|---|---|---------------------------------------|---|-----------------------------------|---|---|----------------------------------|------------------------------------|---|---|---|
| NOV 06... | 0915 | 2.7 | -- | 760 | 63 | 7.3 | 6.2 | 79 | 9.0 | 9.0 | 16 | 2.84 | 2.28 |
| FEB 22... | 0920 | 9.3 | -- | 771 | 75 | 10.1 | 6.4 | 115 | -2.0 | 3.5 | 18 | 3.25 | 2.30 |
| JUN 07... | 0920 | 17 | 8.2 | 758 | 59 | 5.2 | 6.4 | 92 | 25.0 | 21.5 | 19 | 3.52 | 2.42 |
| SEP 18... | 1130 | 5.0 | -- | 758 | 56 | 5.2 | -- | 78 | 27.0 | 18.5 | 16 | 2.61 | 2.32 |

| DATE | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) |
|-----------|--|--|---|---|---|---|--------------------------------------|---|---------------------------------------|
| NOV 06... | 13.3 | 3.0 | 49 | E.026 | .25 | .654 | .91 | <.018 | .010 |
| FEB 22... | 20.2 | 3.9 | 67 | E.030 | .34 | 1.33 | 1.7 | <.018 | .015 |
| JUN 07... | 14.6 | 2.9 | 56 | .148 | .61 | .492 | 1.1 | <.020 | .032 |
| SEP 18... | 14.0 | 2.2 | 49 | E.028 | .50 | .155 | .65 | <.020 | .015 |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

0140940950 BLUE ANCHOR BROOK AT ELM, NJ

LOCATION.--Lat 39°40'11", long 74°50'06", Camden County, Hydrologic Unit 02040301, at bridge on U.S. Route 30 at Elm, at outlet of Winslow Lake, and 1.4 mi upstream from confluence with Pump Branch.

DRAINAGE AREA.--4.86 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

REMARKS.--Field data and samples for laboratory analyses on dates: Nov. 6, Feb. 22, Jun. 7, and Sept. 18, were collected as part of the New Jersey Pinelands Commission Network.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator and New Jersey Pinelands Commission Network site, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-------|------|---|--|--|--|---|--|--|---|--|---|---|---|---|
| | | | | | | | | | | | | | | |
| NOV | | | | | | | | | | | | | | |
| 06... | 0940 | 1.6 | -- | -- | -- | 758 | 88 | 10.3 | 6.9 | 75 | 15.5 | 8.5 | 14 | |
| 27... | 1050 | 5.2 | -- | .075 | .060 | 750 | -- | 11.3 | 6.9 | -- | 11.5 | 7.5 | 13 | |
| FEB | | | | | | | | | | | | | | |
| 20... | 0930 | 3.5 | -- | .135 | .107 | 764 | 99 | 13.0 | 6.6 | 93 | 12.5 | 4.0 | 15 | |
| 22... | 0920 | 3.2 | -- | -- | -- | 770 | 95 | 12.3 | 7.0 | 82 | -2.0 | 5.0 | 15 | |
| MAY | | | | | | | | | | | | | | |
| 07... | 0920 | 2.9 | 1.7 | .224 | .179 | 773 | 93 | 8.7 | 7.4 | 82 | 15.5 | 19.5 | 15 | |
| JUN | | | | | | | | | | | | | | |
| 07... | 1310 | 2.3 | 1.9 | -- | -- | 760 | 102 | 8.3 | 7.6 | 70 | 26.5 | 25.5 | 16 | |
| AUG | | | | | | | | | | | | | | |
| 20... | 1040 | 1.5 | 2.6 | .154 | .120 | 755 | 89 | 6.9 | 6.9 | 70 | 31.0 | 28.0 | 12 | |
| SEP | | | | | | | | | | | | | | |
| 18... | 1240 | .65 | -- | -- | -- | 758 | 92 | 8.0 | 6.2 | 72 | 27.0 | 22.0 | 13 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| NOV | | | | | | | | | | | | | | |
| 06... | 2.96 | 1.58 | -- | -- | -- | 9.7 | -- | -- | 7.4 | 41 | -- | .087 | -- | -- |
| 27... | 2.80 | 1.44 | 1.62 | 5.8 | 8 | 8.9 | <.2 | 1.5 | 6.4 | 40 | 34 | <.030 | .18 | .18 |
| FEB | | | | | | | | | | | | | | |
| 20... | 3.49 | 1.54 | 2.26 | 7.8 | 9 | 11.7 | <.2 | 3.5 | 6.6 | 58 | 45 | .040 | .18 | .18 |
| 22... | 3.46 | 1.56 | -- | -- | -- | 12.1 | -- | -- | 7.6 | 54 | -- | E.037 | -- | -- |
| MAY | | | | | | | | | | | | | | |
| 07... | 3.32 | 1.73 | 1.83 | 6.9 | 14 | 11.5 | <.2 | 1.9 | 5.6 | 52 | 41 | .030 | .34 | .34 |
| JUN | | | | | | | | | | | | | | |
| 07... | 3.44 | 1.74 | -- | -- | -- | 9.6 | -- | -- | 4.9 | 51 | -- | .058 | -- | -- |
| AUG | | | | | | | | | | | | | | |
| 20... | 2.46 | 1.53 | 1.08 | 7.2 | 9 | 10.7 | <.2 | E.4 | 4.6 | 40 | 33 | .030 | .40 | .40 |
| SEP | | | | | | | | | | | | | | |
| 18... | 2.57 | 1.54 | -- | -- | -- | 10.7 | -- | -- | 6.2 | 45 | -- | .139 | -- | -- |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORGANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | |
| NOV | | | | | | | | | | | | | | |
| 06... | -- | .32 | .059 | -- | -- | .38 | -- | -- | <.018 | .020 | -- | -- | -- | -- |
| 27... | <.03 | .25 | .247 | <.003 | .42 | .49 | .028 | .006 | -- | .018 | .3 | <.1 | 2.0 | 2.0 |
| FEB | | | | | | | | | | | | | | |
| 20... | .06 | .25 | .623 | <.003 | .80 | .87 | .108 | .007 | -- | .019 | .8 | <.1 | 2.7 | 2.7 |
| 22... | -- | .32 | .530 | -- | -- | .85 | -- | -- | <.018 | .024 | -- | -- | -- | -- |
| MAY | | | | | | | | | | | | | | |
| 07... | .04 | .45 | <.037 | <.003 | -- | -- | .066 | .010 | -- | .021 | E.5 | <.1 | 4.9 | 4.9 |
| JUN | | | | | | | | | | | | | | |
| 07... | -- | .43 | <.037 | -- | -- | -- | -- | -- | <.020 | .024 | -- | -- | -- | -- |
| AUG | | | | | | | | | | | | | | |
| 20... | .04 | .53 | E.034 | <.003 | -- | -- | .130 | .011 | -- | .033 | .8 | <.1 | 4.2 | 4.2 |
| SEP | | | | | | | | | | | | | | |
| 18... | -- | .48 | E.021 | -- | -- | -- | -- | -- | <.020 | .025 | -- | -- | -- | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

0140940950 BLUE ANCHOR BROOK AT ELM, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) |
|-------|--|---|---|---|---|
| NOV | | | | | |
| 06... | -- | -- | -- | -- | -- |
| 27... | .3 | E1.5 | -- | 14 | 3 |
| FEB | | | | | |
| 20... | .8 | E1.3 | -- | 18 | 5 |
| 22... | -- | -- | -- | -- | -- |
| MAY | | | | | |
| 07... | E.5 | 2.8 | 4.80 | 18 | 5 |
| JUN | | | | | |
| 07... | -- | -- | -- | -- | -- |
| AUG | | | | | |
| 20... | .8 | E1.3 | 14.2 | 17 | 7 |
| SEP | | | | | |
| 18... | -- | -- | -- | -- | -- |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUN | | | | | JUL | | | | |
| 06... | 1115 | <20 | <100 | <10 | 05... | 1140 | <20 | <100 | 10 |
| 20... | 0915 | <20 | <100 | <10 | | | | | |
| 27... | 1115 | <20 | <100 | <10 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

0140940970 ALBERTSON BRANCH NEAR ELM, NJ

LOCATION.--Lat 39°41'34", long 74°48'24", Camden County, Hydrologic Unit 02040301, at bridge on Fleming Pike, 0.4 mi downstream from confluence of Blue Anchor Brook and Pump Branch, and 1.6 mi northeast of Elm.

DRAINAGE AREA.--17.1 mi².

PERIOD OF RECORD.--Water years 1991 to current year.

REMARKS.--Field data and samples for laboratory analyses were collected as part of the New Jersey Pinelands Commission Network. Site is in New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) |
|-----------|------|---|---|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|---|---|
| NOV 06... | 1110 | 12 | -- | 758 | 79 | 9.3 | 6.3 | 74 | 15.5 | 8.0 | 16 | 2.86 | 2.06 |
| FEB 22... | 0950 | 20 | -- | 771 | 84 | 11.3 | 6.4 | 88 | -3.0 | 3.5 | 16 | 3.23 | 1.94 |
| JUN 07... | 1150 | 20 | 1.3 | 760 | 83 | 7.6 | 6.6 | 76 | 24.0 | 19.5 | 17 | 3.38 | 2.11 |
| SEP 18... | 1140 | 8.9 | -- | 761 | 82 | 8.3 | 6.5 | 79 | 23.0 | 15.0 | 16 | 2.90 | 2.13 |

| DATE | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) |
|-----------|--|--|---|---|---|---|--------------------------------------|---|---------------------------------------|
| NOV 06... | 10.7 | 5.7 | 43 | E.024 | .22 | .623 | .84 | <.018 | .006 |
| FEB 22... | 14.3 | 6.2 | 59 | E.026 | .21 | 1.06 | 1.3 | <.018 | .006 |
| JUN 07... | 11.8 | 4.3 | 51 | .077 | .28 | .407 | .69 | <.020 | .012 |
| SEP 18... | 11.6 | 4.0 | 46 | <.050 | .23 | .328 | .56 | <.020 | .006 |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

283

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ

LOCATION.--Lat 39°38'02", long 74°43'05", Atlantic County, Hydrologic Unit 02040301, at bridge on Chestnut Road in Wescoatville, 1.1 mi southwest of Nesco, 1.7 mi upstream from Norton Branch, and 3.8 mi southwest of Batsto.

DRAINAGE AREA.--9.57 mi².

PERIOD OF RECORD.--Water years 1974 to current year.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

REVISIONS.--WDR NJ-83-1: Drainage area.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|---|---|--|--|---|---|---|--|--|
| NOV 27... | 1120 | 34 | -- | .436 | .350 | 752 | 65 | 7.3 | 5.8 | 102 | 13.0 | 9.5 | 21 | |
| FEB 08... | 1210 | 26 | -- | .132 | .103 | 772 | 80 | 10.4 | 5.3 | 139 | 5.0 | 5.0 | 27 | |
| MAY 30... | 1150 | 16 | 4.0 | .199 | .159 | 760 | 72 | 7.0 | 6.4 | 124 | 24.0 | 16.5 | 22 | |
| AUG 20... | 1400 | 7.4 | 4.8 | .156 | .127 | 758 | 83 | 7.2 | 6.4 | 138 | 28.0 | 22.0 | 21 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AM-MONIA + DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 27... | 4.59 | 2.20 | 4.40 | 6.3 | 6 | 11.7 | E.1 | 5.4 | 11.9 | 78 | 54 | <.030 | .43 | |
| FEB 08... | 6.31 | 2.66 | 3.94 | 9.9 | 6 | 18.1 | E.1 | 5.6 | 14.2 | 82 | 75 | .040 | .26 | |
| MAY 30... | 5.10 | 2.26 | 3.79 | 9.9 | 12 | 16.9 | E.1 | 6.1 | 10.8 | 76 | 67 | .100 | .47 | |
| AUG 20... | 4.98 | 2.00 | 4.31 | 14.5 | 18 | 19.9 | E.1 | 7.9 | 10.3 | 82 | 77 | <.030 | .34 | |
| DATE | | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + NO2+NO3 DIS-SOLVED (MG/L AS N) (00625) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR-TICULATE WAT FLT (MG/L AS N) (00600) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | |
| NOV 27... | .04 | .51 | .942 | <.003 | 1.4 | 1.5 | .128 | .107 | .168 | 1.5 | <.1 | 10 | 1.5 | |
| FEB 08... | .04 | .36 | 2.36 | .006 | 2.6 | 2.7 | .089 | .016 | .044 | .8 | <.1 | 3.8 | .8 | |
| MAY 30... | .12 | 1.0 | 1.07 | .013 | 1.5 | 2.1 | .055 | .163 | .255 | .6 | <.1 | 4.6 | .6 | |
| AUG 20... | <.03 | .39 | .596 | <.003 | .94 | .99 | .121 | .137 | .215 | .9 | <.1 | 4.0 | .9 | |

E Estimated value.

< Actual value is known to be less than the value shown.

MULICA RIVER BASIN

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|--------------|---|---|---|--|
| NOV 27... | 2.2 | -- | 31 | 2 |
| FEB 08... | <1.0 | -- | 29 | 2 |
| MAY 30... | E1.4 | 1.50 | 35 | 4 |
| AUG 20... | <1.0 | 10.0 | 57 | 6 |

E Estimated value.

< Actual value is known to be less than the value shown.

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

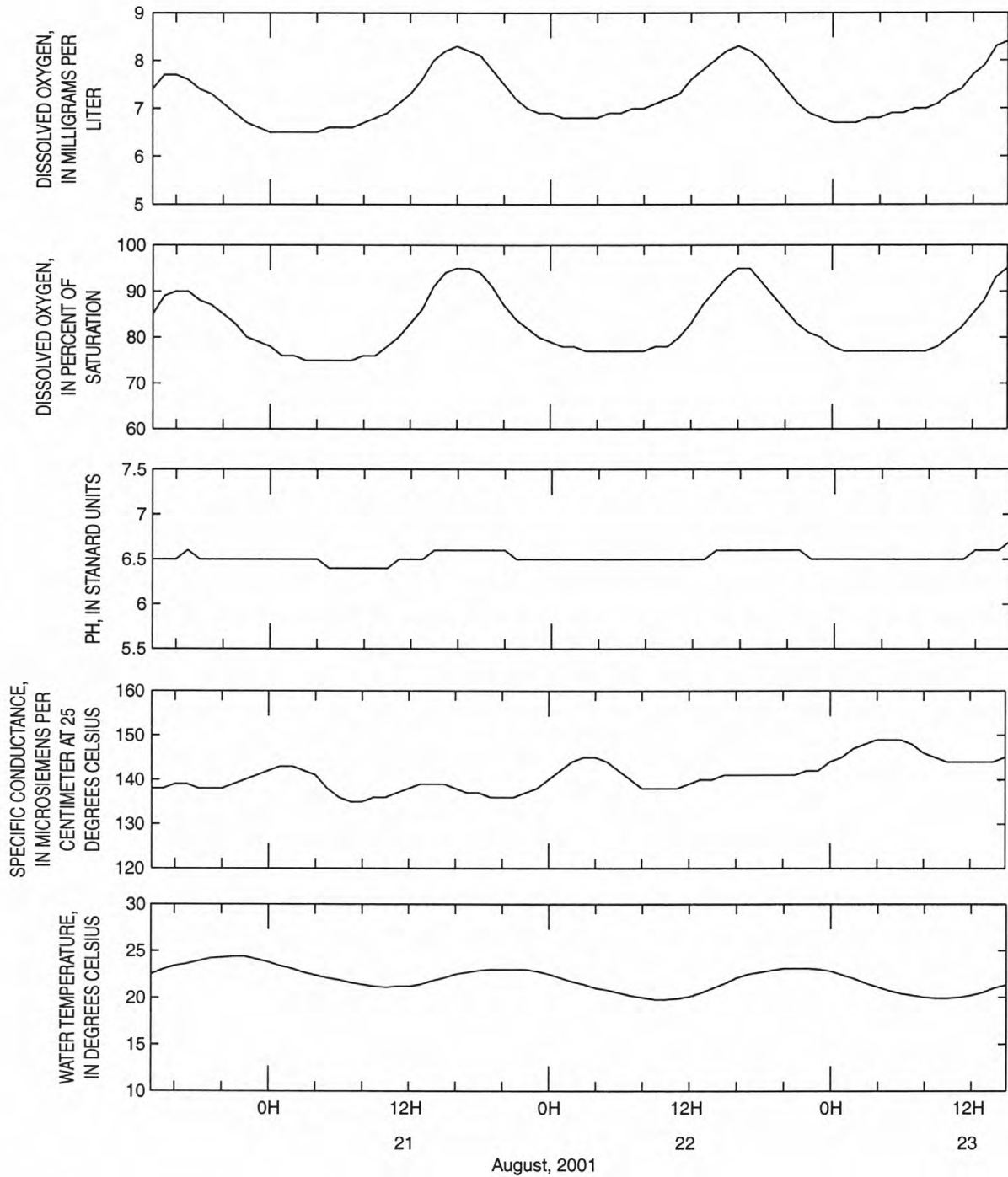


Figure 47. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01409416 Hammonton Creek at Wescoatville, water year 2001.

MULLICA RIVER BASIN

01409435 SKIT BRANCH NEAR HAMPTON GATE, NJ

LOCATION.--Lat 39°47'09", long 74°39'31", Burlington County, Hydrologic Unit 02040301, at bridge on Carranza Road, 0.2 mi upstream from confluence with Roberts Branch, 1.6 mi southeast of Hampton Gate, and 1.6 mi northeast of Hampton Furnace.

DRAINAGE AREA.--4.91 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY | UV ABSORB- ANCE | UV ABSORB- ANCE | BARO- METRIC PRES- | OXYGEN, DIS- SOLVED | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE | SPE- CIFIC | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|---|--|---|--|---|---|--|---|---|---|
| | | FIELD WATER | 254 NM, WTR FLT | 280 NM, WTR FLT | SURE (MM OF HG) | (PER- CENT SATUR- ATION) | | FIELD (STAND- ARD UNITS) | CON- DUCT- ANCE (US/CM) (00095) | | | | | |
| | | UNFLTRD (NTU) (61028) | (UNITS /CM) (50624) | (UNITS /CM) (61726) | (00025) | (00301) | | (00400) | (00095) | | | | | |
| NOV 21... | 1100 | -- | .071 | .058 | 760 | 82 | 10.6 | 5.0 | 26 | -- | 4.5 | 2 | .32 | |
| FEB 06... | 1130 | -- | .425 | .326 | 761 | 86 | 11.6 | 4.2 | 51 | 7.0 | 3.0 | 2 | .35 | |
| MAY 16... | 1030 | 1.8 | .134 | .104 | 760 | 74 | 7.3 | 4.8 | 22 | 22.0 | 16.0 | 2 | .29 | |
| AUG 23... | 1100 | 2.6 | .153 | .120 | 761 | 62 | 5.5 | 5.0 | 19 | 31.0 | 21.0 | 2 | .29 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| | | NOV 21... | .252 | .30 | 1.5 | <1 | 2.8 | <.2 | 5.4 | 3.1 | 13 | -- | .040 | E.07 |
| FEB 06... | .227 | E.18 | 2.0 | -- | 3.5 | <.2 | 3.5 | 5.3 | 33 | -- | .030 | .16 | .04 | |
| MAY 16... | .221 | .34 | 1.3 | <1 | 2.9 | <.2 | 5.1 | 2.3 | 19 | -- | <.030 | E.10 | <.03 | |
| AUG 23... | .240 | .44 | 1.5 | 1 | 3.6 | <.2 | 5.1 | 1.7 | 25 | 14 | <.030 | .12 | <.03 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) |
| | | NOV 21... | .10 | <.037 | <.003 | .072 | <.004 | <.004 | .6 | <.1 | 1.5 | .6 | <1.0 | -- |
| FEB 06... | .16 | <.037 | .027 | .044 | E.003 | .004 | .6 | <.1 | 9.6 | .6 | <1.2 | -- | <13 | |
| MAY 16... | .19 | E.018 | <.003 | .141 | <.004 | .006 | 3.0 | <.1 | 3.0 | 3.0 | E1.5 | 1.40 | <13 | |
| AUG 23... | .28 | E.026 | <.003 | .261 | <.004 | .008 | 5.3 | <.1 | 3.0 | 5.3 | <1.0 | 2.00 | <13 | |
| DATE | | | | | | | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | | |
| NOV 21... | | | | | | | <1 | | | | | | | |
| FEB 06... | | | | | | | 2 | | | | | | | |
| MAY 16... | | | | | | | 6 | | | | | | | |
| AUG 23... | | | | | | | 16 | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

287

01409435 SKIT BRANCH NEAR HAMPTON GATE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|--------------|------|--|--|--|--|--|---|--|--|--|--|--|--|
| AUG 23... | 1100 | E1 | 11.9 | <.06 | 8 | E.03 | <1 | E.4 | 4970 | <1 | 9 | <.01 | <1 |

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|--------------|---|--|--|
| AUG 23... | <.4 | <.05 | 4 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|
|------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|

| | | | | | | | | | | | | | |
|--------------|------|------|------|------|-----|------|------|------|------|------|------|------|------|
| FEB 06... | 1130 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
|--------------|------|------|------|------|-----|------|------|------|------|------|------|------|------|

| DATE | TIME | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | BENZENE ETHYL- TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|------|------|--|---|---|--|---|---|---|--|---|---|---|---|--|
|------|------|--|---|---|--|---|---|---|--|---|---|---|---|--|

| | | | | | | | | | | | | | |
|--------------|------|-----|------|------|------|-----|-----|-----|------|-----|------|------|-----|
| FEB 06... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
|--------------|------|-----|------|------|------|-----|-----|-----|------|-----|------|------|-----|

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|--------------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
| FEB 06... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|--|--|--|---|---|--|--|--|--|---|--|---|
| MAY 16... | 1030 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

01409435 SKIT BRANCH NEAR HAMPTON GATE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|--|---|--|---|---|---|--|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| MAY 16... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
| | | | | | DATE | | | | | | | | |
| MAY 16... | | | | | | <.011 | <.016 | <.034 | <.005 | <.009 | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| | | | | | | | | | |
| JUL 02... | 0832 | <20 | <100 | 40 | JUL 09... | 1044 | <20 | <100 | 10 |
| | | | | | 30... | 0900 | <20 | <100 | 20 |

< Actual value is known to be less than the value shown.

01409500 BATSTO RIVER AT BATSTO, NJ

LOCATION.--Lat 39°38'33", long 74°39'00", Burlington County, Hydrologic Unit 02040301, at bridge on County Highway 542 at Batsto, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--67.8 mi².

PERIOD OF RECORD.--Water years 1925, 1956, 1962-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|---|--|--|--|--|---|---|--|---|
| NOV 16... | 1100 | 79 | -- | .199 | .157 | 764 | 86 | 10.2 | 5.8 | 49 | -- | 8.0 | 10 | |
| FEB 22... | 1030 | 70 | -- | .196 | .150 | 774 | 80 | 10.7 | 4.9 | 52 | -2.5 | 4.0 | 9 | |
| MAY 15... | 1030 | 86 | 3.7 | .262 | .208 | 758 | 81 | 8.1 | 5.7 | 37 | 25.0 | 15.0 | 7 | |
| AUG 29... | 1000 | 64 | 2.5 | .090 | .072 | 762 | 75 | 6.4 | 5.3 | 23 | 29.0 | 23.5 | 3 | |
| DATE | TIME | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA, DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 16... | 2.06 | 1.10 | 1.35 | 3.2 | 3 | 6.6 | <.2 | 6.1 | 5.9 | 36 | 28 | <.030 | .15 | |
| FEB 22... | 2.02 | 1.07 | .93 | 3.3 | <1 | 6.4 | <.2 | 4.3 | 8.1 | 36 | -- | .040 | .11 | |
| MAY 15... | 1.45 | .770 | .70 | 3.0 | 3 | 5.3 | <.2 | 3.2 | 3.6 | 33 | 20 | <.030 | .19 | |
| AUG 29... | .62 | .409 | .47 | 1.9 | 2 | 3.2 | <.2 | 4.7 | 2.6 | 24 | 15 | <.030 | E.07 | |
| DATE | TIME | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-ORGANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689) |
| NOV 16... | <.03 | .17 | .096 | <.003 | .25 | .26 | .080 | E.003 | .004 | 1.1 | <.1 | 4.3 | 1.1 | |
| FEB 22... | .05 | .20 | .273 | <.003 | .39 | .47 | .048 | .004 | .011 | .7 | <.1 | 4.3 | .7 | |
| MAY 15... | <.03 | .33 | .042 | <.003 | .23 | .37 | .176 | E.003 | .022 | 2.7 | <.1 | 4.4 | 2.7 | |
| AUG 29... | <.03 | .12 | E.046 | <.003 | -- | -- | .092 | <.004 | .005 | .9 | <.1 | 2.0 | .9 | |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|---|
| NOV 16... | E1.5 | -- | E10 | 5 |
| FEB 22... | <1.0 | -- | E11 | 4 |
| MAY 15... | E1.8 | 2.60 | E11 | 1 |
| AUG 29... | <1.0 | 2.30 | E10 | 6 |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

01409500 BATSTO RIVER AT BATSTO, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 0950 | <20 | <100 | <10 | JUL 09... | 0941 | <20 | <100 | 10 |
| | | | | | JUL 30... | 1010 | <20 | <100 | <10 |

< Actual value is known to be less than the value shown.

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ

LOCATION.--Lat 39°40'30", long 74°32'28", Burlington County, Hydrologic Unit 02040301, at bridge on County Highway 563 in Maxwell, 1.6 mi southeast of Washington, 1.8 mi southwest of Jenkins, and 2.2 mi upstream from confluence with Oswego River.

DRAINAGE AREA.--85.9 mi².

PERIOD OF RECORD.--Water years 1976-93, 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | |
|-----------|------|--|---|---|--|---|---|---|---|--|---|--|---|--|
| | | | | | | | | | | | | | | |
| NOV 28... | 0930 | 114 | -- | .299 | .236 | 761 | 82 | 9.9 | 4.2 | 45 | 7.0 | 7.0 | 3 | |
| FEB 08... | 0930 | 351 | -- | .386 | .300 | 773 | 86 | 11.7 | 3.7 | 48 | 3.5 | 3.0 | 3 | |
| MAY 30... | 0920 | 101 | 6.0 | .301 | .241 | 760 | 82 | 8.1 | 4.0 | 38 | 15.5 | 16.0 | 3 | |
| AUG 23... | 1130 | 53 | 6.2 | .220 | .179 | 762 | 94 | 8.5 | 3.9 | 38 | 30.5 | 20.5 | 3 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| NOV 28... | .62 | .430 | .93 | 2.3 | -- | 4.2 | <.2 | 6.1 | 5.9 | 30 | <.030 | .14 | .04 | |
| FEB 08... | .58 | .359 | .52 | 2.0 | -- | 3.6 | <.2 | 3.8 | 5.6 | 29 | .100 | .20 | .12 | |
| MAY 30... | .62 | .378 | .84 | 2.1 | <1 | 4.1 | <.2 | 4.7 | 4.3 | 26 | .030 | .13 | <.03 | |
| AUG 23... | .63 | .378 | 1.07 | 2.4 | <1 | 4.1 | <.2 | 5.9 | 6.2 | 30 | <.030 | E.09 | .08 | |
| DATE | | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY CORR. (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) |
| NOV 28... | .21 | <.037 | <.003 | .082 | .004 | .017 | 1.7 | <.1 | 5.9 | 1.7 | E1.4 | -- | 13 | |
| FEB 08... | .19 | <.037 | <.003 | .040 | .018 | .033 | .6 | <.1 | 8.4 | .6 | <1.0 | -- | E10 | |
| MAY 30... | .30 | <.037 | <.003 | .149 | .008 | .093 | 2.8 | <.1 | 5.0 | 2.8 | E1.1 | 1.60 | <13 | |
| AUG 23... | .23 | E.026 | <.003 | .150 | <.004 | .050 | 2.1 | <.1 | 3.2 | 2.1 | <1.0 | 3.60 | E10 | |
| | | | | | | | | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | | |
| DATE | | | | | | | | | | | | | | |
| NOV 28... | | | | | | | | <1 | | | | | | |
| FEB 08... | | | | | | | | 2 | | | | | | |
| MAY 30... | | | | | | | | 12 | | | | | | |
| AUG 23... | | | | | | | | 10 | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

MULICA RIVER BASIN

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 0908 | 310 | <100 | 50 | JUL 09... | 1003 | 20 | <100 | <10 |
| | | | | | JUL 30... | 0954 | <20 | <100 | 40 |

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

293

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETN, NJ

LOCATION.--Lat 39°37'23", long 74°26'30", Burlington County, Hydrologic Unit 02040301, at bridge on Stage Road, 0.7 mi west of Lake Absegami, 2.2 mi north of New Gretna, and 5.3 mi upstream from mouth.

DRAINAGE AREA.--8.11 mi².

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Management Area 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|---|---|--|---|---|---|---|---|---|--|--|
| NOV 28... | 1100 | 23 | -- | .350 | .278 | 762 | 69 | 8.4 | 4.5 | 50 | -- | 7.0 | 4 | |
| FEB 01... | 1000 | 22 | -- | .217 | .172 | 764 | 79 | 10.3 | 4.4 | 47 | 9.0 | 4.5 | 3 | |
| MAY 30... | 1030 | 13 | .5 | .159 | .126 | 760 | 68 | 6.9 | 4.5 | 38 | 19.0 | 14.5 | 3 | |
| AUG 28... | 1000 | 12 | .7 | .118 | .094 | 759 | 66 | 6.2 | 4.6 | 34 | 28.0 | 18.0 | 2 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 28... | .55 | .629 | .54 | 3.3 | -- | 5.0 | <.2 | 6.8 | 5.8 | 39 | -- | .040 | .15 | |
| FEB 01... | .50 | .538 | .51 | 3.0 | 1 | 4.7 | <.2 | 6.1 | 5.3 | 27 | 21 | .040 | <.10 | |
| MAY 30... | .38 | .428 | .32 | 2.7 | <1 | 5.0 | <.2 | 6.4 | 3.2 | 23 | -- | .060 | E.07 | |
| AUG 28... | .34 | .395 | .48 | 2.6 | <1 | 4.9 | <.2 | 9.3 | 3.7 | 34 | -- | .060 | .11 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) |
| NOV 28... | <.03 | .15 | <.037 | <.003 | <.022 | <.004 | E.002 | .3 | <.1 | 7.5 | .3 | <1.2 | -- | |
| FEB 01... | .03 | .12 | E.020 | <.003 | <.022 | E.002 | E.003 | .3 | <.1 | 4.5 | .3 | <1.0 | -- | |
| MAY 30... | .03 | .08 | <.037 | <.003 | .027 | E.003 | <.004 | .3 | <.1 | 3.0 | .3 | <1.0 | 1.10 | |
| AUG 28... | <.03 | .10 | E.026 | <.003 | .088 | <.004 | E.003 | .6 | <.1 | 2.3 | .6 | <1.0 | .700 | |

| DATE | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|---------------------------------------|--|
|------|---------------------------------------|--|

| | | |
|-----------|-----|----|
| NOV 28... | 14 | <1 |
| FEB 01... | E12 | <1 |
| MAY 30... | <13 | 1 |
| AUG 28... | <13 | 1 |

E Estimated value.

< Actual value is known to be less than the value shown.

MULLICA RIVER BASIN

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETN, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 0927 | <20 | <100 | 20 | JUL 09... | 1015 | <20 | <100 | 10 |
| | | | | | JUL 30... | 0940 | <20 | <100 | 10 |

< Actual value is known to be less than the value shown.

01411035 HOSPITALITY BRANCH AT BLUE BELL ROAD, NEAR CECIL, NJ

LOCATION.--Lat 39°38'36", long 74°58'40", Gloucester County, Hydrologic Unit 02040302, at bridge on Blue Bell Road, 1.2 mi upstream of Timber Lakes and 2.0 mi west of Cecil.

DRAINAGE AREA.--4.51 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Mixed Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLT RD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) OF (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|--|--|--|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 15... | 1220 | 1.6 | -- | .144 | .115 | 756 | 83 | 9.5 | 6.0 | 60 | 10.0 | 9.0 | 15 |
| FEB 20... | 1230 | 4.6 | -- | .211 | .166 | 764 | 87 | 10.9 | 6.0 | 67 | 18.0 | 6.0 | 15 |
| MAY 09... | 1110 | 3.0 | 3.0 | .241 | .187 | 765 | 77 | 8.2 | 6.2 | 62 | 20.0 | 13.0 | 15 |
| AUG 22... | 1250 | 1.4 | 2.8 | .141 | .114 | 760 | 101 | 8.8 | 6.4 | 62 | 27.5 | 22.0 | 15 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|---|
| NOV 15... | 3.18 | 1.60 | 1.65 | 3.7 | 6 | 6.5 | <.2 | 8.1 | 4.9 | 45 | 39 | <.030 | .16 |
| FEB 20... | 3.38 | 1.69 | 1.58 | 3.8 | 5 | 6.8 | <.2 | 5.7 | 7.5 | 50 | 38 | <.030 | .24 |
| MAY 09... | 3.25 | 1.63 | 1.54 | 3.6 | 8 | 6.7 | <.2 | 4.2 | 4.5 | 55 | 36 | <.030 | .24 |
| AUG 22... | 3.16 | 1.68 | 1.59 | 3.5 | 7 | 6.6 | <.2 | 7.4 | 4.9 | 52 | 39 | <.030 | .18 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|--|---|---|--|--------------------------------------|--|--|---------------------------------------|---|---|--|--|
| NOV 15... | <.03 | .15 | 1.44 | <.003 | 1.6 | 1.6 | .044 | .004 | .010 | .6 | <.1 | 2.9 | .6 |
| FEB 20... | .03 | .21 | 1.14 | <.003 | 1.4 | 1.4 | .031 | .007 | .010 | .3 | <.1 | 4.5 | .3 |
| MAY 09... | <.03 | .32 | 1.23 | <.003 | 1.5 | 1.5 | .055 | .004 | .017 | 1.0 | M | 4.4 | E1.0 |
| AUG 22... | <.03 | .25 | 1.41 | <.003 | 1.6 | 1.7 | .064 | .005 | .018 | .7 | <.1 | 2.4 | .7 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|----|
| NOV 15... | <1.0 | -- | E9 | 4 |
| FEB 20... | <1.0 | -- | E12 | 6 |
| MAY 09... | E1.4 | 11.7 | E8 | <1 |
| AUG 22... | <1.0 | 3.10 | E12 | 11 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

GREAT EGG HARBOR RIVER BASIN

01411035 HOSPITALITY BRANCH AT BLUE BELL ROAD, NEAR CECIL, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 10... | 1100 | 20 | 200 | 210 | 07... | 1040 | 90 | 100 | 390 |
| 17... | 1055 | 330 | <100 | 380 | | | | | |
| 24... | 1135 | 790 | 700 | 220 | | | | | |
| 31... | 1110 | 130 | 200 | 190 | | | | | |

< Actual value is known to be less than the value shown.

01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, NJ

LOCATION.--Lat 39°30'50", long 74°46'47", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322 in Weymouth, 0.5 mi upstream from Deep Run, and 20.9 mi upstream from mouth.

DRAINAGE AREA.--154 mi².

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|---|---|--|--|---|--|--|--|---|---|--|
| | | | | | | | | | | | | | | |
| NOV 20... | 1330 | 112 | -- | .169 | .134 | 759 | 93 | 11.5 | 6.4 | 54 | 9.5 | 6.0 | 10 | |
| FEB 21... | 1230 | 269 | -- | .356 | .275 | 762 | 90 | 11.1 | 5.0 | 68 | 10.0 | 6.5 | 11 | |
| MAY 08... | 1110 | 145 | 3.0 | .282 | .223 | 772 | 93 | 9.5 | 6.2 | 57 | 20.5 | 15.0 | 10 | |
| SEP 05... | 1140 | 75 | 1.5 | .091 | .072 | 763 | 87 | 8.2 | 6.6 | 53 | 24.0 | 18.5 | 9 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C TUEENTS, DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| | | | | | | | | | | | | | | |
| NOV 20... | 2.06 | 1.18 | 1.11 | 4.9 | 4 | 7.7 | <.2 | 7.4 | 4.9 | 40 | 34 | .070 | .19 | |
| FEB 21... | 2.31 | 1.24 | 1.02 | 6.8 | 2 | 10.5 | <.2 | 5.4 | 6.7 | 59 | 37 | .060 | .24 | |
| MAY 08... | 2.11 | 1.17 | 1.08 | 5.2 | 4 | 8.2 | <.2 | 4.3 | 5.1 | 48 | 32 | <.030 | .23 | |
| SEP 05... | 1.93 | 1.11 | 1.00 | 4.9 | 5 | 7.5 | <.2 | 6.0 | 4.7 | 42 | 30 | <.030 | E.16 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULTE WAT FLT (MG/L AS N) (00600) | NITRO-GEN, SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| | | | | | | | | | | | | | | |
| NOV 20... | .08 | .23 | .467 | <.003 | .65 | .70 | <.022 | .004 | .009 | .4 | <.1 | 3.7 | .4 | |
| FEB 21... | .05 | .28 | .436 | <.003 | .68 | .72 | .144 | .005 | .013 | .7 | <.1 | 7.3 | .7 | |
| MAY 08... | .03 | .32 | .482 | <.003 | .71 | .80 | .084 | .005 | .024 | 1.2 | <.1 | 5.2 | 1.2 | |
| SEP 05... | <.03 | .16 | E.616 | <.003 | -- | -- | <.022 | E.002 | .012 | .5 | <.1 | 5.1 | .5 | |
| DATE | | | | | | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | |
| | | | | | | | | | | | | | | |
| NOV 20... | | | | | | E1.1 | -- | 31 | <1 | | | | | |
| FEB 21... | | | | | | 2.3 | -- | 27 | <1 | | | | | |
| MAY 08... | | | | | | E1.7 | 7.20 | 31 | <1 | | | | | |
| SEP 05... | | | | | | <1.0 | 2.80 | 45 | 7 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

GREAT EGG HARBOR RIVER BASIN

01411196 BABCOCK CREEK NEAR MAYS LANDING, NJ

LOCATION.--Lat 39°28'08", long 74°41'34", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322, 1.1 mi east from intersection of U.S. Route 50, 2.2 mi northeast of Mays Landing, and 2.8 mi upstream from Watering Race Branch.

DRAINAGE AREA.--16.3 mi².

PERIOD OF RECORD.--Water years 1965, 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) |
|------|------|---|---|---|---|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
|------|------|---|---|---|---|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|

| | | | | | | | | | | | | | |
|-----------|------|-----|-----|------|------|-----|----|------|-----|----|------|------|---|
| NOV 20... | 1110 | 8.1 | -- | .159 | .126 | 760 | 78 | 10.0 | 4.5 | 47 | 6.0 | 5.0 | 8 |
| FEB 21... | 1010 | 16 | -- | .461 | .354 | 762 | 80 | 10.0 | 3.9 | 84 | 12.0 | 6.0 | 9 |
| MAY 08... | 0920 | 12 | 1.7 | .320 | .251 | 772 | 81 | 9.0 | 4.5 | 58 | 16.5 | 11.0 | 7 |
| AUG 29... | 1150 | 3.9 | 1.0 | .079 | .064 | 760 | 75 | 7.2 | 5.6 | 41 | 28.0 | 17.5 | 7 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|------|---|---|--|---|---|--|---|---|--|--|---|---|---|
|------|---|---|--|---|---|--|---|---|--|--|---|---|---|

| | | | | | | | | | | | | | |
|-----------|------|------|-----|-----|----|------|-----|-----|-----|----|----|-------|-----|
| NOV 20... | 1.36 | 1.02 | .64 | 3.5 | 1 | 6.6 | <.2 | 9.6 | 4.2 | 42 | 31 | <.030 | .11 |
| FEB 21... | 1.81 | 1.13 | .63 | 6.0 | -- | 10.1 | <.2 | 6.6 | 8.3 | 46 | -- | .030 | .23 |
| MAY 08... | 1.32 | .935 | .82 | 4.8 | -- | 8.9 | <.2 | 6.3 | 4.6 | 47 | -- | <.030 | .18 |
| AUG 29... | 1.25 | 1.05 | .75 | 3.3 | 2 | 6.1 | <.2 | 8.9 | 2.5 | 35 | 25 | <.030 | .11 |

| DATE | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORGANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689) |
|------|--|--|---|---|---|--------------------------------------|---|--|---------------------------------------|---|--|--|---|
|------|--|--|---|---|---|--------------------------------------|---|--|---------------------------------------|---|--|--|---|

| | | | | | | | | | | | | | |
|-----------|------|-----|-------|-------|-----|-----|-------|-------|------|----|-----|-----|----|
| NOV 20... | .50 | .15 | .658 | <.003 | .77 | .81 | .025 | E.003 | .005 | .4 | <.1 | 3.5 | .4 |
| FEB 21... | .03 | .24 | .360 | <.003 | .59 | .60 | .036 | .004 | .007 | .4 | <.1 | 10 | .4 |
| MAY 08... | <.03 | .21 | .498 | <.003 | .68 | .71 | <.022 | E.003 | .009 | .6 | <.1 | 6.3 | .6 |
| AUG 29... | <.03 | .12 | E.850 | <.003 | -- | -- | .040 | E.003 | .008 | .3 | <.1 | 1.7 | .3 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|----|
| NOV 20... | <1.0 | -- | E8 | <1 |
| FEB 21... | E1.6 | -- | E9 | 3 |
| MAY 08... | E1.8 | 1.20 | E11 | <1 |
| AUG 29... | <1.0 | .800 | E10 | 1 |

E Estimated value.

< Actual value is known to be less than the value shown.

01411290 TUCKAHOE RIVER NEAR ESTELL MANOR, NJ

LOCATION.--Lat 39°22'19", long 74°51'14", Atlantic County, Hydrologic Unit 02040302, at bridge on Cumberland Avenue, at Atlantic-Cumberland County boundary, 0.8 mi upstream from Sharps Branch, and 2.8 mi west of Estell Manor.

DRAINAGE AREA.--8.78 mi².

PERIOD OF RECORD.--December 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) |
|--------------|------|--|--|--|---|---|--|--|--|---|---|--|---|
| DEC 13... | 1000 | -- | .145 | .116 | 781 | 80 | 11.5 | 5.8 | 33 | -2.5 | 1.5 | 5 | .85 |
| FEB 08... | 1000 | -- | .435 | .335 | 777 | 79 | 10.5 | 4.8 | 50 | 4.0 | 4.0 | 5 | .79 |
| MAY 30... | 1000 | .8 | .445 | .349 | 761 | 85 | 8.2 | 4.8 | 33 | -- | 17.0 | 4 | .57 |
| AUG 09... | 1000 | 1.1 | .201 | .164 | 763 | 83 | 6.7 | 5.7 | 38 | 31.0 | 26.5 | 5 | .82 |

| DATE | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
|--------------|---|--|---|--|--|---|--|--|---|--|--|--|---|
| DEC 13... | .728 | .62 | 2.4 | 3 | 4.5 | <.2 | 7.5 | 2.5 | 28 | 22 | .050 | .12 | .06 |
| FEB 08... | .784 | .54 | 2.4 | -- | 3.9 | <.2 | 6.9 | 6.1 | 42 | -- | .040 | .24 | .03 |
| MAY 30... | .601 | .36 | 2.6 | <1 | 4.4 | <.2 | 6.0 | 2.0 | 33 | -- | <.030 | .29 | .05 |
| AUG 09... | .668 | .84 | 2.5 | 3 | 4.5 | <.2 | 7.0 | 1.4 | 31 | 20 | .080 | .35 | .06 |

| DATE | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
|--------------|---|--|--|--|--|---|--|---|--|---|---|--|---|
| DEC 13... | .19 | .288 | <.003 | .41 | .48 | .042 | E.003 | .004 | .5 | <.1 | 3.3 | .5 | E1.1 |
| FEB 08... | .21 | .117 | .006 | .36 | .32 | .069 | .004 | .007 | .5 | <.1 | 10 | .5 | <1.0 |
| MAY 30... | .30 | .043 | <.003 | .33 | .34 | .039 | .009 | .005 | .5 | <.1 | 9.5 | .5 | 1.5 |
| AUG 09... | .32 | E.032 | <.003 | -- | -- | .087 | .005 | .005 | .8 | <.1 | 5.1 | .8 | 3.0 |

| DATE | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEd (MG/L) (00530) |
|--------------|---|---|--|
| DEC 13... | -- | E12 | <1 |
| FEB 08... | -- | 14 | 1 |
| MAY 30... | 1.50 | E11 | 7 |
| AUG 09... | 5.10 | <13 | 2 |

E Estimated value.

< Actual value is known to be less than the value shown.

TUCKAHOE RIVER BASIN

01411290 TUCKAHOE RIVER NEAR ESTELL MANOR, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|--------------|------|--|---|--|--|--|---|--|--|--|--|--|--|
| AUG 09... | 1000 | <2 | 16.7 | E.04 | 10 | .05 | <1 | E.6 | 150 | <1 | E3 | <.01 | <1 |

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|--------------|---|--|--|
| AUG 09... | <.4 | <.05 | 3 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,3-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|--------------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|
| FEB 08... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |

| DATE | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL METHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | |
|--------------|--|---|---|---|---|---|---|--|--|---|---|---|--|--|
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| FEB 08... | <.10 | <.2 | .17 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | |

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|--------------|------|--|--|--|--|---------------------------------------|--|---|--|
| FEB 08... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|--|--|--|---|---|--|--|--|--|---|--|---|
| MAY 30... | 1000 | <.004 | <.002 | <.005 | <.007 | <.010 | E.003 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

TUCKAHOE RIVER BASIN

01411290 TUCKAHOE RIVER NEAR ESTELL MANOR, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | |
|------|---|---|--|---|---|---|---|--|--|---|---|---|---|--|
| | DATE | | | | | | | | | | | | | |
| | MAY 30... | | | | | | | | | | | | | |
| | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | | |
| | MAY 30... | | | | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

TUCKAHOE RIVER BASIN

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ

LOCATION.--Lat 39°18'25", long 74°49'15", Cape May County, Hydrologic Unit 02040302, at highway bridge on State Route 49, 0.2 mi upstream from McNeals Branch, 0.4 mi southeast of Head of River, and 3.7 mi west of Tuckahoe.

DRAINAGE AREA.--30.8 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY | UV ABSORB- ANCE | UV ABSORB- ANCE | BARO- METRIC PRES- SURE | OXYGEN, DIS- SOLVED | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD | SPE- CIFIC CON- DUCT- ANCE | TEMPER- ATURE AIR | TEMPER- ATURE WATER | HARD- NESS TOTAL | CALCIUM DIS- SOLVED | |
|--------------|------|---|--|--|--|---|---|---|--|--|--|--|--|---|
| | | FIELD | 254 NM, | 280 NM, | (MM OF HG) | (PER- CENT SATUR- ATION) | | (STAND- ARD UNITS) | (US/CM) (00095) | (DEG C) (00020) | (DEG C) (00010) | (MG/L AS CACO3) | (MG/L AS CA) | |
| | | WATER UNFLTRD (NTU) (61028) | WTR FLT (UNITS /CM) (50624) | WTR FLT (UNITS /CM) (61726) | (00025) | (00301) | | (00400) | (00095) | (00020) | (00010) | (00900) | (00915) | |
| NOV 28... | 0945 | -- | .678 | .542 | 765 | 78 | 9.4 | 4.6 | 49 | -- | 7.5 | 7 | 1.19 | |
| FEB 08... | 0945 | -- | .505 | .394 | 778 | 83 | 11.2 | 4.5 | 47 | 6.0 | 3.5 | 5 | .90 | |
| MAY 23... | 1000 | 3.7 | .445 | .355 | 760 | 80 | 7.7 | 4.9 | 35 | 18.5 | 17.0 | 5 | .89 | |
| AUG 29... | 1000 | 1.1 | .190 | .153 | 765 | 71 | 6.4 | 5.8 | 29 | 26.0 | 20.5 | 5 | .97 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| NOV 28... | .884 | 1.14 | 2.8 | <1 | 5.1 | <.2 | 8.0 | 5.3 | 56 | -- | .040 | <.10 | <.03 | |
| FEB 08... | .669 | .47 | 2.5 | -- | 4.5 | <.2 | 6.3 | 5.5 | 46 | -- | .080 | .23 | <.03 | |
| MAY 23... | .631 | .65 | 2.8 | 1 | 5.1 | <.2 | 7.1 | 3.2 | 34 | 21 | <.030 | .23 | <.03 | |
| AUG 29... | .629 | .65 | 2.6 | 3 | 4.5 | <.2 | 6.7 | 2.8 | 36 | 21 | <.030 | .18 | <.03 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 28... | .32 | E.034 | <.003 | -- | -- | .063 | <.050 | <.060 | .6 | <.1 | 15 | .6 | 2.9 | |
| FEB 08... | .22 | .038 | <.003 | .27 | .26 | .077 | E.003 | .007 | .6 | <.1 | 11 | .5 | E1.6 | |
| MAY 23... | .57 | .042 | <.003 | .28 | .61 | .268 | .005 | .021 | 2.3 | <.1 | 8.4 | 2.3 | E1.2 | |
| AUG 29... | .19 | E.062 | <.003 | -- | -- | .076 | .010 | .019 | .6 | <.1 | 3.2 | .6 | E1.8 | |
| | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530) | | | | | | |
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E Estimated value.

< Actual value is known to be less than the value shown.

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|--------------|------|--|--|--|--|--|---|--|--|--|--|--|--|
| AUG 29... | 1000 | <2 | 15.0 | E.04 | 11 | <.04 | <1 | .6 | 400 | <1 | 4 | <.01 | <1 |

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|--------------|---|--|--|
| AUG 29... | <.4 | <.05 | 3 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYLENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLORO- RIDE TOTAL (UG/L) (32102) |
|--------------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|
| FEB 08... | 0945 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |

| DATE | TIME | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- FORM TOTAL (UG/L) (32105) | CIS-1,2 -DI- CHLORO- ETHYLENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER TERT- BUTYL WATER, UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL WATER, UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|--------------|------|---|--|--|---|---|---|--|--|---|---|---|--|
| FEB 08... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |

| DATE | TIME | METHYL ENE CHLORO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYLENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYLENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLORO- RIDE TOTAL (UG/L) (39175) |
|--------------|------|--|--|--|---------------------------------------|---|---------------------------------------|---|---|--|
| FEB 08... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|--|--|---|---|--|---|---|--|--|--|--|---|
| MAY 23... | 1000 | <.004 | <.002 | <.005 | E.003 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

TUCKAHOE RIVER BASIN

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|---|--|--|---|---|---|---|
| MAY 23... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.008 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| MAY 23... | .016 | <.016 | <.034 | <.005 | <.009 | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

FISHING CREEK BASIN

305

01411400 FISHING CREEK AT RIO GRANDE, NJ

LOCATION.--Lat 39°01'39", long 74°53'48", Cape May County, Hydrologic Unit 02040206, at bridge on State Route 47 at Wildwood Pumping Station, and 1.4 mi northwest of Rio Grande.

DRAINAGE AREA.--2.29 mi².

PERIOD OF RECORD.--Water year 1965, 1998 to current year.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." The calibration of water-quality sensors is verified by regular inspections. Cleaning or recalibration is needed occasionally as a result of sensor fouling or drift. When a sensor is recalibrated, the continuous-record water-quality data for the period between inspections are adjusted to account for the difference between the sensor's response and a known value. The adjustment may be constant over the period or may be prorated. Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value does not exceed recalibration criteria are considered to be reliable and are not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection"). Data from the following periods were adjusted:
DISSOLVED OXYGEN: Jun. 25 to Jun. 28.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 16.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CAC03) (00900) |
|-----------|--|--|---|--|--|--|--|--|--|---|---|---|--|
| NOV 15... | 1040 | 4.0 | -- | .830 | .647 | 757 | 71 | 8.3 | 6.8 | 156 | 6.5 | 8.5 | 39 |
| FEB 27... | 1010 | 3.8 | -- | .703 | .547 | 767 | 81 | 9.9 | 6.3 | 124 | 12.0 | 7.0 | 27 |
| MAY 23... | 0930 | 2.2 | 2.4 | .749 | .585 | 756 | 72 | 6.5 | 7.2 | 146 | 17.0 | 20.0 | 35 |
| AUG 27... | 1300 | E1.0 | 1.4 | .975 | .756 | 757 | 77 | 5.9 | 6.8 | 130 | 29.0 | 29.0 | 36 |
| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CAC03) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| NOV 15... | 9.86 | 3.57 | 2.26 | 12.2 | 21 | 21.7 | <.2 | 8.3 | 12.9 | 123 | 83 | <.030 | .57 |
| FEB 27... | 6.98 | 2.28 | 1.20 | 11.2 | 11 | 18.5 | <.2 | 7.9 | 11.3 | 99 | 67 | <.030 | .38 |
| MAY 23... | 8.96 | 3.03 | 1.85 | 12.1 | 18 | 20.6 | E.1 | 2.8 | 12.3 | 107 | 73 | .210 | .87 |
| AUG 27... | 9.75 | 2.88 | 1.37 | 9.9 | 23 | 15.7 | <.2 | 9.8 | 8.8 | 124 | 72 | .050 | .64 |
| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 15... | <.03 | .55 | .050 | <.003 | .62 | .60 | .148 | .012 | .036 | .8 | <.1 | 17 | .8 |
| FEB 27... | <.03 | .48 | .187 | <.003 | .57 | .67 | .068 | .004 | .010 | .4 | <.1 | 15 | .4 |
| MAY 23... | .20 | .77 | .079 | .006 | .95 | .85 | .100 | .016 | .036 | .7 | <.1 | 14 | .7 |
| AUG 27... | .03 | .72 | .046 | .003 | .69 | .76 | .127 | .010 | .026 | 1.1 | <.1 | 19 | 1.1 |

E Estimated value.

< Actual value is known to be less than the value shown.

FISHING CREEK BASIN

01411400 FISHING CREEK AT RIO GRANDE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|--------------|---|---|---|--|
| NOV 15... | 2.1 | -- | 25 | 9 |
| FEB 27... | E1.0 | -- | 15 | 9 |
| MAY 23... | 2.4 | 10.5 | 29 | 5 |
| AUG 27... | E1.6 | 23.4 | 26 | 2 |

E Estimated value.

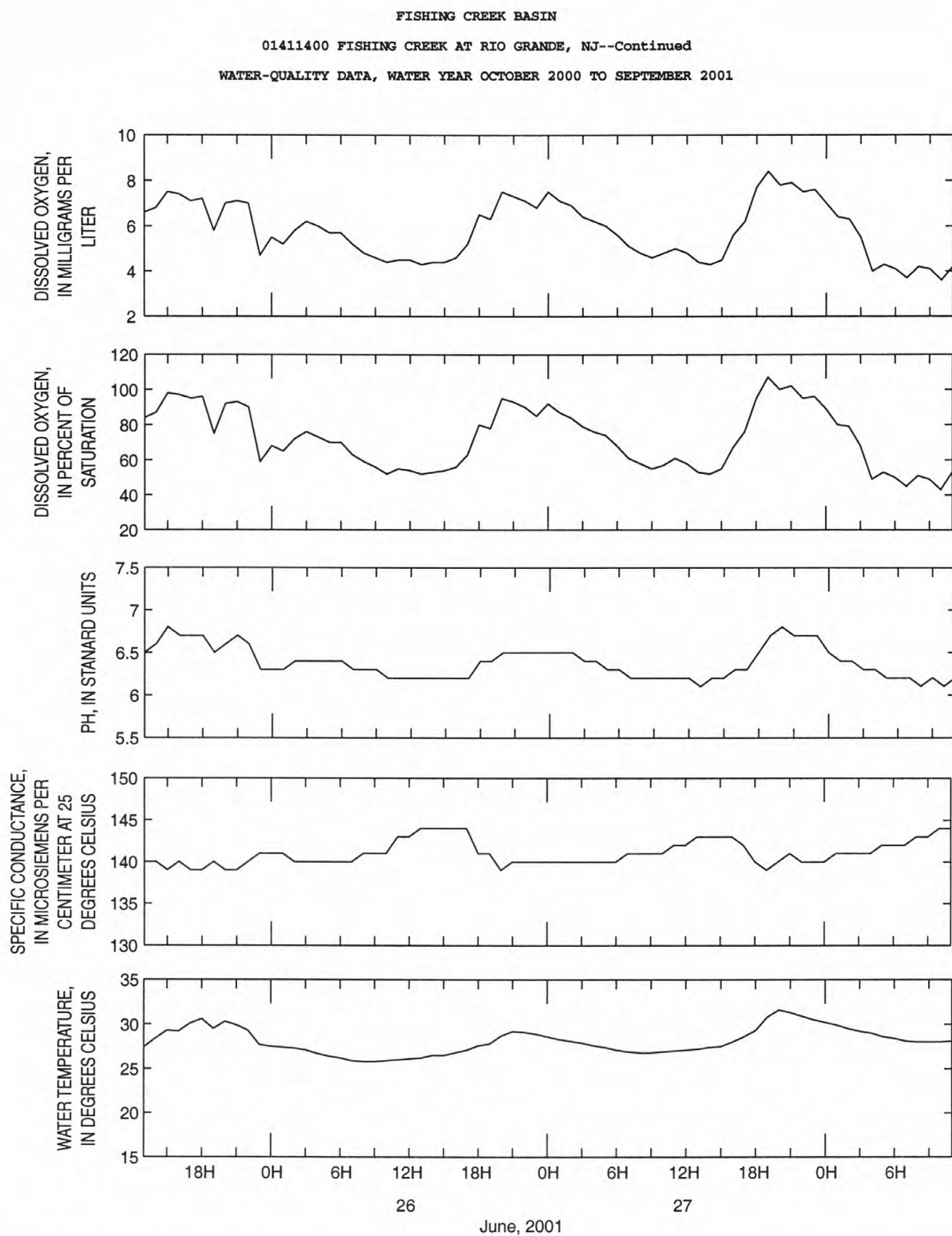


Figure 48. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01411400 Fishing Creek at Rio Grande, water year 2001.

DENNIS CREEK BASIN

01411428 DENNIS CREEK TRIBUTARY 2 AT DENNISVILLE, NJ

LOCATION.--Lat 39°11'34", long 74°49'33", Cape May County, Hydrologic Unit 02040206, at outlet of Johnson Pond, on State Route 47, and 0.1 mi west of Dennisville.

DRAINAGE AREA.--4.00 mi².

PERIOD OF RECORD.--Water Year 2000 to current year.

REMARKS.--Site is tide-affected; all samples collected at low tide, except sample on May 30 that was collected at high tide.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, and total suspended solids was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 16.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|--|--|--|--|---|--|---|--|--|--|--|---|---|
| DEC 13... | 0800 | -- | .171 | .134 | 772 | 84 | 11.3 | 6.4 | 63 | -- | 3.5 | 12 | 1.77 | |
| MAR 01... | 0830 | -- | .149 | .113 | 756 | 90 | 11.0 | 6.3 | 73 | 3.0 | 6.5 | 13 | 2.16 | |
| MAY 30... | 0800 | 1.2 | .120 | .091 | 757 | -- | 6.3 | 6.7 | -- | 16.0 | 21.0 | 120 | 8.98 | |
| SEP 06... | 0800 | 1.9 | .131 | .098 | 764 | -- | 6.8 | 6.5 | -- | 15.0 | 22.0 | 22 | 2.57 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| DEC 13... | 1.95 | 1.97 | 6.4 | 4 | 11.5 | <.2 | 3.4 | 7.8 | 48 | 39 | .050 | .19 | .07 | |
| MAR 01... | 1.89 | 1.88 | 6.2 | 4 | 9.8 | <.2 | 5.4 | 8.5 | 45 | 40 | .030 | .15 | .04 | |
| MAY 30... | 23.6 | 8.06 | 185 | 8 | 332 | E.1 | 1.3 | 49.4 | 626 | 613 | <.030 | .23 | <.03 | |
| SEP 06... | 3.69 | 2.24 | 19.5 | 7 | 34.7 | <.2 | 3.0 | 10.2 | 97 | 80 | .060 | E.47 | .10 | |
| DATE | | NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| DEC 13... | .30 | .301 | <.003 | .49 | .60 | .058 | .005 | .012 | .6 | <.1 | 4.3 | .5 | E1.9 | |
| MAR 01... | .22 | .498 | <.003 | .65 | .72 | .056 | E.003 | .014 | .5 | <.1 | 3.6 | .5 | E1.1 | |
| MAY 30... | .32 | E.025 | <.003 | -- | -- | .054 | .006 | .016 | .6 | <.1 | 3.4 | .6 | E1.4 | |
| SEP 06... | .57 | E.035 | <.003 | -- | -- | .098 | .012 | .030 | 1.0 | <.1 | 4.5 | 1.0 | 2.7 | |
| | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | |
| DATE | | | | | | | | | | | | | | |
| DEC 13... | | | | | | -- | 17 | <1 | | | | | | |
| MAR 01... | | | | | | -- | E9 | 9 | | | | | | |
| MAY 30... | | | | | | 5.70 | 97 | 1 | | | | | | |
| SEP 06... | | | | | | 14.1 | 26 | 5 | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01411428 DENNIS CREEK TRIBUTARY 2 AT DENNISVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|

SEP 06... 0800 <2 92.1 .07 25 <.04 <1 1.2 290 <1 20 <.01 <1

| DATE | SELE- NIUM, TOTAL (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|------|---|--|--|
|------|---|--|--|

SEP 06... <.4 <.05 4

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|
|------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|

MAR 01... 0830 <.10 <.10 <.10 <.2 <.10 <.10 <.10 <.10 <.10 <.10 <.20 <.20

| DATE | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL METHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|------|--|---|---|---|---|---|---|--|--|---|---|---|--|
|------|--|---|---|---|---|---|---|--|--|---|---|---|--|

MAR 01... <.10 <.2 <.10 <.10 <.10 <.2 <.2 <.2 <.10 <.2 <.10 <.10 <.2

| DATE | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD TOTAL (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|

MAR 01... <.2 <.20 <.10 <.10 <.1 <.10 <.10 <.20 <.2

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|------|------|--|--|--|---|--|--|--|--|--|---|--|---|
|------|------|--|--|--|---|--|--|--|--|--|---|--|---|

MAY 30... 0800 <.004 <.002 <.005 .010 <.010 E.238 <.020 <.005 <.018 <.003 E.004 <.005

< Actual value is known to be less than the value shown.

DENNIS CREEK BASIN

01411428 DENNIS CREEK TRIBUTARY 2 AT DENNISVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|---|--|--|---|---|---|---|
| MAY 30... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| MAY 30... | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01411444 WEST CREEK NEAR LEESBURG, NJ

LOCATION.--Lat 39°15'36", long 74°54'42", Cumberland County, Hydrologic Unit 02040206, at bridge on County Route 550, 1.5 mi upstream of Hands Millpond, 2.4 mi south of Halberton, and 4.0 mi east of Leesburg.

DRAINAGE AREA.--6.64 mi².

PERIOD OF RECORD.--Water years 1999 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator and Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 16.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) |
|------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
|------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|

| | | | | | | | | | | | | | |
|-----------|------|-----|-----|------|------|-----|----|------|-----|----|------|------|---|
| NOV 15... | 1350 | 14 | -- | .528 | .416 | 757 | 77 | 8.9 | 4.4 | 52 | 6.2 | 9.0 | 5 |
| FEB 27... | 1220 | 6.7 | -- | .448 | .343 | 766 | 92 | 10.9 | 4.0 | 57 | 10.0 | 8.0 | 5 |
| MAY 23... | 1140 | 16 | .9 | .478 | .372 | 757 | 78 | 7.4 | 4.4 | 50 | 18.5 | 17.5 | 3 |
| SEP 20... | 0900 | .00 | 1.7 | .257 | .204 | 765 | 49 | 4.6 | 4.4 | 40 | 20.0 | 18.5 | 2 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) |
|------|---|---|--|---|--|---|---|--|---|---|---|--|--|
|------|---|---|--|---|--|---|---|--|---|---|---|--|--|

| | | | | | | | | | | | | | |
|-----------|-----|------|-----|-----|-----|-----|------|-----|----|-------|-----|------|-----|
| NOV 15... | .77 | .788 | .99 | 2.8 | 5.8 | <.2 | 12.3 | 4.8 | 51 | <.030 | .32 | <.03 | .40 |
| FEB 27... | .72 | .728 | .76 | 2.7 | 4.6 | <.2 | 7.0 | 6.4 | 36 | <.030 | .20 | <.03 | .36 |
| MAY 23... | .41 | .526 | .56 | 2.7 | 5.0 | <.2 | 8.1 | 3.6 | 41 | .050 | .25 | <.03 | .29 |
| SEP 20... | .27 | .436 | .80 | 2.6 | 4.8 | <.2 | 7.9 | 3.6 | 23 | <.030 | .19 | <.03 | .25 |

| DATE | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC CORR. (UG/L) (32209) |
|------|---|---|---|--------------------------------------|--|--|---------------------------------------|---|---|--|--|--|---|
|------|---|---|---|--------------------------------------|--|--|---------------------------------------|---|---|--|--|--|---|

| | | | | | | | | | | | | | |
|-----------|-------|-------|-----|-----|------|-------|------|-----|-----|-----|-----|------|------|
| NOV 15... | E.031 | <.003 | -- | -- | .124 | E.003 | .010 | 1.4 | <.1 | 11 | 1.4 | E1.4 | -- |
| FEB 27... | .196 | <.003 | .40 | .56 | .100 | E.002 | .008 | 1.7 | <.1 | 9.6 | 1.7 | E1.0 | -- |
| MAY 23... | .037 | <.003 | .28 | .33 | .060 | E.003 | .006 | .5 | <.1 | 10 | .5 | E1.2 | 1.20 |
| SEP 20... | E.018 | <.003 | -- | -- | .066 | .004 | .007 | .9 | <.1 | 5.0 | .9 | <1.0 | 1.90 |

| DATE | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|---------------------------------------|--|
|------|---------------------------------------|--|

| | | |
|-----------|-----|----|
| NOV 15... | E13 | 6 |
| FEB 27... | E13 | 3 |
| MAY 23... | 14 | <1 |
| SEP 20... | E9 | 6 |

E Estimated value.

< Actual value is known to be less than the value shown.

01411444 WEST CREEK NEAR LEESBURG, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | |
|--------------|-------|--|--|---|---|---|--|---|---|---|--|--|--|---|
| SEP 20... | 0900 | -- | -- | -- | -- | -- | -- | <2 | 17.9 | .06 | 11 | E.03 | <1 | |
| 20... | 0900 | 5.50 | 180 | <.2 | 110 | 1.6 | <.2 | -- | -- | -- | -- | -- | -- | |
| DATE | | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECov. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECov. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029) | COBALT, RECov. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) |
| SEP 20... | E.4 | 300 | <1 | 6 | <.01 | <1 | <.4 | <.05 | 11 | -- | -- | -- | -- | |
| 20... | -- | -- | -- | -- | -- | -- | -- | -- | -- | <1 | <.03 | 1.0 | .1 | |
| DATE | | COPPER, RECov. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170) | LEAD, RECov. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECov. FM BOT- TOM MA- TERIAL (UG/G AS MN) (01053) | MERCURY RECov. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECov. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G AS SE) (01148) | ZINC, RECov. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) |
| SEP 20... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 20... | <.342 | 280 | 1.1 | 3.8 | <.01 | <.3 | <1 | <3 | <50 | <50 | <50 | <50 | <50 | |
| DATE | | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49450) | FLUOR- ANTHENE BED MAT WS, <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPHTAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403) | |
| SEP 20... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 20... | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | M | <50 | <50 | <50 | |
| DATE | | NAPHTAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPHTAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPHTAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPHTAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | P- CRESEL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | BED MAT. FALL DIAM. % FINER THAN .004 MM (80157) | |
| SEP 20... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 20... | <50 | <50 | M | <50 | <50 | <5 | <50 | <50 | <50 | <50 | <50 | M | 2 | |
| | | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) | | | | | | | | | | | | |
| | | SEP 20... 20... 3 | | | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

01411444 WEST CREEK NEAR LEESBURG, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1-TRI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHYLENE | 1,2-DI-CHLORO-ETHANE | 1,2-DI-CHLORO-PROPANE | TRANS-1,2-DI-CHLORO-ETHENE | BENZENE 1,3-DI-CHLORO-WATER | BENZENE 1,4-DI-CHLORO-WATER | BENZENE O-DI-CHLORO-WATER | BENZENE TOTAL (UG/L) | BROMO-FORM TOTAL (UG/L) | CARBON TETRA-CHLORO-RIDE TOTAL (UG/L) | | | | | | | |
|-----------|------|----------------------------------|------------------------|--------------------------|-------------------------|------------------------------------|-----------------------------|----------------------------------|--|-----------------------------|----------------------------|--------------------------|--|---------|---------|---------|---------|------|------|-----|
| | | TOTAL (UG/L) | TOTAL (UG/L) | TOTAL (UG/L) | TOTAL (UG/L) | TOTAL (UG/L) | TOTAL (UG/L) | REC (UG/L) | REC (UG/L) | REC (UG/L) | | | | | | | | | | |
| | | (34506) | (34496) | (34501) | (32103) | (34541) | (34546) | (34566) | (34571) | (34536) | | | | (34030) | (32104) | (32102) | | | | |
| FEB 27... | 1220 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | | | | | | | |
| DATE | TIME | CHLORO-DI-BROMO-METHANE | CHLORO-FORM | CIS-1,2-DI-CHLORO-ETHENE | BROMO-DI-CHLORO-METHANE | DI-CHLORO-DI-FLUORO-METHANE | DI-ISO-PROPYL-ETHER, WATER, | ETHER ETHYL WATER | ETHER TERT-BUTYL | ETHER TERT-PENTYL | ETHYL-BENZENE TOTAL (UG/L) | WATER UNFLTRD REC (UG/L) | METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) | | | | | | | |
| | | TOTAL (UG/L) | TOTAL (UG/L) | TOTAL (UG/L) | TOTAL (UG/L) | TOTAL (UG/L) | UNFLTRD RECOVER (UG/L) | UNFLTRD RECOVER (UG/L) | UNFLTRD RECOVER (UG/L) | UNFLTRD RECOVER (UG/L) | | | | | | | | | | |
| | | (34301) | (32105) | (32106) | (77093) | (32101) | (34668) | (81577) | (81576) | (50004) | | | | (50005) | (34371) | (77652) | (78032) | | | |
| FEB 27... | | <.10 | <.2 | .11 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | | | | | | |
| DATE | TIME | METHYL-ENE-CHLORIDE TOTAL (UG/L) | META/PARA-XYLENE WATER | O-XYLENE WATER | STYRENE TOTAL (UG/L) | TETRA-CHLORO-ETHYLENE TOTAL (UG/L) | TOLUENE TOTAL (UG/L) | TRI-CHLORO-ETHYLENE TOTAL (UG/L) | TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) | VINYL-CHLORIDE TOTAL (UG/L) | FEB 27... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 |
| | | | UNFLTRD REC (UG/L) | WHOLE TOTAL (UG/L) | | ENE TOTAL (UG/L) | | ENE TOTAL (UG/L) | ENE TOTAL (UG/L) | | | | | | | | | | | |
| | | | (34423) | (85795) | | (77135) | | (77128) | (34475) | (34010) | | | | | | | | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD | ALA- CHLOR, WATER, DISS, | ALPHA BHC DIS- | ATRA- ZINE, WATER, DISS, | BEN- FLUR- ALIN WAT FLT | CAR- BARYL WATER FLTRD | CARBO- FURAN WATER FLTRD | CHLOR- PYRIFOS DIS- | CYANA- ZINE, WATER, DISS, | DCPA WATER FLTRD | DEETHYL ATRA- ZINE, WATER, DISS, | DI- AZINON, DIS- | |
|--------------|------|------------------------------------|-----------------------------------|---------------------------|--|------------------------------------|------------------------------------|------------------------------------|-----------------------------------|------------------------------------|------------------------------------|--|------------------------------------|--|
| | | REC | REC, | SOLVED | REC | GF, REC | GF, REC | GF, REC | SOLVED | REC | GF, REC | REC | SOLVED | |
| | | (UG/L) (49260) | (UG/L) (46342) | (UG/L) (34253) | (UG/L) (39632) | (UG/L) (82673) | (UG/L) (82680) | (UG/L) (82674) | (UG/L) (38933) | (UG/L) (04041) | (UG/L) (82682) | (UG/L) (04040) | (UG/L) (39572) | |
| MAY 23... | 1140 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED | EPTC WATER FLTRD | LINDANE DIS- SOLVED | LIN- URON WATER FLTRD | MALA- THION, DIS- SOLVED | METHYL AZIN- PHOS WAT FLT | METO- LACHLOR WATER FLTRD | METRI- BUZIN WATER FLTRD | MOL- INATE WATER FLTRD | NAPROP- AMIDE WATER FLTRD | P,P' DDE DISSOLV | PENDI- METH- ALIN WAT FLT | PRO- METON, WATER, DISS, REC |
| | | (UG/L) (39381) | GF, REC (UG/L) (82668) | (UG/L) (39341) | GF, REC (UG/L) (82666) | (UG/L) (39532) | GF, REC (UG/L) (82686) | (UG/L) (39415) | DISSOLV (UG/L) (82630) | GF, REC (UG/L) (82671) | GF, REC (UG/L) (82684) | DISSOLV (UG/L) (34653) | GF, REC (UG/L) (82683) | (UG/L) (04037) |
| | | MAY 23... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.002 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DATE | TIME | | | | SI- MAZINE, WATER, DISS, REC | TEBU- THIURON WATER FLTRD | TER- BACIL WATER FLTRD | THIO- BENCARB WATER FLTRD | TRI- FLUR- ALIN WAT FLT | | | | | |
| | | | | | (UG/L) (04035) | GF, REC (UG/L) (82670) | GF, REC (UG/L) (82665) | GF, REC (UG/L) (82681) | GF, REC (UG/L) (82661) | | | | | |
| | | | | | MAY 23... | <.011 | <.016 | <.034 | <.005 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

WEST CREEK BASIN

01411444 WEST CREEK NEAR LEESBURG, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUN | | | | | JUL | | | | |
| 28... | 1055 | <20 | 100 | 100 | 12... | 1017 | 20 | <100 | 10 |
| JUL | | | | | 19... | 1017 | <20 | 100 | 10 |
| 05... | 1018 | 310 | 200 | 70 | 26... | 1031 | <20 | <100 | 40 |

< Actual value is known to be less than the value shown.

01411452 STILL RUN AT LITTLE MILL ROAD, NEAR CLAYTON, NJ

LOCATION.--Lat 39°38'08", long 75°05'59", Gloucester County, Hydrologic Unit 02040206, at bridge on Little Mill Road, 1.3 mi downstream of Silver Lake, and 1.5 mi south of Clayton.

DRAINAGE AREA.--10.6 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS (CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS (CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | | |
|--------------|------|---|---|--|---|---|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | |
| NOV 14... | 1000 | -- | .126 | .098 | 758 | 73 | 8.0 | 6.7 | 115 | -- | 11.0 | 28 | | |
| FEB 15... | 1000 | -- | .145 | .110 | 760 | 81 | 9.6 | 6.5 | 145 | 8.5 | 8.0 | 29 | | |
| MAY 09... | 1000 | 1.7 | .292 | .235 | 769 | 75 | 7.7 | 6.6 | 122 | -- | 14.5 | 29 | | |
| AUG 30... | 1000 | 1.9 | .211 | .163 | 760 | 66 | 5.8 | 6.5 | 104 | 24.5 | 21.5 | 30 | | |
| DATE | | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) |
| | | | | | | | | | | | | | | |
| NOV 14... | 5.58 | 3.30 | 2.29 | 8.0 | 17 | 14.1 | <.2 | 5.0 | 6.9 | 62 | 60 | .030 | .23 | |
| FEB 15... | 6.39 | 3.17 | 1.87 | 12.4 | 9 | 21.5 | <.2 | 6.6 | 11.2 | 88 | 75 | <.030 | .18 | |
| MAY 09... | 6.19 | 3.32 | 2.22 | 9.2 | 15 | 16.7 | <.2 | 3.2 | 8.3 | 78 | 64 | <.030 | .36 | |
| AUG 30... | 5.95 | 3.56 | 2.14 | 9.1 | 18 | 15.9 | <.2 | 4.2 | 6.7 | 78 | 58 | .030 | .28 | |
| DATE | | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, PAR TICULATE WAT FLT SUSP TOTAL (MG/L AS N) (00600) | NITRO- GEN, PAR TICULATE WAT FLT SUSP TOTAL (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) |
| | | | | | | | | | | | | | | |
| NOV 14... | .04 | .24 | 1.01 | <.003 | 1.2 | 1.3 | .036 | .004 | .010 | .5 | <.1 | 3.1 | .5 | |
| FEB 15... | <.03 | .18 | 1.46 | <.003 | 1.6 | 1.6 | .091 | .005 | .011 | .7 | <.1 | 3.7 | .7 | |
| MAY 09... | <.03 | .36 | 1.17 | <.003 | 1.5 | 1.5 | .064 | .005 | .015 | .6 | M | 5.0 | E.6 | |
| AUG 30... | .06 | .43 | E.610 | <.003 | -- | -- | .058 | .006 | .035 | .5 | <.1 | 4.7 | .5 | |
| DATE | | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | | | | |
| | | | | | | | | | | | | | | |
| NOV 14... | | E1.0 | -- | 19 | 3 | | | | | | | | | |
| FEB 15... | | <1.1 | -- | E12 | 7 | | | | | | | | | |
| MAY 09... | | <1.0 | 7.30 | 21 | <1 | | | | | | | | | |
| AUG 30... | | <1.0 | 13.0 | 25 | 17 | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

MAURICE RIVER BASIN

01411452 STILL RUN AT LITTLE MILL ROAD, NEAR CLAYTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | |
|--------------|------|--|--|---|--|---|--|--|---|---|--|--|--|---|
| AUG 30... | 1000 | -- | -- | -- | -- | -- | -- | E1 | 88.5 | .09 | 25 | .05 | <1 | |
| 30... | 1000 | 6.30 | 100 | 1.6 | 220 | 8.9 | <.2 | -- | -- | -- | -- | -- | -- | |
| DATE | TIME | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) |
| AUG 30... | 1.2 | 1460 | 2 | 90 | .03 | 1 | E.2 | <.05 | 10 | -- | -- | -- | -- | |
| 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | <1 | <.03 | 2.7 | .3 | |
| DATE | TIME | COPPER, FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/FE) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G (01053) | MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G (01148) | ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) |
| AUG 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 30... | M | 1200 | 3.3 | 7.5 | <.01 | .8 | <1 | 4 | <50 | <50 | <50 | <50 | <50 | |
| DATE | TIME | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403) |
| AUG 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 30... | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | M | <50 | <50 | |
| DATE | TIME | NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. FALL DIAM. % FINER THAN .004 MM (80157) |
| AUG 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 30... | <50 | <50 | <50 | <50 | <50 | <5 | E20 | <50 | <50 | <50 | <50 | M | <1 | |
| DATE | TIME | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) | | | | | | | | | | | | |
| AUG 30... | -- | | | | | | | | | | | | | |
| 30... | 2 | | | | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

01411452 STILL RUN AT LITTLE MILL ROAD, NEAR CLAYTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLORO- RIDE TOTAL (UG/L) (32102) |
|--------------|------|---|--|---|---|---|---|---|---|---|--|---|--|
| FEB 15... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
| DATE | TIME | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
| FEB 15... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
| DATE | TIME | METHYL CHLORO- RIDE TOTAL (UG/L) (34423) | METHYL CHLORO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD TOTAL (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLORO- RIDE TOTAL (UG/L) (39175) | | |
| FEB 15... | | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD | ALA- CHLOR, WATER, DISS, | ALPHA BHC DIS- | ATRA- ZINE, WATER, DISS, | BEN- FLUR- ALIN WAT FLT | CAR- BARYL WATER FLTRD | CARBO- FURAN WATER FLTRD | CHLOR- PYRIFOS DIS- | CYANA- ZINE, WATER, DISS, | DCPA WATER FLTRD | DEETHYL ATRA- ZINE, WATER, DISS, | DI- AZINON, DIS- | | |
|--------------|-------|--|---|--|---|---|---|---|---|---|---|--|---|---|--|
| | | REC (UG/L) (49260) | REC, (UG/L) (46342) | SOLVED (UG/L) (34253) | REC (UG/L) (39632) | GF, REC (UG/L) (82673) | GF, REC (UG/L) (82680) | GF, REC (UG/L) (82674) | SOLVED (UG/L) (38933) | REC (UG/L) (04041) | GF, REC (UG/L) (82682) | REC (UG/L) (04040) | SOLVED (UG/L) (39572) | | |
| | | | | | | | | | | | | | | | |
| MAY 09... | 1000 | <.004 | <.002 | <.005 | .009 | <.010 | <.041 | E.007 | <.005 | <.018 | <.003 | E.004 | <.005 | | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER FLTRD 0.7 U DISSOLV (UG/L) (39415) | METRI- BUZIN WATER FLTRD 0.7 U DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| MAY 09... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .022 | <.006 | <.002 | <.007 | <.003 | <.010 | E.005 | | |
| DATE | TIME | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| MAY 09... | | | | | <.011 | E.013 | <.034 | <.005 | <.009 | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

MAURICE RIVER BASIN

01411452 STILL RUN AT LITTLE MILL ROAD, NEAR CLAYTON, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 10... | 1025 | <20 | 200 | 190 | 07... | 1010 | 220 | 100 | 220 |
| 17... | 1020 | 230 | <100 | 200 | | | | | |
| 24... | 1000 | 80 | <100 | 380 | | | | | |
| 31... | 1040 | 110 | 100 | 170 | | | | | |

< Actual value is known to be less than the value shown.

MAURICE RIVER BASIN

319

01411466 INDIAN BRANCH NEAR MALAGA, NJ

LOCATION.--Lat 39°35'27", long 75°03'36", Gloucester County, Hydrologic Unit 02040206, at bridge on U.S. Route 47 (Delsea Drive), 0.4 mi upstream of Malaga Lake, and 1.4 mi north of Malaga.

DRAINAGE AREA.--6.50 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) |
|-----------|------|---|---|---|---|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 15... | 0940 | 4.9 | -- | .611 | .484 | 756 | 65 | 7.6 | 4.7 | 46 | 7.5 | 8.0 | 7 |
| FEB 20... | 0950 | 9.1 | -- | .508 | .399 | 765 | 75 | 10.0 | 4.4 | 60 | 12.0 | 3.5 | 7 |
| MAY 09... | 0830 | 1.6 | .8 | .432 | .345 | 765 | 60 | 6.5 | 4.6 | 48 | 14.0 | 12.0 | 7 |
| AUG 22... | 1030 | 2.7 | .8 | .192 | .158 | 760 | 78 | 7.5 | 5.5 | 40 | 31.0 | 17.0 | 6 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|--|---|---|--|
| NOV 15... | 1.27 | .927 | 1.03 | 2.6 | <1 | 5.4 | <.2 | 9.7 | 3.9 | 49 | -- | <.030 | .34 |
| FEB 20... | 1.23 | .897 | .78 | 2.7 | -- | 5.2 | <.2 | 6.6 | 5.3 | 49 | -- | .040 | .25 |
| MAY 09... | 1.29 | .957 | .87 | 3.5 | <1 | 6.4 | <.2 | 5.3 | 3.7 | 45 | -- | <.030 | .22 |
| AUG 22... | 1.09 | .908 | .92 | 3.3 | 3 | 6.1 | <.2 | 7.5 | 3.3 | 40 | 28 | <.030 | .19 |

| DATE | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR-TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|---|---|---|---|--------------------------------------|---|--|---------------------------------------|---|---|--|--|
| NOV 15... | <.03 | .32 | .350 | <.003 | .69 | .67 | .041 | .004 | .004 | .3 | <.1 | 11 | .3 |
| FEB 20... | .05 | .28 | .588 | <.003 | .83 | .87 | .037 | .005 | .005 | .3 | <.1 | 9.6 | .3 |
| MAY 09... | <.03 | .29 | .610 | <.003 | .83 | .90 | <.022 | E.003 | .006 | .5 | <.1 | 7.2 | .5 |
| AUG 22... | <.03 | .24 | .669 | <.003 | .86 | .91 | .047 | .007 | .011 | .4 | <.1 | 3.8 | .4 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, METHOD 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|---|--|---------------------------------------|--|
|------|---|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|----|
| NOV 15... | E1.3 | -- | E7 | 6 |
| FEB 20... | <1.0 | -- | E7 | 7 |
| MAY 09... | <1.0 | 5.50 | E11 | <1 |
| AUG 22... | <1.0 | 4.50 | E10 | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

MAURICE RIVER BASIN

01411466 INDIAN BRANCH NEAR MALAGA, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 10... | 1040 | 50 | <100 | 80 | 07... | 1025 | 70 | <100 | 80 |
| 17... | 1040 | 20 | <100 | 60 | | | | | |
| 24... | 1055 | 20 | <100 | 50 | | | | | |
| 31... | 1055 | 50 | <100 | 40 | | | | | |

< Actual value is known to be less than the value shown.

MAURICE RIVER BASIN

321

01411500 MAURICE RIVER AT NORMA, NJ

LOCATION.--Lat 39°29'44", long 75°04'38", Salem County, Hydrologic Unit 02040206, at bridge on Almond Road (County Route 540) in Norma, 0.8 mi downstream from Blackwater Branch, and 2.9 mi west of Vineland.

DRAINAGE AREA.--112.0 mi².

PERIOD OF RECORD.--Water years 1953, 1962-63, 1965 to September 1997, December 1998 to current year.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|---|--|--|--|---|---|---|--|---|
| NOV 27... | 1140 | 154 | -- | .305 | .243 | 753 | 89 | 10.4 | 6.2 | 90 | 12.5 | 8.0 | 20 | |
| FEB 26... | 1230 | 184 | -- | .253 | .194 | 765 | 95 | 11.6 | 6.2 | 110 | 9.0 | 7.0 | 22 | |
| MAY 09... | 1000 | 122 | 1.7 | .305 | .240 | 768 | 84 | 8.4 | 6.5 | 99 | 8.5 | 16.0 | 22 | |
| SEP 06... | 1000 | 58 | 1.2 | .097 | .075 | 767 | 91 | 8.5 | 6.5 | 96 | 20.2 | 19.0 | 20 | |
| DATE | TIME | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 27... | 4.25 | 2.27 | 2.22 | 6.7 | 7 | 11.0 | <.2 | 6.2 | 7.9 | 64 | 52 | <.030 | .30 | |
| FEB 26... | 4.80 | 2.34 | 1.79 | 8.9 | 5 | 14.8 | <.2 | 5.5 | 9.7 | 75 | 59 | <.030 | .24 | |
| MAY 09... | 4.60 | 2.50 | 1.84 | 7.5 | 9 | 11.7 | <.2 | 3.4 | 7.5 | 70 | 53 | .030 | .30 | |
| SEP 06... | 3.94 | 2.43 | 2.46 | 7.5 | 10 | 11.9 | <.2 | 4.0 | 6.0 | 56 | -- | .030 | .24 | |
| DATE | TIME | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULATE SUSP TOTAL (MG/L AS N) (00600) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | |
| NOV 27... | <.03 | .38 | 1.57 | <.003 | 1.9 | 1.9 | .043 | .006 | .016 | .8 | <.1 | 7.2 | .8 | |
| FEB 26... | .03 | .29 | 1.92 | <.003 | 2.2 | 2.2 | .025 | E.003 | .009 | .3 | <.1 | 5.7 | .3 | |
| MAY 09... | <.03 | .40 | 1.79 | .004 | 2.1 | 2.2 | .044 | .006 | .017 | .5 | <.1 | 5.6 | .5 | |
| SEP 06... | .04 | .23 | 1.63 | <.003 | 1.9 | 1.9 | .027 | .004 | .010 | .3 | <.1 | 2.6 | .3 | |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|--|--|---------------------------------------|--|
| NOV 27... | E1.9 | -- | 97 | 10 |
| FEB 26... | E1.2 | -- | 52 | 1 |
| MAY 09... | 2.7 | 1.20 | 30 | 3 |
| SEP 06... | <1.0 | .900 | -- | <1 |

E Estimated value.

< Actual value is known to be less than the value shown.

MAURICE RIVER BASIN

01411500 MAURICE RIVER AT NORMA, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUN | | | | | JUL | | | | |
| 28... | 0919 | 110 | 100 | 70 | 12... | 0913 | 90 | <100 | 140 |
| JUL | | | | | 19... | 0905 | 140 | 100 | 310 |
| 05... | 0905 | 50 | 100 | 340 | 26... | 0920 | <20 | <100 | 50 |

< Actual value is known to be less than the value shown.

01411955 GRAVELLY RUN AT LAUREL LAKE, NJ

LOCATION.--Lat 39°20'14", long 75°03'04", Cumberland County, Hydrologic Unit 02040206, at bridge on Battle Lane, 0.3 mi upstream from mouth and Buckshutem Creek, 1.1 mi west of community of Laurel Lake, and 2.5 mi southeast of Millville Municipal Airport.

DRAINAGE AREA.--3.19 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTDR (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM HG) OF (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 20... | 1110 | .68 | -- | .073 | .060 | 760 | 81 | 10.2 | 5.2 | 26 | -- | 5.5 | 4 |
| FEB 26... | 1140 | 3.7 | -- | .229 | .175 | 764 | 86 | 10.5 | 4.6 | 44 | -- | 7.0 | 5 |
| MAY 10... | 1040 | .93 | 1.3 | .115 | .091 | 764 | 81 | 8.6 | 5.1 | 25 | 18.5 | 13.0 | 3 |
| AUG 27... | 1010 | .92 | 6.2 | .091 | .074 | 757 | 77 | 7.2 | 5.3 | 23 | 29.0 | 18.0 | 4 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|---|
| NOV 20... | .64 | .508 | .41 | 2.1 | 2 | -- | <.2 | 7.7 | -- | 19 | -- | <.030 | <.10 |
| FEB 26... | .75 | .725 | .46 | 2.8 | <1 | 5.2 | <.2 | 5.8 | 5.5 | 39 | -- | <.030 | .12 |
| MAY 10... | .52 | .481 | .42 | 2.2 | 2 | 4.1 | <.2 | 4.4 | 1.8 | 24 | 15 | <.030 | E.10 |
| AUG 27... | .52 | .532 | .44 | 2.0 | 2 | 4.0 | <.2 | 7.3 | 1.4 | 32 | 18 | <.030 | E.09 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHURUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHURUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|--|---|---|---|--------------------------------------|--|--|---------------------------------------|---|---|--|--|
| NOV 20... | .03 | .17 | .117 | <.003 | -- | .29 | <.022 | E.002 | .006 | .4 | <.1 | 1.6 | .4 |
| FEB 26... | <.03 | .18 | .082 | <.003 | .20 | .26 | .038 | <.004 | .005 | .5 | <.1 | 5.0 | .5 |
| MAY 10... | .05 | .13 | .057 | <.003 | -- | .19 | .045 | <.004 | E.002 | .5 | M | 2.4 | E.5 |
| AUG 27... | <.03 | .27 | .149 | <.003 | -- | .42 | .043 | E.002 | .014 | .6 | <.1 | 1.7 | .6 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|--|--|---------------------------------------|--|
| NOV 20... | <1.0 | -- | E9 | 5 |
| FEB 26... | <1.0 | -- | 19 | 2 |
| MAY 10... | <1.0 | 1.60 | E8 | <1 |
| AUG 27... | <1.0 | 10.9 | E7 | 12 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

MAURICE RIVER BASIN

01411955 GRAVELLY RUN AT LAUREL LAKE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|--------------|------|--|--|--|--|--|---|--|--|--|--|--|--|
| AUG 27... | 1010 | <2 | 16.5 | E.04 | 11 | E.02 | <1 | E.6 | 230 | 2 | E2 | <.01 | <1 |

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|--------------|---|--|--|
| AUG 27... | <.4 | <.05 | 4 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLOR- IDE TOTAL (UG/L) (32102) |
|--------------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|
| FEB 26... | 1140 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |

| DATE | CHLORO-DI-CHLORO-BENZENE | | CHLORO-FORM TOTAL (UG/L) (32106) | CIS-1,2-DI-CHLORO-ETHENE | | BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101) | DI-CHLORO-DI-FLUORO-METHANE | | DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT-BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL-BENZENE TOTAL (UG/L) (34371) | FREON-113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|-----------|--------------------------|---------------|--|--------------------------|---------|--|-----------------------------|---------|--|---|---|---|--|--|--|
| | TOTAL | METHANE TOTAL | | TOTAL | TOTAL | | TOTAL | TOTAL | | | | | | | |
| | (UG/L) | (UG/L) | | (UG/L) | (UG/L) | | (UG/L) | (UG/L) | | | | | | | |
| | (34301) | (32105) | | (32106) | (77093) | | (32101) | (34668) | | | | | | | |
| FEB 26... | <.10 | <.2 | .28 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | | |

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|--------------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
| FEB 26... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DISS, SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|--|--|--|---|---|--|--|---|--|---|--|---|
| MAY 10... | 1040 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

MAURICE RIVER BASIN

325

01411955 GRAVELLY RUN AT LAUREL LAKE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|--|--|--|--|--|---|--|---|---|--|---|--|---|
| MAY 10... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| | | | | | | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (04035) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
| | | | DATE | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | MAY 10... | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | |

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUN 28... | 1039 | 40 | 100 | 10 | JUL 12... | 1000 | <20 | 200 | 30 |
| JUL 05... | 1000 | 170 | 100 | 200 | JUL 19... | 0959 | 90 | <100 | 120 |
| | | | | | JUL 26... | 0949 | 20 | <100 | 100 |

< Actual value is known to be less than the value shown.

COHANSEY RIVER BASIN

01412800 COHANSEY RIVER AT SEELEY, NJ

LOCATION.--Lat 39°28'21", long 75°15'21", Cumberland County, Hydrologic Unit 02040206, at bridge on Silver Lake Road, 0.6 mi south of Seeley, 2.6 mi east of Shiloh, 4.1 mi north of Bridgeton, and 22.5 mi upstream from mouth.

DRAINAGE AREA.--28.0 mi².

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 27... | 0930 | 34 | -- | .118 | .094 | 755 | 87 | 10.2 | 6.8 | 221 | 10.5 | 8.0 | 62 |
| FEB 26... | 1030 | 37 | -- | .081 | .063 | 765 | 93 | 11.5 | 6.7 | 207 | 7.5 | 6.5 | 60 |
| MAY 22... | 1400 | 49 | 14 | .199 | .157 | 756 | 86 | 8.3 | 7.0 | 194 | 23.0 | 16.5 | 56 |
| AUG 29... | 1220 | 29 | 14 | .100 | .077 | 762 | 84 | 7.3 | 6.4 | 207 | 25.5 | 22.5 | 59 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C TUEVTS, DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|--|
| NOV 27... | 12.1 | 7.67 | 7.87 | 9.5 | 17 | 24.1 | <.2 | 9.7 | 22.7 | 132 | 126 | <.030 | .29 |
| FEB 26... | 12.1 | 7.13 | 4.00 | 8.8 | 12 | 20.8 | <.2 | 8.5 | 25.8 | 128 | 118 | .040 | .20 |
| MAY 22... | 11.4 | 6.75 | 4.45 | 8.9 | 16 | 20.1 | <.2 | 6.6 | 23.4 | 136 | 110 | .100 | .48 |
| AUG 29... | 11.6 | 7.28 | 6.21 | 9.8 | 16 | 22.6 | <.2 | 8.0 | 23.7 | 126 | 99 | .060 | .38 |

| DATE | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR-TICULATE SUSP (MG/L AS N) (00600) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|---|---|---|--|--|--|--|--|---|---|--|--|
| NOV 27... | .03 | .40 | 4.97 | .012 | 5.3 | 5.4 | .100 | .018 | .058 | .9 | <.1 | 3.3 | .9 |
| FEB 26... | .04 | .30 | 5.40 | .006 | 5.6 | 5.7 | .097 | .004 | .048 | .9 | <.1 | 2.5 | .9 |
| MAY 22... | .08 | .76 | 4.13 | .018 | 4.6 | 4.9 | .206 | .017 | .115 | 1.8 | <.1 | 5.0 | 1.8 |
| AUG 29... | .07 | .50 | 4.39 | .017 | -- | -- | .148 | .020 | .077 | 1.1 | <.1 | 3.1 | 1.1 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|--|--|---------------------------------------|--|
| NOV 27... | E2.1 | -- | 17 | 2 |
| FEB 26... | E1.5 | -- | 17 | 7 |
| MAY 22... | 2.9 | 9.00 | 15 | 12 |
| AUG 29... | <1.0 | 4.30 | 20 | 12 |

E Estimated value.

< Actual value is known to be less than the value shown.

COHANSEY RIVER BASIN

01412800 COHANSEY RIVER AT SEELEY, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUN | | | | | JUL | | | | |
| 28... | 0941 | 50 | <100 | <10 | 12... | 0929 | <20 | <100 | <10 |
| JUL | | | | | 19... | 0925 | <20 | <100 | 60 |
| 05... | 0924 | 20 | <100 | 290 | 26... | 0939 | <20 | <100 | 20 |

< Actual value is known to be less than the value shown.

COHANSEY RIVER BASIN

01413013 BARRETT RUN AT BRIDGETON, NJ

LOCATION.--Lat 39°26'45", long 75°14'48", Cumberland County, Hydrologic Unit 02040206, at bridge on West Avenue, 400 ft downstream of Mary Elmer Lake in Bridgeton, 1,300 ft upstream of Sunset Lake, and 2.2 mi northeast of Bowentown.

DRAINAGE AREA.--7.58 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | | |
|--------------|------|---|---|---|--|---|--|---|--|--|--|--|---|--|
| | | | | | | | | | | | | | | |
| NOV 29... | 1000 | -- | .143 | .120 | 764 | 88 | 10.7 | 6.9 | 158 | -- | 7.0 | 50 | | |
| MAR 07... | 0900 | -- | .050 | .039 | 754 | 96 | 12.6 | 7.7 | 176 | 3.5 | 3.5 | 49 | | |
| MAY 30... | 1000 | 56 | .169 | .133 | 760 | 93 | 8.5 | 7.1 | 127 | 16.5 | 19.5 | 43 | | |
| AUG 14... | 1000 | 6.9 | .088 | .069 | 760 | 87 | 7.0 | 7.2 | 157 | 24.0 | 26.0 | 51 | | |
| DATE | | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AM- MONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| | | | | | | | | | | | | | | |
| NOV 29... | 10.5 | 5.77 | 3.69 | 6.1 | 16 | 15.6 | <.2 | 7.5 | 17.0 | 94 | 89 | .030 | .39 | |
| MAR 07... | 10.4 | 5.65 | 2.72 | 7.9 | 13 | 18.8 | <.2 | 5.9 | 18.1 | 97 | 94 | .040 | .18 | |
| MAY 30... | 9.68 | 4.67 | 3.84 | 4.2 | 18 | 10.7 | E.1 | 4.8 | 14.6 | 90 | 73 | .040 | .44 | |
| AUG 14... | 10.6 | 5.92 | 3.88 | 6.6 | 24 | 16.7 | <.2 | 5.5 | 15.9 | 81 | 85 | .090 | .39 | |
| DATE | | NITRO- GEN, AM- MONIA TOTAL (MG/L AS N) (00610) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) |
| | | | | | | | | | | | | | | |
| NOV 29... | <.03 | .58 | 3.05 | .011 | 3.4 | 3.6 | .216 | .006 | .036 | 1.4 | <.1 | 3.3 | 1.4 | |
| MAR 07... | .06 | .29 | 3.74 | .009 | 3.9 | 4.0 | .074 | .004 | .028 | .6 | <.1 | 1.7 | .5 | |
| MAY 30... | .12 | .95 | 2.11 | .040 | 2.5 | 3.1 | .250 | .023 | .197 | 1.6 | <.1 | 4.3 | 1.6 | |
| AUG 14... | .15 | .63 | 1.15 | .037 | 1.5 | 1.8 | .229 | .012 | .049 | 1.5 | <.1 | 2.8 | 1.5 | |
| DATE | | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | BORON, DIS- SOLVED (UG/L AS B) (01020) | | | | | | | | | |
| | | | | | | | | | | | | | | |
| NOV 29... | | 3.0 | -- | 23 | 3 | | | | | | | | | |
| MAR 07... | | E1.4 | -- | <13 | 2 | | | | | | | | | |
| MAY 30... | | 3.9 | 36.4 | 14 | 21 | | | | | | | | | |
| AUG 14... | | 2.2 | 53.5 | 25 | 5 | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

E Estimated value.
< Actual value is known to be less than the value shown.

COHANSEY RIVER BASIN

01413013 BARRETT RUN AT BRIDGETON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHYL- ENE | 1,2-DI- CHLORO- ETHANE | 1,2-DI- CHLORO- PROPANE | TRANS- 1,2-DI- CHLORO- ETHENE | BENZENE 1,3-DI- CHLORO- WATER UNFLTRED | BENZENE 1,4-DI- CHLORO- WATER UNFLTRED | BENZENE O-DI- CHLORO- WATER UNFLTRED | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|--------------|------|-------------------------------------|------------------------------|---|-------------------------------------|---|---|--|---|---|---|--|---|
| | | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (32103) | TOTAL (UG/L) (34541) | TOTAL (UG/L) (34546) | TOTAL (UG/L) (34566) | TOTAL (UG/L) (34571) | TOTAL (UG/L) (34536) | TOTAL (UG/L) (34030) | TOTAL (UG/L) (32104) | TOTAL (UG/L) (32102) |
| MAR 07... | 0900 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
| DATE | TIME | CHLORO- DI- BROMO- METHANE | CHLORO- FORM TOTAL | CIS-1,2 -DI- CHLORO- ETHENE WATER | BROMO- DI- CHLORO- METHANE | DI- CHLORO- DI- FLUORO- METHANE | DI-ISO- PROPYL- ETHER, WATER, UNFLTRED RECOVER | ETHER ETHYL WATER UNFLTRED RECOVER | ETHER TERT- BUTYL ETHYL UNFLTRED RECOVER | ETHER TERT- PENTYL METHYL UNFLTRED RECOVER | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRED REC | METHYL TERT- BUTYL ETHER WAT UNF REC |
| | | TOTAL (UG/L) (34301) | TOTAL (UG/L) (32106) | TOTAL (UG/L) (77093) | TOTAL (UG/L) (32101) | TOTAL (UG/L) (34668) | TOTAL (UG/L) (81577) | TOTAL (UG/L) (81576) | TOTAL (UG/L) (50004) | TOTAL (UG/L) (50005) | TOTAL (UG/L) (34371) | TOTAL (UG/L) (77652) | TOTAL (UG/L) (78032) |
| MAR 07... | | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.2 |
| DATE | TIME | CHLORO- DI- BROMO- METHANE | CHLORO- FORM TOTAL | CIS-1,2 -DI- CHLORO- ETHENE WATER | BROMO- DI- CHLORO- METHANE | DI- CHLORO- DI- FLUORO- METHANE | DI-ISO- PROPYL- ETHER, WATER, UNFLTRED RECOVER | ETHER ETHYL WATER UNFLTRED RECOVER | ETHER TERT- BUTYL ETHYL UNFLTRED RECOVER | ETHER TERT- PENTYL METHYL UNFLTRED RECOVER | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRED REC | METHYL TERT- BUTYL ETHER WAT UNF REC |
| | | TOTAL (UG/L) (34301) | TOTAL (UG/L) (32106) | TOTAL (UG/L) (77093) | TOTAL (UG/L) (32101) | TOTAL (UG/L) (34668) | TOTAL (UG/L) (81577) | TOTAL (UG/L) (81576) | TOTAL (UG/L) (50004) | TOTAL (UG/L) (50005) | TOTAL (UG/L) (34371) | TOTAL (UG/L) (77652) | TOTAL (UG/L) (78032) |
| MAR 07... | | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.2 |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|--------------|------|--|---|---|---|---|---|--|---|---|---|--|---|---|
| | | | | | | | | | | | | | | |
| MAY 30... | 1000 | <.004 | .578 | <.005 | .217 | <.010 | E.058 | <.020 | <.005 | .766 | <.003 | E.013 | 3.41 | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER FLTRD DISSOLV (UG/L) (39415) | BUZIN SENCOR WATER FLTRD DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | | | | | | | | | | | | | |
| MAY 30... | | <.005 | .010 | <.004 | .072 | <.027 | E.080 | .350 | .012 | <.002 | <.007 | <.003 | <.010 | E.007 |
| DATE | TIME | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
| | | | | | | | | | | | | | | |
| MAY 30... | | | | | | .143 | <.016 | <.034 | <.005 | E.007 | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

COHANSEY RIVER BASIN

01413013 BARRETT RUN AT BRIDGETON, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUN | | | | | JUL | | | | |
| 28... | 1008 | <20 | <100 | 80 | 12... | 0937 | 20 | 100 | 150 |
| JUL | | | | | 19... | 0933 | 20 | 100 | 90 |
| 05... | 0935 | 330 | 200 | 600 | 26... | 0949 | <20 | <100 | <10 |

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, PA, Hydrologic Unit 02040104, at bridge (on U.S. Highways 6 and 209) between Port Jervis, N.Y. and Matamoras, PA, 1.2 mi upstream from Neversink River, and 6.5 mi downstream from Mongaup River.

DRAINAGE AREA.--3,070 mi².

PERIOD OF RECORD.--Water years 1957-60, 1964 to January 1994, June 1997, 1999 to August 2001 (discontinued).

CHEMICAL DATA: 1958-59 (a), 1964-65 (c), 1966 (a), 1967-68 (c), 1969-76 (d), 1987 (b), 1988-89 (c), 1990-91 (b), 1992, 1997 (a), 1999 to August 2001 (discontinued).

MINOR ELEMENTS DATA: 1970, 1972-73 (a), 1974-76 (c), 1987 (b), 1988-89 (c), 1990-91 (b), 1992 (a).

PESTICIDE DATA: 1974 (a), 1987 (b), 1988-89 (c), 1990 (b), 1997 (a), 1999 to August 2001 (discontinued).

ORGANIC DATA: OC--1974 (b), 1975 (d), 1999 to August 2001 (discontinued).

NUTRIENT DATA: 1968 (a), 1969-76 (d), 1987 (b), 1988-89 (c), 1990 (b), 1999 to August 2001 (discontinued).

BIOLOGICAL DATA:

Bacteria--1973-76 (d).

Phytoplankton--1974 (b), 1975-76 (c).

Periphyton--1976 (a).

SEDIMENT DATA: 1959, 1976 (c), 1988 (b), 1989 (c), 1990-91 (b), 1992 (a), 1999 to August 2001 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January to September 1973.

SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960, March 1970 to June 1976.

WATER TEMPERATURE: February 1957 to September 1960, January to September 1973, June 1974 to January 1994, October 1998 to August 2001.

INSTRUMENTATION.-- Thermocoupler to data logger; recorded every 15 minutes.

REMARKS.--These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (DELN NAWQA).

For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-Control Data" in the "Introduction."

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum (water years 1957-59, 1973-81, 1983-84, 1988- 93, 1999-2000), 30.5 °C, July 5, 1999; minimum (water years 1958-60, 1973, 1975-93, 1999-2000), 0.0°C on many days during winter periods, except 1984.

SUSPENDED-SEDIMENT CONCENTRATION (water years 1957-60, 1970-76): Maximum daily mean, 760 mg/L, June 29, 1973; minimum daily mean, less than 1 mg/L on many days.

SUSPENDED-SEDIMENT DISCHARGE (water years 1957-60, 1970-76): Maximum daily, 187,000 tons, June 29, 1973; minimum daily, 1 ton, Aug. 29, 1957.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) |
|-------|------|-----------------|---|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|---|
| OCT | | | | | | | | | | | | |
| 16... | 1530 | ENVIRONMENTAL | 1840 | 754 | 102 | 10.6 | 7.2 | 75 | 12.0 | 13.3 | 23 | 6.82 |
| NOV | | | | | | | | | | | | |
| 07... | 1020 | ENVIRONMENTAL | 1490 | 756 | 109 | 13.1 | 7.1 | 82 | 7.5 | 7.0 | 24 | 7.10 |
| JAN | | | | | | | | | | | | |
| 17... | 1300 | ENVIRONMENTAL | 2020 | 755 | 105 | 15.0 | 7.5 | 82 | 4.0 | .6 | 22 | 6.55 |
| FEB | | | | | | | | | | | | |
| 14... | 1230 | ENVIRONMENTAL | 3410 | 752 | 77 | 11.0 | 7.2 | 108 | 4.0 | .4 | 24 | 7.36 |
| MAR | | | | | | | | | | | | |
| 08... | 1229 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 08... | 1230 | ENVIRONMENTAL | 2490 | 754 | 109 | 14.9 | 7.5 | 97 | 6.0 | 2.1 | 22 | 6.81 |
| 08... | 1231 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | 23 | 7.03 |
| 31... | 1310 | ENVIRONMENTAL | 24600 | 744 | 104 | 13.9 | 6.9 | 75 | 8.0 | 2.3 | 17 | 5.12 |
| MAY | | | | | | | | | | | | |
| 10... | 1030 | ENVIRONMENTAL | 1550 | 757 | 94 | 9.0 | 7.0 | 93 | 17.5 | 17.4 | 24 | 7.30 |
| JUN | | | | | | | | | | | | |
| 04... | 1220 | ENVIRONMENTAL | 6590 | 751 | 103 | 10.0 | 7.2 | 72 | 20.0 | 15.9 | 20 | 6.14 |
| 25... | 1310 | ENVIRONMENTAL | 2210 | 755 | 112 | 9.6 | 7.6 | 81 | 27.0 | 22.5 | 22 | 6.60 |
| AUG | | | | | | | | | | | | |
| 23... | 0900 | ENVIRONMENTAL | 1890 | 755 | 106 | 9.1 | 7.2 | 95 | 20.2 | 22.3 | 25 | 7.13 |

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 (39086) | BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN, TOTAL (MG/L AS N) (00600) |
|-----------|---|--|---|---|---|--|---|--|--|--|---|--|--|
| OCT 16... | 1.37 | .81 | 5.1 | -- | -- | 7.8 | <.2 | .9 | 6.8 | .18 | .31 | <.041 | .38 |
| NOV 07... | 1.41 | .83 | 5.1 | 18 | 22 | 7.7 | <.2 | .5 | 7.2 | .12 | .15 | <.041 | .23 |
| JAN 17... | 1.34 | .70 | 5.2 | 11 | 14 | 9.1 | <.2 | 3.2 | 7.4 | .12 | .11 | <.041 | .49 |
| FEB 14... | 1.35 | .87 | 8.9 | -- | -- | 16.0 | <.2 | 3.1 | 7.4 | .12 | .17 | <.041 | .53 |
| MAR 08... | -- | -- | -- | -- | -- | -- | -- | -- | -- | E.06 | <.08 | <.041 | -- |
| 08... | 1.27 | .69 | 7.8 | 11 | 13 | 13.5 | <.2 | 1.9 | 7.6 | .13 | .20 | <.041 | .39 |
| 08... | 1.31 | .72 | 8.0 | -- | -- | 13.7 | E.1 | 2.0 | 7.7 | .11 | .19 | <.041 | .37 |
| 31... | .997 | .86 | 5.6 | 7 | 8 | 9.5 | <.2 | 2.5 | 6.5 | .20 | .59 | .041 | .98 |
| MAY 10... | 1.42 | .88 | 6.8 | 14 | 17 | 12.0 | <.2 | .8 | 7.6 | .19 | .23 | <.041 | .46 |
| JUN 04... | 1.25 | .67 | 5.3 | 12 | 15 | 8.5 | <.2 | 2.5 | 6.3 | .19 | .32 | <.040 | .49 |
| 25... | 1.34 | .58 | 6.6 | 12 | 15 | 10.8 | <.2 | 1.9 | 6.2 | .19 | .24 | E.026 | .33 |
| AUG 23... | 1.65 | .96 | 6.8 | 16 | 20 | 13.3 | <.2 | 1.3 | 7.4 | .17 | .24 | <.040 | .41 |

| DATE | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, TOTAL (MG/L AS N) (00605) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) |
|-----------|--|--|--|--|---|--|--|---|---|---|---|--|---|
| OCT 16... | .24 | .068 | <.006 | -- | -- | E.004 | <.018 | .006 | -- | -- | 2.4 | -- | 47 |
| NOV 07... | .20 | .076 | <.006 | -- | -- | <.006 | <.018 | .005 | -- | -- | 2.0 | <.2 | 45 |
| JAN 17... | .49 | .377 | <.006 | -- | <.022 | .007 | <.018 | .010 | .1 | -- | 1.9 | -- | 48 |
| FEB 14... | .48 | .360 | <.006 | -- | .054 | .007 | <.018 | .015 | .4 | -- | 2.3 | -- | 65 |
| MAR 08... | -- | <.047 | <.006 | -- | -- | <.006 | <.018 | .004 | -- | -- | -- | -- | -- |
| 08... | .32 | .189 | <.006 | -- | .026 | E.005 | <.018 | .012 | .4 | <.1 | 2.3 | .3 | 57 |
| 08... | .30 | .187 | <.006 | -- | -- | E.004 | <.018 | .012 | -- | -- | -- | -- | 55 |
| 31... | .59 | .394 | E.003 | .55 | .377 | .010 | <.018 | .149 | 3.7 | <.1 | 2.9 | 3.6 | 48 |
| MAY 10... | .42 | .228 | .008 | -- | .042 | .008 | <.018 | .016 | .4 | M | 2.1 | E.4 | 59 |
| JUN 04... | .37 | .177 | <.006 | -- | .155 | .011 | <.020 | .041 | 1.2 | <.1 | 3.2 | 1.2 | 43 |
| 25... | .29 | .093 | .018 | -- | .203 | .014 | <.020 | .021 | .8 | <.1 | 4.8 | .7 | 46 |
| AUG 23... | .34 | .174 | E.003 | -- | .037 | E.005 | <.020 | .012 | .5 | <.1 | 2.0 | .5 | 57 |

| DATE | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155) | SEDI- MENT, SUS- PENDE (MG/L) (80154) |
|-----------|---|--|---|---|---|--|--|
| OCT 16... | 41 | <2.0 | E7 | 20 | 5.2 | 6.0 | 1 |
| NOV 07... | 41 | <2.0 | E10 | 20 | 4.5 | -- | <1 |
| JAN 17... | 42 | <2.0 | <13 | 20 | 3.3 | 6.5 | 1 |
| FEB 14... | 54 | 2.8 | E9 | 50 | 11.0 | 42 | 5 |
| MAR 08... | -- | -- | -- | -- | -- | -- | -- |
| 08... | 47 | <2.0 | E11 | 30 | 9.2 | -- | <1 |
| 08... | -- | -- | E10 | 30 | 8.7 | -- | <1 |
| 31... | 38 | 54 | E8 | 40 | 25.9 | 3790 | 57 |
| MAY 10... | 46 | <2.0 | E8 | 30 | 13.4 | -- | <1 |
| JUN 04... | 39 | 11 | <13 | 60 | 7.2 | 240 | 14 |
| 25... | 42 | <2.0 | E8 | 80 | 11.5 | 18 | 3 |
| AUG 23... | 49 | <2.0 | E9 | 30 | 5.4 | 6.1 | 1 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020/2021 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | 1,1,1-TRI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHYLENE | ACETONE WATER WHOLE | 1,2,3-TRI-CHLORO-BENZENE WAT, WH | BENZENE 1,2,4-TRI-CHLORO-UNFILT | BENZENE 135-TRI-METHYL WATER | BENZENE 1,3-DI-CHLORO-UNFLTRD | BENZENE 1,4-DI-CHLORO-UNFLTRD | ISO-PROPYL-BENZENE WATER WHOLE | BENZENE O-DI-CHLORO-WATER | | |
|-----------|------|--|---|---|---|--|--|--|--|--|---|--|---|---|
| DATE | TIME | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (81552) | REC (UG/L) (77613) | REC (UG/L) (34551) | RECOVER (UG/L) (77222) | REC (UG/L) (77226) | REC (UG/L) (34566) | REC (UG/L) (34571) | REC (UG/L) (77223) | REC (UG/L) (34536) | |
| OCT 16... | 1530 | <.03 | <.04 | <.04 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | |
| | | BENZENE TOTAL (UG/L) (34030) | BROMO-FORM TOTAL (UG/L) (32104) | CARBON DI-SULFIDE WATER WHOLE TOTAL (UG/L) (77041) | CHLORO-BENZENE TOTAL (UG/L) (34301) | CHLORO-BROMO-METHANE TOTAL (UG/L) (32105) | CIS-1,2-DI-CHLORO-ETHYLENE WATER TOTAL (UG/L) (32106) | BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (77093) | DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (32101) | DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668) | ETHER-ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER-TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL-BENZENE TOTAL (UG/L) (34371) | FREON-113 WATER UNFLTRD REC (UG/L) (77652) |
| DATE | | | | | | | | | | | | | | |
| OCT 16... | | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| | | FURAN, TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607) | METHYL-TERT-BUTYL-ETHER WAT UNF REC (UG/L) (78032) | METHYL-CHLORIDE TOTAL (UG/L) (34418) | METHYL-CHLORIDE TOTAL (UG/L) (34423) | META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795) | O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275) | O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77135) | P-ISO-PROPYL-TOLUENE WATER WHOLE TOTAL (UG/L) (77356) | TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180) | TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488) | |
| OCT 16... | | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | E.01 | <.04 | <.09 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA-CHLOR, WATER, DISS, REC (UG/L) (46342) | ALPHA-BHC DIS- SOLVED (UG/L) (34253) | ATRA-ZINE, WATER, DISS, REC (UG/L) (39632) | BEN-FLUR-ALIN WAT FLD GF, REC (UG/L) (82673) | CAR-BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO-FURAN WATER FLTRD GF, REC (UG/L) (82674) | CHLOR-PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA-ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD GF, REC (UG/L) (82682) | DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040) | DI-AZINON, DIS- SOLVED (UG/L) (39572) |
|-----------|------|---|--|--|---|--|---|---|--|--|--|---|---|
| OCT 16... | 1530 | <.004 | <.002 | <.005 | E.004 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.003 | <.005 |
| FEB 14... | 1230 | <.004 | <.004 | <.005 | E.003 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.003 | <.005 |
| MAR 31... | 1310 | <.004 | <.002 | <.005 | E.002 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.002 | <.005 |
| MAY 10... | 1030 | <.004 | <.002 | <.005 | E.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.003 | <.005 |
| JUN 04... | 1220 | <.004 | <.002 | <.005 | .020 | <.010 | E.005 | <.020 | <.005 | <.018 | <.003 | E.005 | <.005 |
| JUN 25... | 1310 | <.004 | <.002 | <.005 | .011 | <.010 | E.039 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |
| AUG 23... | 0900 | <.004 | <.002 | <.005 | E.004 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.004 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|-----------|--|---|--|---|--|---|---|--|--|---|---|---|---|
| OCT 16... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| FEB 14... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| MAR 31... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.001 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| MAY 10... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.006 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| JUN 04... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.009 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| JUN 25... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.005 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| AUG 23... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.002 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |

| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (82661) |
|-----------|---|---|--|---|---|
| OCT 16... | <.011 | <.016 | <.034 | <.005 | <.009 |
| FEB 14... | E.003 | <.016 | <.034 | <.005 | <.009 |
| MAR 31... | <.011 | <.016 | <.034 | <.005 | <.009 |
| MAY 10... | E.003 | <.016 | <.034 | <.005 | <.009 |
| JUN 04... | E.003 | <.016 | <.034 | <.005 | <.009 |
| JUN 25... | E.009 | E.004 | <.034 | <.005 | <.009 |
| AUG 23... | <.011 | <.016 | <.034 | <.005 | <.009 |

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---------|------|------|----------|-----|-----|----------|-----|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 16.5 | 14.0 | 15.5 | 9.0 | 7.0 | 8.0 | 3.5 | 2.5 | 3.0 | .0 | -.5 | .0 |
| 2 | 16.5 | 15.0 | 16.0 | 9.0 | 7.0 | 8.0 | 2.5 | 1.0 | 2.0 | .0 | -.5 | .0 |
| 3 | 17.5 | 15.5 | 16.5 | 9.5 | 7.0 | 8.5 | 1.0 | .0 | .5 | .0 | -.5 | .0 |
| 4 | 17.5 | 15.5 | 16.5 | 9.5 | 8.5 | 9.0 | 1.0 | .0 | .5 | .0 | .0 | .0 |
| 5 | 17.0 | 15.5 | 16.0 | 9.0 | 8.0 | 8.5 | 1.0 | .0 | .5 | .0 | .0 | .0 |
| 6 | 16.0 | 15.0 | 15.5 | 8.5 | 7.0 | 7.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 7 | 15.5 | 14.0 | 15.0 | 8.0 | 6.5 | 7.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 8 | 14.0 | 11.0 | 12.5 | 8.0 | 6.5 | 7.5 | .0 | .0 | .0 | .5 | .0 | .0 |
| 9 | 11.0 | 9.5 | 10.0 | 8.5 | 8.0 | 8.5 | .5 | .0 | .0 | .5 | .0 | .0 |
| 10 | 10.0 | 8.5 | 9.5 | 9.5 | 8.5 | 9.0 | .0 | .0 | .0 | .5 | .0 | .0 |
| 11 | 10.5 | 8.5 | 9.5 | 9.5 | 9.0 | 9.0 | 1.0 | .0 | .5 | .5 | -.5 | .0 |
| 12 | 11.5 | 9.0 | 10.5 | 9.0 | 8.5 | 9.0 | 1.0 | .0 | 1.0 | .5 | .0 | .0 |
| 13 | 12.0 | 10.0 | 11.0 | 8.5 | 8.0 | 8.5 | .5 | .0 | .0 | .5 | .0 | .0 |
| 14 | 13.5 | 11.5 | 12.5 | 8.5 | 8.0 | 8.5 | .5 | .0 | .0 | .5 | .0 | .0 |
| 15 | 14.5 | 12.0 | 13.5 | 8.0 | 6.0 | 7.0 | 1.0 | .0 | .5 | .5 | .0 | .5 |
| 16 | --- | --- | --- | 6.5 | 5.5 | 6.0 | 1.0 | .0 | .5 | .5 | .0 | .5 |
| 17 | 13.0 | 12.5 | 12.5 | 6.5 | 5.5 | 6.0 | 4.0 | .5 | 1.5 | .5 | .5 | .5 |
| 18 | 13.0 | 12.5 | 12.5 | 5.5 | 4.5 | 5.0 | 2.0 | .5 | 1.5 | .5 | .0 | .5 |
| 19 | 12.5 | 11.5 | 12.0 | 5.0 | 3.5 | 4.5 | 1.5 | 1.0 | 1.0 | 1.0 | .0 | .5 |
| 20 | 12.0 | 10.5 | 11.0 | 4.5 | 2.5 | 3.5 | 1.0 | .5 | .5 | 1.0 | .0 | .5 |
| 21 | 12.5 | 11.0 | 11.5 | 3.5 | 2.0 | 3.0 | .5 | .0 | .5 | .5 | .0 | .0 |
| 22 | 12.5 | 11.0 | 12.0 | 3.0 | 1.0 | 2.0 | 1.0 | .0 | .5 | .5 | .0 | .0 |
| 23 | 12.0 | 10.0 | 11.0 | 1.5 | .0 | .5 | .0 | -.5 | .0 | .5 | .0 | .0 |
| 24 | 12.0 | 10.0 | 11.0 | .5 | -.5 | .0 | .0 | .0 | .0 | .5 | -.5 | .0 |
| 25 | 13.0 | 10.5 | 12.0 | .5 | .0 | .5 | .0 | .0 | .0 | .5 | .0 | .0 |
| 26 | 13.5 | 11.0 | 12.5 | 2.0 | .5 | 1.5 | .0 | -.5 | .0 | .5 | .0 | .0 |
| 27 | 13.5 | 11.5 | 12.5 | 2.5 | 1.5 | 2.0 | .0 | .0 | .0 | .5 | .0 | .0 |
| 28 | 13.0 | 11.0 | 12.0 | 3.0 | 2.0 | 2.5 | .0 | .0 | .0 | 1.0 | .0 | .0 |
| 29 | 11.0 | 8.5 | 9.5 | 3.5 | 2.5 | 3.0 | .0 | -.5 | .0 | .5 | .0 | .0 |
| 30 | 9.0 | 7.5 | 8.0 | 4.0 | 3.0 | 3.5 | .0 | .0 | .0 | .5 | .0 | .5 |
| 31 | 8.5 | 6.5 | 8.0 | --- | --- | --- | .0 | .0 | .0 | 1.5 | .5 | .5 |
| MONTH | 17.5 | 6.5 | 12.3 | 9.5 | -.5 | 5.6 | 4.0 | -.5 | .5 | 1.5 | -.5 | .1 |

E Estimated value.

< Actual value is known to be less than the value shown.

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|------|
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 1.5 | .0 | .5 | 1.0 | .0 | .5 | 3.0 | 2.5 | 2.5 | 16.0 | 13.5 | 14.5 |
| 2 | 1.0 | .0 | .5 | 1.5 | .0 | .5 | 3.5 | 3.0 | 3.0 | 17.5 | 14.5 | 16.0 |
| 3 | .5 | .0 | .0 | 3.0 | 1.0 | 1.5 | 4.5 | 3.0 | 4.0 | 18.5 | 16.5 | 17.5 |
| 4 | .5 | .0 | .0 | 2.0 | .5 | 1.0 | 5.5 | 3.5 | 4.5 | 20.5 | 16.5 | 18.5 |
| 5 | .0 | .0 | .0 | .5 | .0 | .0 | 6.5 | 4.5 | 5.5 | 20.0 | 17.0 | 18.5 |
| 6 | .5 | .0 | .0 | 1.0 | .0 | .5 | 6.0 | 5.0 | 5.5 | 18.5 | 15.5 | 17.0 |
| 7 | 1.0 | .0 | .5 | 3.5 | .5 | 1.5 | 5.0 | 4.5 | 5.0 | 18.0 | 15.5 | 16.5 |
| 8 | .5 | .0 | .5 | 3.0 | .5 | 2.0 | 5.0 | 4.5 | 5.0 | 17.5 | 15.0 | 16.5 |
| 9 | 1.5 | .0 | .5 | 2.0 | 1.0 | 1.5 | 6.5 | 4.5 | 5.5 | 17.5 | 16.0 | 16.5 |
| 10 | 2.0 | .0 | 1.0 | 3.0 | .5 | 2.0 | 7.0 | 6.5 | 7.0 | 20.0 | 16.0 | 18.0 |
| 11 | .5 | .0 | .0 | 2.5 | .5 | 1.5 | 6.5 | 6.0 | 6.0 | 20.5 | 17.5 | 19.0 |
| 12 | .5 | -.5 | .0 | 3.5 | .5 | 2.0 | 6.5 | 5.5 | 6.0 | 21.0 | 18.0 | 19.5 |
| 13 | 1.5 | .0 | .5 | 3.0 | 2.0 | 2.5 | 8.0 | 6.0 | 7.0 | 19.5 | 17.5 | 18.5 |
| 14 | .5 | .0 | .5 | 3.0 | 1.5 | 2.0 | 8.5 | 7.0 | 8.0 | 18.0 | 16.5 | 17.5 |
| 15 | 1.0 | .0 | .5 | 3.0 | 1.0 | 2.0 | 8.5 | 7.0 | 8.0 | 18.0 | 15.5 | 17.0 |
| 16 | .5 | .0 | .0 | 3.5 | 1.5 | 2.5 | 8.5 | 7.5 | 8.0 | 17.5 | 15.5 | 16.5 |
| 17 | 1.0 | .0 | .5 | 3.5 | 2.0 | 2.5 | 8.0 | 7.5 | 7.5 | 17.0 | 16.0 | 16.5 |
| 18 | 1.0 | -.5 | .0 | 3.5 | 1.5 | 2.5 | 8.0 | 6.5 | 7.0 | 16.0 | 15.0 | 15.5 |
| 19 | 1.5 | -.5 | .5 | 4.0 | 1.5 | 2.5 | 8.0 | 6.0 | 7.0 | 19.0 | 15.0 | 17.0 |
| 20 | 1.5 | .0 | 1.0 | 4.5 | 2.0 | 3.0 | 8.0 | 6.5 | 7.5 | 18.5 | 17.0 | 18.0 |
| 21 | 2.0 | .0 | 1.0 | 3.0 | 2.0 | 2.5 | 9.5 | 7.5 | 8.5 | 18.0 | 16.5 | 17.0 |
| 22 | .5 | -.5 | .0 | 2.5 | 2.0 | 2.0 | 12.5 | 9.0 | 10.5 | 16.5 | 16.0 | 16.0 |
| 23 | 1.0 | .0 | .5 | 3.5 | 1.5 | 2.5 | 15.0 | 12.0 | 13.5 | 16.0 | 15.5 | 16.0 |
| 24 | 1.5 | .0 | .5 | 3.5 | 2.5 | 3.0 | 15.5 | 14.0 | 15.0 | 18.0 | 15.5 | 17.0 |
| 25 | 1.0 | .0 | .5 | 3.5 | 2.0 | 3.0 | 15.0 | 13.0 | 13.5 | 18.0 | 16.5 | 17.0 |
| 26 | 1.5 | .5 | 1.0 | 3.0 | 2.0 | 2.5 | 13.0 | 11.0 | 12.5 | 16.5 | 15.5 | 16.0 |
| 27 | 2.0 | .0 | 1.0 | 3.0 | 1.0 | 2.0 | 13.0 | 11.5 | 12.5 | 16.0 | 15.0 | 15.5 |
| 28 | 1.5 | .0 | 1.0 | 3.5 | 1.5 | 2.5 | 13.5 | 11.5 | 12.5 | 17.5 | 15.5 | 16.5 |
| 29 | --- | --- | --- | 3.5 | 2.5 | 3.0 | 14.5 | 11.0 | 12.5 | 18.0 | 16.0 | 17.0 |
| 30 | --- | --- | --- | 3.0 | 2.5 | 3.0 | 14.5 | 11.0 | 13.0 | 17.5 | 16.0 | 16.5 |
| 31 | --- | --- | --- | 2.5 | 2.0 | 2.5 | --- | --- | --- | 17.5 | 14.5 | 16.0 |
| MONTH | 2.0 | -.5 | .4 | 4.5 | .0 | 2.0 | 15.5 | 2.5 | 8.1 | 21.0 | 13.5 | 16.9 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | | |
| 1 | 17.0 | 14.5 | 16.0 | --- | --- | --- | 25.5 | 22.5 | 24.0 | --- | --- | --- |
| 2 | 17.0 | 15.0 | 16.0 | --- | --- | --- | 26.5 | 23.5 | 25.0 | --- | --- | --- |
| 3 | 16.5 | 15.5 | 16.0 | --- | --- | --- | 26.5 | 24.0 | 25.5 | --- | --- | --- |
| 4 | 16.5 | 15.5 | 16.0 | --- | --- | --- | 26.0 | 24.0 | 25.0 | --- | --- | --- |
| 5 | 17.0 | 15.0 | 16.5 | 23.5 | 21.0 | 22.5 | 27.0 | 24.0 | 25.5 | --- | --- | --- |
| 6 | 18.5 | 16.5 | 17.5 | 23.0 | 20.5 | 22.0 | 28.0 | 25.5 | 27.0 | --- | --- | --- |
| 7 | 19.5 | 17.0 | 18.5 | 23.5 | 20.0 | 21.5 | 29.0 | 26.0 | 27.5 | --- | --- | --- |
| 8 | 21.0 | 17.5 | 19.0 | 21.5 | 20.5 | 21.0 | 28.5 | 25.0 | 26.5 | --- | --- | --- |
| 9 | 21.5 | 18.0 | 19.5 | 25.5 | 21.0 | 23.0 | 27.5 | 24.0 | 26.0 | --- | --- | --- |
| 10 | 21.5 | 18.5 | 20.0 | 26.0 | 23.0 | 24.0 | 26.5 | 25.0 | 26.0 | --- | --- | --- |
| 11 | 21.0 | 19.5 | 20.0 | 25.5 | 22.5 | 24.0 | 25.5 | 24.0 | 25.0 | --- | --- | --- |
| 12 | 22.0 | 19.0 | 20.5 | 24.5 | 22.0 | 23.0 | 24.5 | 23.5 | 24.0 | --- | --- | --- |
| 13 | 24.0 | 21.0 | 22.0 | 22.0 | 20.5 | 21.5 | 25.5 | 23.5 | 24.5 | --- | --- | --- |
| 14 | 26.0 | 21.5 | 23.5 | 22.0 | 20.0 | 21.0 | 25.5 | 23.5 | 24.5 | --- | --- | --- |
| 15 | 27.0 | 23.5 | 25.0 | 23.0 | 19.5 | 21.5 | 25.5 | 23.5 | 24.5 | --- | --- | --- |
| 16 | 26.0 | 23.0 | 24.5 | 25.0 | 21.5 | 23.0 | 25.0 | 23.0 | 24.5 | --- | --- | --- |
| 17 | 23.5 | 22.5 | 23.0 | 24.5 | 23.0 | 23.5 | 24.5 | 23.5 | 24.0 | --- | --- | --- |
| 18 | 23.0 | 21.0 | 22.5 | 25.5 | 22.0 | 23.5 | 24.5 | 22.5 | 23.5 | --- | --- | --- |
| 19 | 24.5 | 22.0 | 23.0 | 25.0 | 23.0 | 24.0 | 24.5 | 22.5 | 23.5 | --- | --- | --- |
| 20 | 25.5 | 22.5 | 24.0 | 25.5 | 22.5 | 24.0 | 25.0 | 23.5 | 24.0 | --- | --- | --- |
| 21 | 23.5 | 21.0 | 22.5 | 26.0 | 22.5 | 24.0 | 24.5 | 23.0 | 24.0 | --- | --- | --- |
| 22 | 22.5 | 21.0 | 21.5 | 26.0 | 23.5 | 24.5 | 24.5 | 22.5 | 23.5 | --- | --- | --- |
| 23 | 21.5 | 20.0 | 21.0 | 27.5 | 24.5 | 26.0 | --- | --- | --- | --- | --- | --- |
| 24 | 23.0 | 20.0 | 21.0 | 28.0 | 25.0 | 26.0 | --- | --- | --- | --- | --- | --- |
| 25 | --- | --- | --- | 28.0 | 24.5 | 26.0 | --- | --- | --- | --- | --- | --- |
| 26 | --- | --- | --- | 25.5 | 24.0 | 24.5 | --- | --- | --- | --- | --- | --- |
| 27 | --- | --- | --- | 25.5 | 22.5 | 24.0 | --- | --- | --- | --- | --- | --- |
| 28 | --- | --- | --- | 25.0 | 22.0 | 23.5 | --- | --- | --- | --- | --- | --- |
| 29 | --- | --- | --- | 24.0 | 22.0 | 23.0 | --- | --- | --- | --- | --- | --- |
| 30 | --- | --- | --- | 24.5 | 22.5 | 23.5 | --- | --- | --- | --- | --- | --- |
| 31 | --- | --- | --- | 25.0 | 22.5 | 24.0 | --- | --- | --- | --- | --- | --- |
| MONTH | 27.0 | 14.5 | 20.4 | 28.0 | 19.5 | 23.4 | 29.0 | 22.5 | 24.9 | --- | --- | --- |
| YEAR | 29.0 | -.5 | 9.7 | | | | | | | | | |

DELAWARE RIVER BASIN

337

01435000 NEVERSINK RIVER NEAR CLARYVILLE, NY

LOCATION.--Lat 41°53'24", long 74°35'25", Sullivan County, Hydrologic Unit 02040104, at covered bridge, 300 ft upstream from small tributary, 2.2 mi downstream from confluence of East and West Branches, and 2.2 mi southwest of Claryville.

DRAINAGE AREA.--66.6 mi².

PERIOD OF RECORD.-- May 1999 to September 2001 (discontinued).

REMARKS.-- These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (DELN NAWQA); the 05/10 and 08/23 samples were part of the DELN NAWQA synoptic study. Data from additional sites collected as part of the synoptic study are listed in "Water Quality at Miscellaneous Surface-Water Sites." Continuous water temperature records for this and other sites are presented in "Water Quality at Miscellaneous Surface-Water Sites." For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality Control Data" in the "Introduction."

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | | |
|-----------|-------|---|---|--|--|--|--|---|---|--|--|---|---|---|
| DATE | TIME | SAMPLE TYPE | | | | | | | | | | | | |
| OCT 16... | 1040 | ENVIRONMENTAL | 60 | 729 | 93 | 10.0 | 6.4 | 27 | 9.5 | 10.2 | 9 | 2.52 | | |
| MAY 10... | 0929 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | .01 | | |
| 10... | 0930 | ENVIRONMENTAL | 104 | 723 | 109 | 11.9 | 7.0 | 35 | 21.0 | 9.1 | 9 | 2.60 | | |
| AUG 23... | 1600 | ENVIRONMENTAL | 26 | 719 | 106 | 9.8 | 7.5 | 34 | 19.5 | 16.3 | 9 | 2.65 | | |
| DATE | | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086) | BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, TOTAL (MG/L AS N) (00600) |
| OCT 16... | .638 | .30 | 1.1 | 4 | 4 | 1.5 | E.1 | 2.5 | 4.9 | E.07 | .09 | <.041 | .14 | |
| MAY 10... | <.008 | <.09 | <.1 | -- | -- | <.1 | <.2 | <.1 | <.1 | <.10 | <.08 | <.041 | -- | |
| 10... | .631 | .30 | 1.5 | 3 | 4 | 2.9 | <.2 | 2.0 | 4.7 | <.10 | E.07 | <.041 | -- | |
| AUG 23... | .674 | .40 | 1.8 | 4 | 5 | 3.6 | <.2 | 2.4 | 4.8 | <.10 | E.06 | <.040 | -- | |
| DATE | | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, PAR-TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) |
| OCT 16... | .052 | <.006 | -- | <.006 | <.018 | E.002 | -- | -- | 1.0 | <.2 | 20 | 16 | 2.0 | |
| MAY 10... | <.047 | <.006 | -- | <.006 | <.018 | <.004 | -- | -- | -- | -- | <10 | -- | -- | |
| 10... | .206 | <.006 | <.022 | <.006 | <.018 | E.002 | .2 | <.1 | .99 | .2 | 26 | 17 | -- | |
| AUG 23... | .119 | <.006 | <.022 | <.006 | <.020 | .006 | .2 | <.1 | .65 | .2 | 23 | 19 | <2.0 | |
| DATE | | | BORON, DIS-SOLVED (UG/L AS B) (01020) | IRON, DIS-SOLVED (UG/L AS FE) (01046) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155) | SEDI-MENT, SUS-PENDED (MG/L) (80154) | | | | | | | |
| OCT 16... | | | <13 | <10 | E2.3 | .16 | 1 | | | | | | | |
| MAY 10... | | | <13 | <10 | <3.2 | -- | <1 | | | | | | | |
| 10... | | | <13 | <10 | E1.8 | -- | <1 | | | | | | | |
| AUG 23... | | | <13 | <10 | E1.9 | .11 | 2 | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01435000 NEVERSINK RIVER NEAR CLARYVILLE, NY--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|-----------|-------|---|---|---|---|---|---|--|---|---|---|--|---|---|
| | | | | | | | | | | | | | | |
| OCT 16... | 1040 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 | |
| MAY 10... | 0930 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 | |
| AUG 23... | 1600 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 | |
| DATE | | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | | | | | | | | | | | | | |
| OCT 16... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | |
| MAY 10... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | |
| AUG 23... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | |
| DATE | | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
| | | | | | | | | | | | | | | |
| OCT 16... | | | | | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | |
| MAY 10... | | | | | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | |
| AUG 23... | | | | | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Pike County, PA, Hydrologic Unit 02040104, at toll bridge (on U.S. Route 206) between Montague, NJ and Milford, PA, 0.8 mi downstream from Sawkill Creek, and at river mile 246.3.

DRAINAGE AREA.--3,480 mi².

PERIOD OF RECORD.--Water years 1956-73, 1976-78, July 1991 to current year.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.-- Delaware River Main Stem, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLT RD (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) |
|------|------|---|--|--|--|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
|------|------|---|--|--|--|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|

| | | | | | | | | | | | | | |
|-----------|------|------|-----|------|------|-----|-----|------|-----|-----|------|------|----|
| NOV 08... | 0915 | 1800 | -- | .053 | .040 | 757 | 98 | 12.0 | 7.3 | 90 | -- | 6.5 | 26 |
| MAR 08... | 1030 | 3610 | -- | .060 | .045 | 755 | 96 | 13.4 | 7.4 | 111 | 8.0 | 1.5 | 25 |
| MAY 10... | 0930 | 1920 | 1.0 | .072 | .054 | 755 | 108 | 10.7 | 7.3 | 107 | 22.0 | 15.5 | 26 |
| AUG 22... | 1100 | 2090 | 1.3 | .054 | .041 | 758 | 80 | 6.9 | 7.4 | 100 | 30.0 | 22.5 | 25 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC UNFLT RD TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
|------|---|---|--|---|--|--|---|---|--|---|---|---|---|
|------|---|---|--|---|--|--|---|---|--|---|---|---|---|

| | | | | | | | | | | | | | |
|-----------|------|------|-----|-----|----|------|-----|-----|-----|----|----|-------|-----|
| NOV 08... | 7.67 | 1.54 | .81 | 5.8 | 18 | 8.8 | <.2 | .6 | 7.0 | 45 | 44 | .050 | .18 |
| MAR 08... | 7.71 | 1.47 | .75 | 9.3 | 14 | 15.8 | <.2 | 2.4 | 7.6 | 61 | 55 | <.030 | .14 |
| MAY 10... | 7.79 | 1.50 | .88 | 8.8 | 16 | 15.9 | <.2 | 1.5 | 7.7 | 70 | 55 | <.030 | .22 |
| AUG 22... | 7.27 | 1.64 | .91 | 7.3 | 18 | 12.1 | <.2 | 1.3 | 6.6 | 58 | 49 | <.030 | .22 |

| DATE | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + NO2+NO3 DIS-SOLVED (MG/L AS N) (00625) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORGANIC, ORGANIC PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689) |
|------|--|---|---|---|---|---|---|--|--|---|--|--|---|
|------|--|---|---|---|---|---|---|--|--|---|--|--|---|

| | | | | | | | | | | | | | |
|-----------|------|-----|------|-------|-----|-----|------|------|------|----|-----|-----|-----|
| NOV 08... | .04 | .23 | .115 | <.003 | .30 | .34 | .052 | .004 | .014 | .3 | <.1 | 1.9 | .3 |
| MAR 08... | <.03 | .12 | .272 | <.003 | .41 | .40 | .042 | .006 | .012 | .3 | <.1 | 2.0 | .3 |
| MAY 10... | <.03 | .25 | .305 | <.003 | .52 | .55 | .034 | .008 | .016 | .4 | M | 2.5 | E.4 |
| AUG 22... | <.03 | .26 | .205 | <.003 | .42 | .46 | .088 | .007 | .017 | .6 | <.1 | 2.1 | .6 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|----|
| NOV 08... | E1.1 | -- | E10 | 12 |
| MAR 08... | <1.0 | -- | <13 | 2 |
| MAY 10... | E1.0 | 2.90 | E8 | <1 |
| AUG 22... | <1.0 | 2.40 | E8 | 4 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

01438500 DELAWARE RIVER AT MONTAGUE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 05... | 1035 | 20 | <100 | 10 | 01... | 1040 | <20 | <100 | 60 |
| 11... | 1040 | 20 | <100 | 210 | | | | | |
| 18... | 1035 | 50 | <100 | 30 | | | | | |
| 25... | 1040 | <20 | <100 | <10 | | | | | |

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

341

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ

LOCATION.--Lat 41°06'24", long 74°57'09", Sussex County, Hydrologic Unit 02040104, 1.0 mi upstream from Flatbrookville, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--64.0 mi².

PERIOD OF RECORD.--Water years 1923-24, 1956-57, 1959-80, 1993, 1995, 1997 to current year.

INSTRUMENTATION.--WATER TEMPERATURE: Water temperature data logger (in-situ system; measurements recorded every 15 to 30 minutes) located at gage.

REMARKS.--Additional water-quality data for this and other sites collected as part of the DELR NAWQA synoptic study are listed in "Water Quality at Miscellaneous Surface-Water Sites." Continuous water temperature records and fish community data for this and other sites are presented in "Water-Quality at Miscellaneous Surface-Water Sites." For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Physical parameters measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses on 10/05, 05/10, and 08/23 were provided by the Delaware River Basin National Water Quality Assessment Program (DELR NAWQA). Additional field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | |
|-----------|------------------------------------|---|---|---|--|--|--|--|--|--|---|---|--|
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| OCT 05... | 1150 | ENVIRONMENTAL | 28 | <2.0 | -- | -- | 717 | 112 | 10.9 | 7.6 | 251 | 14.5 | |
| NOV 14... | 1100 | ENVIRONMENTAL | 37 | -- | .080 | .061 | 749 | 92 | 10.6 | 7.9 | 198 | -- | |
| FEB 21... | 1100 | ENVIRONMENTAL | 110 | -- | .056 | .043 | 756 | 95 | 12.7 | 7.8 | 179 | 3.0 | |
| MAY 10... | 1619 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10... | 1620 | ENVIRONMENTAL | 55 | <2.0 | -- | -- | 757 | 100 | 9.3 | 8.0 | 235 | 30.5 | |
| 31... | 1100 | ENVIRONMENTAL | 123 | 2.2 | .133 | .103 | 754 | 97 | 10.2 | 7.8 | 149 | 18.0 | |
| AUG 23... | 1550 | ENVIRONMENTAL | 13 | <2.0 | -- | -- | 755 | 104 | 9.4 | 8.1 | 285 | 20.0 | |
| SEP 05... | 0800 | ENVIRONMENTAL | 10 | .4 | .034 | .026 | 752 | | 6.2 | 7.9 | -- | 16.0 | |
| DATE | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086) | BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3 AS CL) (00453) | CHLO-RIDE, DIS-SOLVED (MG/L AS F) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) |
| OCT 05... | 13.6 | 97 | 27.9 | 6.52 | .68 | 10.2 | -- | 85 | 103 | 16.8 | <.2 | 3.2 | 13.5 |
| NOV 14... | 8.5 | 73 | 20.8 | 5.08 | .71 | 8.9 | 61 | -- | -- | 14.5 | <.2 | 4.3 | 13.3 |
| FEB 21... | 3.0 | 60 | 17.7 | 3.76 | .53 | 9.1 | 48 | -- | -- | 15.5 | <.2 | 4.9 | 11.6 |
| MAY 10... | -- | -- | E.01 | <.008 | <.09 | <.1 | -- | -- | -- | <.1 | <.2 | <.1 | <.1 |
| 10... | 18.4 | 87 | 25.6 | 5.52 | .50 | 10.5 | -- | 73 | 89 | 18.3 | <.2 | 4.0 | 13.3 |
| 31... | 12.5 | 52 | 15.2 | 3.43 | .40 | 7.9 | 42 | -- | -- | 12.5 | <.2 | 4.8 | 9.8 |
| AUG 23... | 19.6 | 110 | 32.3 | 8.16 | .62 | 11.2 | -- | 92 | 112 | 20.9 | <.2 | 3.4 | 19.3 |
| SEP 05... | 17.0 | 110 | 31.5 | 7.98 | .70 | 11.7 | 97 | -- | -- | 17.8 | <.2 | 3.8 | 19.6 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L) AS N (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L) AS N (00610) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613) | NITRO- GEN DIS- SOLVED (MG/L) AS N (00602) | NITRO- GEN, TOTAL (MG/L) AS N (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L) AS N (49570) | PHOS- PHORUS DIS- SOLVED (MG/L) AS P (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P (00671) |
|-----------|---|--|---|--|--|---|---|--|--|---|---|--|--|
| OCT 05... | 139 | 129 | <.020 | .12 | -- | .14 | <.050 | <.010 | -- | -- | -- | E.005 | <.010 |
| NOV 14... | 108 | 104 | <.030 | .15 | <.03 | .13 | E.027 | <.003 | -- | -- | <.022 | E.003 | -- |
| FEB 21... | 107 | 92 | .030 | E.08 | .05 | E.08 | .131 | <.003 | -- | -- | <.022 | .004 | -- |
| MAY 10... | <10 | -- | <.041 | <.10 | -- | <.08 | <.047 | .006 | -- | -- | -- | <.006 | <.018 |
| 10... | 140 | 122 | <.041 | .10 | -- | .17 | .111 | .009 | .21 | .29 | .036 | .006 | <.018 |
| 31... | 101 | 80 | <.030 | .17 | <.03 | .20 | .086 | <.003 | .26 | .28 | .049 | .012 | -- |
| AUG 23... | 165 | 151 | <.040 | .10 | -- | .10 | <.050 | <.006 | -- | -- | -- | E.004 | <.020 |
| SEP 05... | 152 | 151 | <.030 | E.09 | <.03 | .12 | <.037 | <.003 | -- | -- | <.022 | E.003 | -- |
| DATE | PHOS- PHORUS TOTAL (MG/L) AS P (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L) AS C (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L) AS C (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L) AS C (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L) AS C (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L) AS B (01020) | IRON, DIS- SOLVED (UG/L) AS FE (01046) | MANGA- NESE, DIS- SOLVED (UG/L) AS MN (01056) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155) | SEDI- MENT, SUS- PENDE (MG/L) (80154) |
| OCT 05... | .010 | -- | -- | 1.9 | <.2 | -- | -- | E11 | 30 | 10.1 | -- | .19 | 2 |
| NOV 14... | .006 | .3 | <.1 | 2.4 | .3 | <1.0 | -- | <13 | -- | -- | 2 | -- | -- |
| FEB 21... | .007 | .2 | <.1 | 1.7 | .2 | <1.0 | -- | <13 | -- | -- | <1 | -- | -- |
| MAY 10... | <.004 | -- | -- | -- | -- | -- | -- | <13 | <10 | <3.2 | -- | -- | -- |
| 10... | .014 | .3 | M | 1.8 | E.3 | -- | -- | E10 | 50 | 12.6 | -- | .21 | 1 |
| 31... | .020 | .6 | <.1 | 3.4 | .6 | <1.0 | 1.00 | <13 | -- | -- | 1 | -- | -- |
| AUG 23... | .006 | -- | -- | 1.4 | -- | -- | -- | E13 | 20 | <3.0 | -- | .05 | 1 |
| SEP 05... | E.004 | .2 | <.1 | 1.4 | .2 | <1.0 | 1.20 | <13 | -- | -- | 4 | -- | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

343

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | |
|--------------|-------|----------------|---|--|---|---|--|---|---|--|--|---|---|
| DATE | TIME | SAMPLE TYPE | | | | | | | | | | | |
| OCT 05... | 1150 | ENVIRONMENTAL | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| MAY 10... | 1618 | FIELD BLANK | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| 10... | 1620 | ENVIRONMENTAL | <.004 | <.002 | <.005 | E.003 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| AUG 23... | 1550 | ENVIRONMENTAL | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| | | | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LIN- URON WATER LINDANE DIS- SOLVED (UG/L) (39341) | METHYL AZIN- PHOS WAT FLT DIS- SOLVED (UG/L) (39532) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) |
| OCT 05... | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.003 | <.007 | E.002 |
| MAY 10... | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 |
| 10... | E.002 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 |
| AUG 23... | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 |
| | | | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
| OCT 05... | | | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | | | | |
| MAY 10... | | | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | | | | |
| 10... | | | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | | | | |
| AUG 23... | | | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | | | | |

DELAWARE RIVER BASIN

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 05... | 0950 | 70 | <100 | 50 | 01... | 0955 | 20 | <100 | 50 |
| 11... | 0950 | 460 | 100 | 180 | | | | | |
| 18... | 0945 | <20 | <100 | 380 | | | | | |
| 25... | 0950 | 80 | <100 | 60 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01440000 FLAT BROOK NEAR FLATBROOKVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

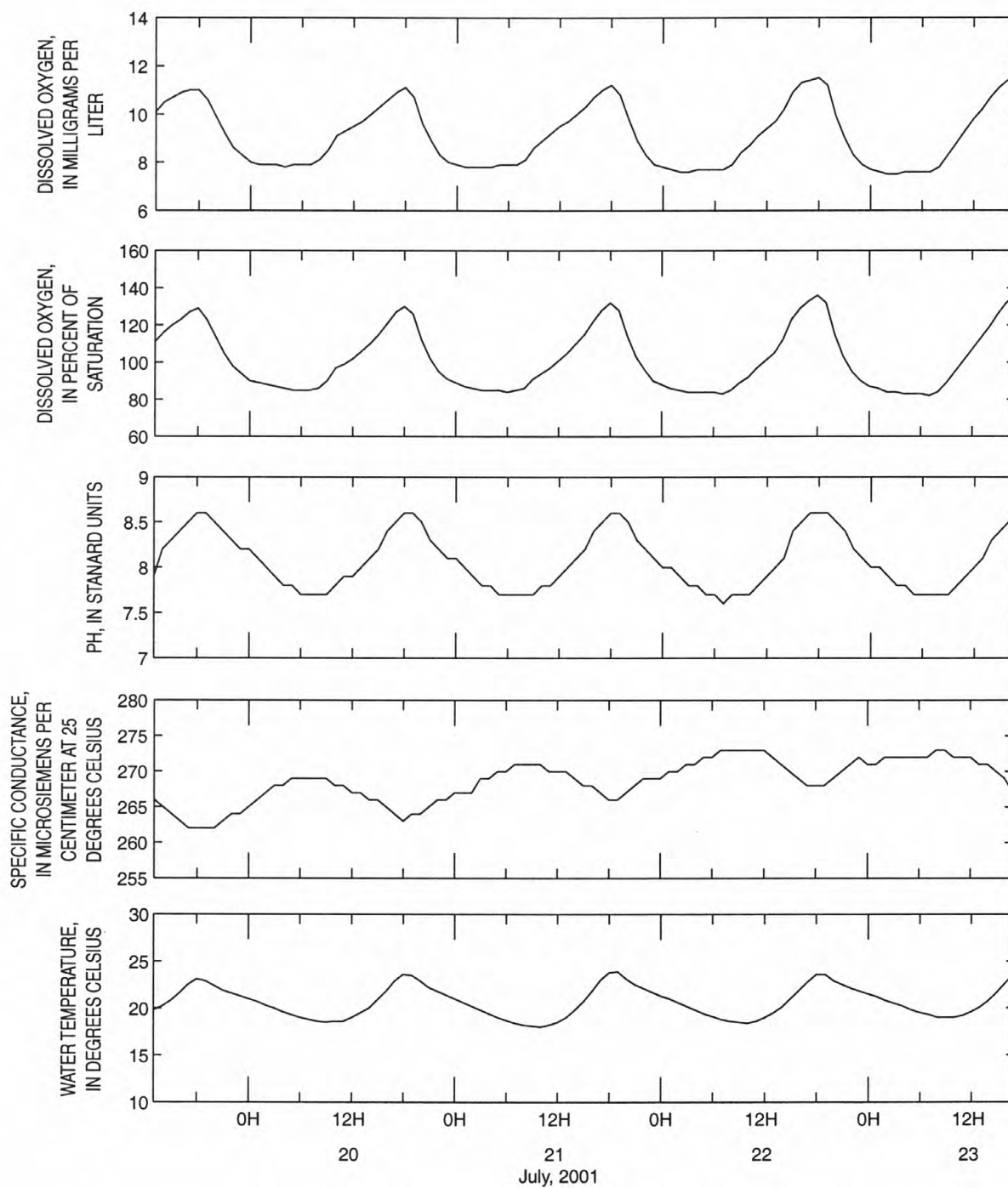


Figure 49. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01440000 Flat Brook near Flatbrookville, water year 2001.

DELAWARE RIVER BASIN

01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ

LOCATION.--Lat 40°58'14", long 75°07'35", Warren County, Hydrologic Unit 02040104, at footbridge in Delaware Water Gap National Recreation Area 300 ft upstream from mouth and Delaware River, 0.6 mi northwest of Arrow Island, and 0.6 mi southeast of Delaware Water Gap Toll Bridge on Interstate 80.

DRAINAGE AREA.--3.56 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD ANCE UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) |
|-----------|------|---|---|--|--|--|---|-----------------------------------|---|---|----------------------------------|------------------------------------|---|
| NOV 01... | 0920 | .99 | -- | .020 | .015 | 755 | -- | -- | 6.6 | 37 | 15.5 | 9.5 | 15 |
| FEB 07... | 1020 | 8.8 | -- | .018 | .014 | 760 | 100 | 13.4 | 7.1 | 34 | 6.5 | 3.0 | 11 |
| MAY 02... | 1000 | 4.9 | -- | .022 | .018 | 755 | 100 | 10.9 | 6.7 | 33 | 26.5 | 11.0 | 12 |
| AUG 08... | 1310 | .43 | .4 | .023 | .018 | 752 | 104 | 9.3 | 5.8 | 39 | 35.0 | 20.0 | 14 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC UNFLTRD LAB AS CaCO3 (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|----------------------------------|--|---|---|-------------------------------|---|---|---|--|
| NOV 01... | 3.77 | 1.32 | .51 | 1.0 | 7 | 1.5 | <.2 | 4.6 | 7.3 | 26 | 25 | .060 | <.10 |
| FEB 07... | 2.82 | 1.02 | .40 | .7 | 4 | 1.2 | <.2 | 4.3 | 8.1 | 24 | 21 | .030 | <.10 |
| MAY 02... | 3.04 | 1.03 | .44 | .8 | 6 | 1.1 | <.2 | 4.2 | 8.1 | -- | 22 | <.030 | E.08 |
| AUG 08... | 3.62 | 1.26 | .55 | 1.0 | 7 | 1.5 | <.2 | 5.4 | 7.2 | 26 | 26 | .030 | <.10 |

| DATE | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, PAR-TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC CORR. (UG/L) (32209) |
|-----------|--|--|---|---|--|--|---------------------------------------|---|---|--|--|--|---|
| NOV 01... | .03 | E.07 | <.037 | <.003 | <.022 | <.004 | <.004 | .1 | <.1 | .72 | .1 | 2.4 | -- |
| FEB 07... | <.03 | E.07 | E.022 | <.003 | <.022 | <.004 | E.002 | .2 | <.1 | .70 | .2 | E1.7 | -- |
| MAY 02... | <.03 | <.08 | <.037 | <.003 | <.022 | E.003 | E.003 | E.2 | <.1 | .83 | E.2 | E1.9 | .200 |
| AUG 08... | .05 | E.04 | .259 | <.003 | .050 | .005 | .005 | .3 | <.1 | .72 | .3 | <1.0 | .100 |

| DATE | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|---------------------------------------|--|
| NOV 01... | <13 | <1 |
| FEB 07... | E8 | 2 |
| MAY 02... | <13 | 6 |
| AUG 08... | E8 | 2 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

347

01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LITUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|------|------|--|--|---|--|--|---|--|--|--|--|--|--|
|------|------|--|--|---|--|--|---|--|--|--|--|--|--|

| | | | | | | | | | | | | | |
|--------------|------|----|------|------|---|-----|----|-----|-----|----|----|------|---|
| AUG 08... | 1310 | <2 | 17.0 | <.06 | 7 | .04 | <1 | E.4 | E10 | <1 | E3 | <.01 | 2 |
|--------------|------|----|------|------|---|-----|----|-----|-----|----|----|------|---|

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|------|---|--|--|
|------|---|--|--|

| | | | |
|--------------|-----|------|---|
| AUG 08... | <.4 | <.05 | 8 |
|--------------|-----|------|---|

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|
|------|------|---|--|--|--|---|--|---|---|---|---------------------------------------|--|---|

| | | | | | | | | | | | | | |
|--------------|------|------|------|------|-----|------|------|------|------|------|------|------|------|
| FEB 07... | 1020 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
|--------------|------|------|------|------|-----|------|------|------|------|------|------|------|------|

| DATE | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|------|--|---|---|--|---|---|---|--|---|---|---|---|--|
|------|--|---|---|--|---|---|---|--|---|---|---|---|--|

| | | | | | | | | | | | | | |
|--------------|------|-----|------|------|------|-----|-----|-----|------|-----|------|------|-----|
| FEB 07... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
|--------------|------|-----|------|------|------|-----|-----|-----|------|-----|------|------|-----|

| DATE | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|

| | | | | | | | | | |
|--------------|-----|------|------|------|-----|------|------|------|-----|
| FEB 07... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 |
|--------------|-----|------|------|------|-----|------|------|------|-----|

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|------|------|--|--|--|---|---|--|--|--|--|---|--|---|
|------|------|--|--|--|---|---|--|--|--|--|---|--|---|

| | | | | | | | | | | | | | |
|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MAY 02... | 1000 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |
|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01442760 DUNNFIELD CREEK AT DUNNFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER WATER 0.7 U DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER WATER 0.7 U DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|---|--|--|---|---|---|---|
| | MAY 02... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| MAY 02... | <.011 | <.016 | <.034 | <.005 | <.009 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| AUG 01... | 0900 | 20 | <100 | 40 | AUG 15... | 1020 | 80 | <100 | 30 |
| 08... | 0830 | <20 | <100 | 30 | 22... | 0930 | <20 | <100 | 40 |
| | | | | | 29... | 0935 | <20 | <100 | 70 |

< Actual value is known to be less than the value shown.

01443000 DELAWARE RIVER AT PORTLAND, PA

LOCATION.--Lat 40°55'26", long 75°05'46", Northampton County, Hydrologic Unit 02040105, at walkbridge connecting Portland, PA and Columbia, NJ, and 0.5 mi upstream from Paulins Kill.

DRAINAGE AREA.--4,165 mi².

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Delaware River Main Stem, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|---|---|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 02... | 0950 | 1950 | -- | .064 | .049 | 756 | 102 | 11.8 | 7.5 | 98 | 15.5 | 8.5 | 31 |
| FEB 13... | 0930 | 5730 | -- | .068 | .052 | 762 | 96 | 13.8 | 7.0 | 125 | 7.0 | .5 | 30 |
| MAY 02... | 1330 | 4660 | -- | .065 | .051 | 756 | 106 | 10.3 | 7.7 | 108 | 32.0 | 16.5 | 29 |
| AUG 08... | 1000 | 2330 | 1.3 | .062 | .047 | 752 | 102 | 7.9 | 7.3 | 111 | 34.0 | 28.0 | 30 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|--|---|---|--|
| NOV 02... | 9.57 | 1.72 | .81 | 6.2 | 22 | 9.1 | <.2 | .8 | 8.1 | 56 | 50 | .030 | .13 |
| FEB 13... | 9.13 | 1.71 | .76 | 10.2 | 16 | 18.2 | <.2 | 3.8 | 8.8 | 74 | 64 | <.030 | .14 |
| MAY 02... | 8.68 | 1.68 | .71 | 7.4 | 20 | 13.5 | <.2 | 1.1 | 8.1 | 80 | 54 | <.030 | .20 |
| AUG 08... | 9.02 | 1.83 | .90 | 7.9 | 22 | 13.7 | <.2 | 1.4 | 8.1 | 59 | 56 | .060 | .21 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR-TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|---|---|---|--|--------------------------------------|--|--|---------------------------------------|---|---|--|--|
| NOV 02... | .05 | .14 | .045 | .003 | .17 | .19 | .028 | .010 | .015 | .2 | <.1 | 2.2 | .2 |
| FEB 13... | <.03 | .14 | .360 | <.003 | .50 | .50 | <.022 | .011 | .022 | .4 | <.1 | 2.3 | .4 |
| MAY 02... | <.03 | .18 | .222 | <.003 | .42 | .40 | .060 | .009 | .016 | .3 | <.1 | 2.6 | .3 |
| AUG 08... | <.03 | .26 | .091 | <.003 | .30 | .35 | .104 | .013 | .021 | .7 | <.1 | 2.3 | .7 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, METHOD 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|---|--|---------------------------------------|--|
|------|---|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|----|
| NOV 02... | E1.2 | -- | <13 | 6 |
| FEB 13... | E1.1 | -- | E7 | 6 |
| MAY 02... | E1.3 | 2.60 | <13 | -- |
| AUG 08... | <1.0 | 2.50 | E8 | 5 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01443000 DELAWARE RIVER AT PORTLAND, PA--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 01... | 0930 | <20 | <100 | 20 | 15... | 1012 | 20 | <100 | <10 |
| 08... | 0850 | <20 | <100 | 60 | 22... | 0955 | <20 | <100 | 10 |
| | | | | | 29... | 0950 | 20 | <100 | 40 |

< Actual value is known to be less than the value shown.

01443250 PAULINS KILL AT WARBASE JUNCTION ROAD, NEAR LAFAYETTE, NJ

LOCATION.--Lat 41°06'21", long 74°40'56", Sussex County, Hydrologic Unit 02040104, at bridge on Warbase Junction Road (County Route 663) at Warbase, 0.9 mi southwest of Lafayette, and 1.3 mi east of unnamed pond.

DRAINAGE AREA.--11.4 mi².

PERIOD OF RECORD.--November 2000 to August 2000.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | | |
|--------------|------|---|---|--|--|---|--|---|--|--|--|--|--|--|
| | | | | | | | | | | | | | | |
| NOV 21... | 1100 | -- | .298 | .219 | 745 | 77 | 10.2 | 7.7 | 658 | -- | 2.5 | 220 | | |
| FEB 15... | 1115 | -- | .197 | .147 | 746 | 76 | 9.7 | 7.5 | 681 | 5.0 | 4.0 | 180 | | |
| MAY 23... | 1100 | 8.2 | .422 | .319 | 744 | 52 | 5.2 | 7.5 | 535 | 18.0 | 14.2 | 160 | | |
| AUG 14... | 1100 | 24 | .168 | .125 | 747 | 42 | 3.6 | 7.5 | 574 | 27.0 | 21.5 | 170 | | |
| DATE | | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| | | | | | | | | | | | | | | |
| NOV 21... | 58.4 | 19.0 | 3.66 | 42.1 | 173 | 73.8 | <.2 | 7.8 | 34.7 | 377 | 359 | .070 | .79 | |
| FEB 15... | 49.3 | 14.0 | 2.18 | 57.8 | 128 | 109 | <.2 | 6.8 | 26.5 | 375 | 351 | .050 | .56 | |
| MAY 23... | 43.5 | 12.7 | 2.17 | 40.4 | 120 | 70.9 | E.1 | 6.0 | 27.4 | 313 | 279 | .180 | .91 | |
| AUG 14... | 43.7 | 14.4 | 4.46 | 43.9 | 117 | 77.2 | <.2 | 6.7 | 37.9 | 313 | 310 | .440 | .84 | |
| DATE | | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) |
| | | | | | | | | | | | | | | |
| NOV 21... | .11 | .98 | 3.60 | .024 | 4.4 | 4.6 | .077 | .036 | .059 | .7 | <.1 | 8.4 | .7 | |
| FEB 15... | .05 | .58 | 2.02 | <.003 | 2.6 | 2.6 | .123 | .022 | .070 | 1.2 | <.1 | 5.4 | 1.2 | |
| MAY 23... | .19 | 1.2 | .899 | .034 | 1.8 | 2.1 | .249 | .069 | .115 | 2.2 | <.1 | 10 | 2.2 | |
| AUG 14... | .40 | 1.1 | 2.42 | .123 | 3.3 | 3.5 | .170 | .079 | .144 | 1.9 | <.1 | 5.3 | 1.9 | |
| DATE | | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) | BORON, DIS- SOLVED (UG/L AS B) (01020) | | | | | | | | | |
| | | | | | | | | | | | | | | |
| NOV 21... | | <1.0 | -- | 55 | 5 | | | | | | | | | |
| FEB 15... | | <1.0 | -- | 20 | 8 | | | | | | | | | |
| MAY 23... | | 2.9 | 14.6 | 24 | 14 | | | | | | | | | |
| AUG 14... | | E2.1 | 6.90 | 48 | 7 | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01443250 PAULINS KILL AT WARBASSE JUNCTION ROAD. NEAR LAFAYETTE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | PH SED BED MAT | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT | NITRO- GEN, NH4 TOTAL IN BOT. MAT. | PHOS- PHORUS TOTAL IN BOT. MAT. | CARBON, INORG + ORGANIC TOT. IN BOT MAT | CARBON, INOR- GANIC, TOT IN BOT MAT | ARSENIC TOTAL | BARIUM, TOTAL RECOV- ERABLE | BERYL- LIUM, TOTAL RECOV- ERABLE | BORON, TOTAL RECOV- ERABLE | CADMIUM WATER TOTAL UNFLTRD | CHRO- MIUM, TOTAL RECOV- ERABLE |
|-------|------|----------------------|---|--|---|---|---|------------------|--------------------------------------|--|-------------------------------------|--------------------------------------|---|
| | | (STD | (MG/KG | (MG/KG | (MG/KG | (GM/KG | (G/KG | (UG/L | (UG/L | (UG/L | (UG/L | (UG/L | (UG/L |
| | | UNITS) | AS N) | AS N) | AS P) | AS C) | AS C) | AS AS) | AS BA) | AS BE) | AS B) | AS CD) | AS CR) |
| | | (70310) | (00626) | (00611) | (00668) | (00693) | (00686) | (01002) | (01007) | (01012) | (01022) | (01027) | (01034) |
| | | | | | | | | | | | | | |
| AUG | | | | | | | | | | | | | |
| 14... | 1100 | -- | -- | -- | -- | -- | -- | 6 | 18.3 | <.06 | 47 | .05 | M |
| 14... | 1100 | 7.47 | 760 | 2.2 | 310 | 34 | 13 | -- | -- | -- | -- | -- | -- |

| DATE | COPPER, TOTAL RECOVERABLE (UG/L AS CU (01042) | IRON, TOTAL RECOVERABLE (UG/L AS FE (01045) | LEAD, TOTAL RECOVERABLE (UG/L AS PB (01051) | MANGANESE, TOTAL RECOVERABLE (UG/L AS MN (01055) | MERCURY, TOTAL RECOVERABLE (UG/L AS HG (71900) | NICKEL, TOTAL RECOVERABLE (UG/L AS NI (01067) | SELENIUM, TOTAL RECOVERABLE (UG/L AS SE (01147) | SILVER, TOTAL RECOVERABLE (UG/L AS AG (01077) | ZINC, TOTAL RECOVERABLE (UG/L AS ZN (01092) | ARSENIC, TOTAL IN BOTTOM MATERIAL (UG/G AS AS (01003) | CADMIUM, RECOVERABLE IN BOTTOM MATERIAL (UG/G AS CD (01028) | CHROMIUM, RECOVERABLE IN BOTTOM MATERIAL (UG/G AS CR (01029) | COBALT, RECOVERABLE IN BOTTOM MATERIAL (UG/G AS CO (01038) |
|-----------|--|--|--|---|---|--|--|--|--|--|--|---|---|
| AUG 14... | 4.3 | 680 | 3 | 186 | <.01 | 2 | .4 | .26 | 12 | -- | -- | -- | -- |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | .2 | 13 | 5.8 |

| DATE | COPPER, REC OV. | IRON, SEDIMT. | LEAD, REC OV. | MANGA- NESE, REC OV. | MERCURY REC OV. | NICKEL, REC OV. | SELE- NIUM, TOTAL | ZINC, REC OV. | 4HCYPEN PHENAN THRENE | 9H-FLU- ORENE, 1METHYL | 9H-FLU- ORENE | ACENAPH THENE | ACENAPH THYLENE |
|-------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL | FM BOT- TOM MA- TERIAL |
| | (UG/G AS CU) | (UG/G AS FE) | (UG/G AS PB) | (UG/G AS HG) | (UG/G AS NI) | (UG/G AS NI) | (UG/G AS NI) | (UG/G AS NI) | (UG/G AS ZN) | (UG/G AS ZN) | (UG/G AS ZN) | (UG/G AS ZN) | (UG/G AS ZN) |
| | (01043) | (01170) | (01052) | (01053) | (71921) | (01068) | (01148) | (01093) | (49411) | (49398) | (49399) | (49429) | (49428) |
| AUG | | | | | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | 14 | 16000 | 15 | 370 | .03 | 15 | <1 | 70 | <50 | <50 | <50 | <50 | <50 |

| DATE | ANTHRA-CENE, 2-METHYL-SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ(A) ANTHRA-CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR-ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO (G) HI) PERYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR-ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY-SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR-ANTHENE BED MAT WS <2MM DRY WGT REC (UG/KG) (94666) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (94000) | NAPHTHAL EN, 12 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49403) |
|-------|--|---|---|--|--|--|---|---|---|--|---|---|--|
| AUG | | | | | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | <50 | E30 | 70 | 80 | 70 | 60 | 70 | 100 | <50 | 140 | 60 | <50 | <50 |

| DATE | NAPHTH ENE, 16 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPHTH ENE, 236 TRIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPHTH ENE, 26 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPHTH ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. FALL DIAM. % FINER THAN .004 MM (80157) |
|--------------|---|---|---|---|---|---|--|---|--|--|--|---|---|
| AUG 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | <50 | <50 | <50 | <50 | <50 | <5 | <50 | <50 | 50 | <50 | <50 | 120 | 3 |

BED
MAT.
SIEVE
DIAM.
% FINER
THAN
.062 MM
(80164)

DATE _____

AUG
14.
14.

E Estimated value.

< Actual value is known to be less than the value shown.

01443250 PAULINS KILL AT WARBASE JUNCTION ROAD, NEAR LAFAYETTE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHYL- ENE | 1,2-DI- CHLORO- ETHANE | 1,2-DI- CHLORO- PROPANE | TRANS- 1,2-DI- CHLORO- ETHENE | BENZENE 1,3-DI- CHLORO- WATER | BENZENE 1,4-DI- CHLORO- WATER | BENZENE O-DI- CHLORO- WATER | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | |
|--------------|------|---|--|---|---|---|---|---|--|---|--|---|---|--|
| | | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (32103) | TOTAL (UG/L) (34541) | TOTAL (UG/L) (34546) | UNFLTRD REC (UG/L) (34566) | UNFLTRD REC (UG/L) (34571) | UNFLTRD REC (UG/L) (34536) | | | | |
| | | CHLORO- DI- BROMO- METHANE | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER TERT- BUTYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- PENTYL ETHYL METHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | | | | |
| DATE | | TOTAL (UG/L) (34301) | TOTAL (UG/L) (32105) | TOTAL (UG/L) (32106) | TOTAL (UG/L) (77093) | TOTAL (UG/L) (32101) | TOTAL (UG/L) (34668) | TOTAL (UG/L) (81577) | TOTAL (UG/L) (81576) | TOTAL (UG/L) (50004) | TOTAL (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
| FEB 15... | 1115 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |
| FEB 15... | <.10 | <.2 | .10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | .6 | |
| DATE | | METHYL CHLO- RIDE TOTAL (UG/L) (34423) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | |
| FEB 15... | | <.2 | <.20 | <.10 | <.10 | .4 | <.10 | <.10 | <.10 | <.20 | <.2 | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD (UG/L) (82673) | CAR- BARYL WATER FLTRD (UG/L) (82680) | CARBO- FURAN WATER FLTRD (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|--------------|------|--|---|--|---|---|---|--|---|---|---|--|---|---|
| | | | | | | | | | | | | | | |
| MAY 23... | 1100 | .009 | <.002 | <.005 | .015 | <.010 | E.007 | <.020 | <.005 | <.018 | <.003 | E.005 | E.003 | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | | | | | | | | | | | | | |
| MAY 23... | | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.006 | <.006 | <.002 | <.007 | <.003 | <.010 | E.013 |
| DATE | TIME | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
| | | | | | | DATE | | | | | | | | |
| MAY 23... | | | | | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01443250 PAULINS KILL AT WARBASSE JUNCTION ROAD, NEAR LAFAYETTE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 05... | 1040 | 490 | 400 | 300 | 01... | 1115 | 790 | 400 | 160 |
| 11... | 1105 | 2200 | 700 | 2300 | | | | | |
| 18... | 1050 | 790 | 800 | 70 | | | | | |
| 25... | 1130 | 460 | 600 | 60 | | | | | |

01443500 PAULINS KILL AT BLAIRSTOWN, NJ

LOCATION.--Lat 40°58'44", long 74°57'15", Warren County, Hydrologic Unit 02040105, 1,200 ft upstream from bridge on State Highway 94 in Blairstown, 1,400 ft upstream from Blairs Creek, and 10 mi upstream from mouth. Water-quality samples collected at bridge, 1,200 ft downstream from gage, at high flows.

DRAINAGE AREA.--126 mi².

PERIOD OF RECORD.--Water years 1921, 1925, 1957-60, 1962-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLT/RTD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 28... | 1100 | 87 | -- | .118 | .088 | 753 | 98 | 12.5 | 8.1 | 480 | -- | 4.5 | 180 |
| FEB 27... | 1100 | 405 | -- | .103 | .077 | 758 | 102 | 14.0 | 8.0 | 463 | 8.0 | 2.0 | 140 |
| MAY 17... | 1100 | 72 | 5.4 | .090 | .067 | 755 | 92 | 9.0 | 8.2 | 534 | 16.0 | 16.0 | 210 |
| AUG 23... | 0830 | 20 | 4.7 | .097 | .072 | 754 | 71 | 6.2 | 8.2 | 580 | 18.0 | 21.5 | 210 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|--|
| NOV 28... | 46.3 | 16.6 | 1.82 | 26.4 | 149 | 46.7 | <.2 | 6.4 | 20.4 | 271 | 258 | .040 | .28 |
| FEB 27... | 35.4 | 12.2 | 1.45 | 34.1 | 110 | 63.3 | <.2 | 4.9 | 17.9 | 256 | 238 | <.030 | .18 |
| MAY 17... | 50.8 | 19.7 | 1.40 | 28.6 | 175 | 53.5 | <.2 | 3.8 | 18.4 | 279 | 284 | <.030 | .28 |
| AUG 23... | 46.6 | 23.2 | 1.89 | 33.9 | 170 | 65.8 | <.2 | 2.8 | 21.7 | 316 | 299 | <.030 | .32 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|---|---|---|--|-------------------------------------|--|--|---------------------------------------|---|---|--|--|
| NOV 28... | <.03 | .29 | .951 | <.003 | 1.2 | 1.2 | .047 | .007 | .016 | .4 | <.1 | 3.5 | .4 |
| FEB 27... | <.03 | .28 | .838 | <.003 | 1.0 | 1.1 | .071 | .005 | .019 | .6 | <.1 | 3.2 | .6 |
| MAY 17... | <.03 | .35 | .543 | .014 | .82 | .89 | .100 | .017 | .040 | .9 | <.1 | 2.8 | .9 |
| AUG 23... | .04 | .40 | .233 | <.003 | .55 | .64 | .084 | .026 | .043 | .6 | <.1 | 2.9 | .6 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|--|--|---------------------------------------|--|
| NOV 28... | <1.0 | -- | 17 | <1 |
| FEB 27... | E1.3 | -- | E9 | 6 |
| MAY 17... | E1.4 | 8.40 | 20 | 6 |
| AUG 23... | <1.0 | 5.00 | 23 | 6 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01443500 PAULINS KILL AT BLAIRSTOWN, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 01... | 0830 | 230 | 100 | 140 | 15... | 1040 | 260 | <100 | 50 |
| 08... | 0905 | 80 | <100 | 50 | 22... | 0910 | 130 | 200 | 70 |
| | | | | | 29... | 0900 | 330 | 100 | 270 |

< Actual value is known to be less than the value shown.

01445160 BEAR BROOK AT DARK MOON ROAD, NEAR JOHNSONBURG, NJ

LOCATION.--Lat 40°58'30", long 74°50'57", Warren County, Hydrologic Unit 02040105, at bridge on Dark Moon Road 1.3 mi northeast of Johnsonburg, 0.4 mi northeast of CONRAIL railroad tunnel, and 0.5 mi northwest of Francis Lake.

DRAINAGE AREA.--5.10 mi².

PERIOD OF RECORD.--November 2000 to August 2000.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|---|---|---|--|--|--|--|--|---|---|--|
| | | | | | | | | | | | | | | |
| NOV 29... | 1030 | 1.0 | -- | .037 | .028 | 746 | 97 | 11.4 | 8.1 | 456 | 8.0 | 7.5 | 210 | |
| FEB 07... | 1300 | 7.2 | -- | .101 | .077 | 753 | 96 | 12.1 | 7.9 | 391 | 6.5 | 5.0 | 160 | |
| MAY 22... | 1110 | 7.7 | 36 | .215 | .166 | 743 | 82 | 8.3 | 7.8 | 338 | 19.0 | 13.5 | 150 | |
| AUG 09... | 0920 | .62 | 1.1 | .016 | .013 | 744 | 135 | 13.4 | 7.3 | 454 | 30.0 | 14.5 | 220 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB AS CACO3 (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 29... | 50.8 | 20.3 | 1.68 | 10.3 | 201 | 18.2 | <.2 | 7.6 | 20.0 | 267 | 256 | <.030 | .11 | |
| FEB 07... | 41.1 | 14.2 | 1.51 | 13.9 | 138 | 26.0 | <.2 | 7.8 | 16.1 | 221 | 207 | <.030 | .24 | |
| MAY 22... | 34.0 | 14.9 | 1.34 | 10 | 137 | 16.5 | <.2 | 5.0 | 13.4 | 204 | 180 | .040 | .48 | |
| AUG 09... | 53.3 | 21.3 | 1.46 | 13.1 | 199 | 23.9 | <.2 | 7.8 | 18.8 | 277 | 267 | .070 | E.08 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (00600) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 29... | .03 | .30 | 1.43 | <.003 | 1.5 | 1.7 | .028 | .004 | .008 | .3 | <.1 | 1.3 | .3 | |
| FEB 07... | <.03 | .32 | .780 | <.003 | 1.0 | 1.1 | .121 | .011 | .021 | .6 | <.1 | 3.2 | .6 | |
| MAY 22... | .06 | 1.1 | .645 | .004 | 1.1 | 1.8 | .600 | .035 | .143 | 5.6 | <.1 | 6.2 | 5.5 | |
| AUG 09... | .08 | .12 | 1.80 | <.003 | -- | 1.9 | .077 | E.003 | <.004 | .4 | <.1 | .74 | .4 | |
| DATE | | | | | | OXYGEN DEMAND, BIO-CHEM-ICAL, METHOD 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | |
| NOV 29... | | | | | | <1.0 | -- | 15 | <1 | | | | | |
| FEB 07... | | | | | | <1.0 | -- | E8 | 3 | | | | | |
| MAY 22... | | | | | | 3.1 | 9.50 | E9 | 44 | | | | | |
| AUG 09... | | | | | | E1.5 | 2.20 | E9 | <1 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01445160 BEAR BROOK AT DARK MOON ROAD, NEAR JOHNSONBURG, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 01... | 0815 | 20 | 100 | 3600 | 15... | 1053 | 20 | <100 | 2900 |
| 08... | 0745 | 70 | <100 | 800 | 22... | 0850 | 80 | <100 | 2100 |
| | | | | | 29... | 0845 | 230 | 200 | 660 |

< Actual value is known to be less than the value shown.

01445900 HONEY RUN NEAR HOPE, NJ

LOCATION.--Lat 40°53'33", long 74°53'42", Warren County, Hydrologic Unit 02040105, at bridge on County Route 519 1.0 mi east of Swayzes Mills, 1.4 mi southwest of Hope, and 1.6 mi downstream of Hope Pond.

DRAINAGE AREA.--10.2 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY | UV ABSORB- ANCE | UV ABSORB- ANCE | BARO- METRIC PRES- | OXYGEN, DIS- SOLVED | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE | SPE- CIFIC | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|--|---|---|---|--|--|--|---|--|---|
| | | FIELD | 254 NM, WTR FLT | 280 NM, WTR FLT | SURE (MM OF HG) (00025) | (PER- CENT SATUR- ATION) (00301) | | FIELD (STAND- ARD UNITS) (00400) | CON- DUCT- ANCE (US/CM) (00095) | | | | | |
| | | WATER UNFLTRD (NTU) (61028) | (UNITS /CM) (50624) | (UNITS /CM) (61726) | | | | | | | | | | |
| NOV 16... | 1100 | -- | .178 | .137 | 755 | 89 | 11.1 | 7.8 | 352 | -- | 5.5 | 140 | 36.2 | |
| FEB 22... | 1000 | -- | .076 | .057 | 764 | 93 | 13.6 | 7.8 | 386 | -4.5 | .00 | 140 | 35.9 | |
| MAY 16... | 1000 | 7.1 | .146 | .113 | 753 | 66 | 6.9 | 7.9 | 418 | 17.0 | 13.0 | 180 | 45.5 | |
| AUG 15... | 1000 | 4.3 | .141 | .107 | 756 | 44 | 3.8 | 7.8 | 384 | 23.0 | 22.5 | 180 | 42.7 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| NOV 16... | 12.3 | 2.88 | 13.2 | 122 | 23.0 | <.2 | 9.6 | 22.1 | 202 | 193 | <.030 | .29 | .03 | |
| FEB 22... | 12.0 | 1.38 | 17.6 | 110 | 35.4 | <.2 | 5.1 | 21.7 | 210 | 198 | <.030 | .15 | <.03 | |
| MAY 16... | 16.4 | .94 | 17.1 | 165 | 29.2 | <.2 | 9.3 | 11.9 | 252 | 230 | .100 | .44 | .10 | |
| AUG 15... | 16.9 | 1.71 | 12.5 | 164 | 20.8 | <.2 | 9.4 | 10.1 | 218 | 213 | <.030 | .31 | .12 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 16... | .39 | .064 | <.003 | .36 | .46 | .070 | .020 | .045 | .5 | <.1 | 5.1 | .5 | <1.0 | |
| FEB 22... | .21 | .687 | <.003 | .84 | .90 | .030 | .007 | .017 | .4 | <.1 | 2.3 | .4 | <1.0 | |
| MAY 16... | .53 | .253 | .018 | .69 | .78 | .100 | .034 | .069 | .6 | <.1 | 3.7 | .6 | E1.2 | |
| AUG 15... | .34 | .093 | <.003 | .40 | .43 | .073 | .061 | .083 | .6 | <.1 | 4.0 | .6 | <1.0 | |
| DATE | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | |
| NOV 16... | -- | | | | | | E11 | 18 | | | | | | |
| FEB 22... | -- | | | | | | E11 | 5 | | | | | | |
| MAY 16... | | | | | | 2.50 | 14 | 2 | | | | | | |
| AUG 15... | | | | | | 9.00 | 17 | <1 | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01445900 HONEY RUN NEAR HOPE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | |
|--------------|------|--|--|--|---|---|--|---|--|---|--|--|--|--|
| AUG 15... | 1000 | -- | -- | -- | -- | -- | -- | E1 | 9.3 | <.06 | 16 | <.04 | <1 | |
| 15... | 1000 | 7.50 | 580 | 3.9 | 270 | 8.7 | 3.4 | -- | -- | -- | -- | -- | -- | |
| DATE | TIME | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CR) (01038) |
| AUG 15... | .6 | 200 | <1 | 145 | <.01 | <1 | <.4 | <.05 | 2 | -- | -- | -- | -- | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 11 | 11 | 5.4 | |
| DATE | TIME | COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS MN) (01053) | MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G AS SE) (01148) | ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH- THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH- THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) |
| AUG 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 15... | 13 | 18000 | 17 | 660 | .03 | <.1 | <1 | 60 | 60 | <50 | 50 | E30 | <50 | |
| DATE | TIME | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ (A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO (G HI) PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS, <2MM REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR- ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPHTHAL- ENE, 12 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49403) |
| AUG 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 15... | <50 | 110 | 320 | 310 | 260 | 180 | 260 | 360 | 60 | 650 | 210 | <50 | <50 | |
| DATE | TIME | NAPHTHAL- ENE, 16 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPHTHAL- ENE, 236 TRIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPHTHAL- ENE, 26 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPHTHAL- ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN- THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. FALL DIAM. % FINER THAN .062 MM (80157) |
| AUG 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 15... | <50 | E30 | E30 | <50 | E40 | <5 | <50 | E40 | 460 | <50 | <50 | 560 | 4 | |
| DATE | TIME | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) | | | | | | | | | | | | |
| AUG 15... | -- | | | | | | | | | | | | | |
| 15... | 9 | | | | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01445900 HONEY RUN NEAR HOPE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHYL- ENE | 1,2-DI- CHLORO- ETHANE | 1,2-DI- CHLORO- PROPANE | TRANS- 1,2-DI- CHLORO- ETHYLENE | BENZENE 1,3-DI- CHLORO- WATER | BENZENE 1,4-DI- CHLORO- WATER | BENZENE O-DI- CHLORO- WATER | BENZENE TOTAL | BROMO- FORM TOTAL | CARBON TETRA- CHLO- RIDE TOTAL | |
|--------------|------|-------------------------------------|--|---|-------------------------------------|---|--|--|--|--|----------------------------|--|---|----------------------------|
| | | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (32103) | TOTAL (UG/L) (34541) | TOTAL (UG/L) (34546) | TOTAL (UG/L) (34566) | TOTAL (UG/L) (34571) | TOTAL (UG/L) (34536) | TOTAL (UG/L) (34030) | TOTAL (UG/L) (32104) | TOTAL (UG/L) (32102) | |
| FEB 22... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |
| DATE | TIME | CHLORO- DI- BROMO- METHANE | CHLORO- FORM TOTAL | CIS-1,2 -DI- CHLORO- ETHYLENE WATER | BROMO- DI- CHLORO- METHANE | DI- CHLORO- DI- FLUORO- METHANE | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER | ETHER TERT- ETHYL WATER UNFLTRD RECOVER | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER | ETHYL- BENZENE TOTAL | FREON- 113 WATER UNFLTRD REC | METHYL TERT- BUTYL ETHER WAT UNF REC | |
| | | TOTAL (UG/L) (34301) | TOTAL (UG/L) (32105) | TOTAL (UG/L) (32106) | TOTAL (UG/L) (77093) | TOTAL (UG/L) (32101) | TOTAL (UG/L) (34668) | TOTAL (UG/L) (81577) | TOTAL (UG/L) (81576) | TOTAL (UG/L) (50004) | TOTAL (UG/L) (50005) | TOTAL (UG/L) (34371) | TOTAL (UG/L) (77652) | TOTAL (UG/L) (78032) |
| FEB 22... | | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
| DATE | TIME | CHLORO- ETHYL- RIDE | METHA/ PARA- XYLENE WATER UNFLTRD REC | O- XYLENE WATER WHOLE TOTAL | STYRENE TOTAL | TETRA- CHLORO- ETHYL- ENE TOTAL | TOLUENE TOTAL | TRI- CHLORO- ETHYL- ENE TOTAL | TRI- CHLORO- FLUORO- METHANE TOTAL | VINYL CHLO- RIDE TOTAL | | | | |
| | | TOTAL (UG/L) (34423) | TOTAL (UG/L) (85795) | TOTAL (UG/L) (77135) | TOTAL (UG/L) (77128) | TOTAL (UG/L) (34475) | TOTAL (UG/L) (34010) | TOTAL (UG/L) (39180) | TOTAL (UG/L) (34488) | TOTAL (UG/L) (39175) | | | | |
| FEB 22... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|------|------|--|---|---|---|---|---|---|--|--|---|--|---|---|
| | | MAY 16... | 1000 | <.004 | <.002 | <.005 | E.006 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.003 |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER FLTRD 0.7 U DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER FLTRD 0.7 U DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | MAY 16... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DATE | TIME | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | |
| | | | | | MAY 16... | <.011 | <.016 | <.034 | <.005 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01445900 HONEY RUN NEAR HOPE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 01... | 1010 | 50 | 400 | 300 | 15... | 1100 | 790 | 800 | 520 |
| 08... | 0915 | 490 | 500 | 330 | 22... | 1030 | 700 | <100 | 230 |
| | | | | | 29... | 1020 | 5400 | 1700 | 4000 |

< Actual value is known to be less than the value shown.

01446400 PEQUEST RIVER AT BELVIDERE, NJ

LOCATION.--Lat 40°49'45", long 75°04'44", Warren County, Hydrologic Unit 02040105, at bridge on County Route 619 in Belvidere, and 0.3 mi upstream from mouth.

DRAINAGE AREA.--158 mi².

PERIOD OF RECORD.--Water years 1957, 1962, 1976-82, 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | |
|-----------|------|---|--|---|--|---|---|---|--|--|---|---|---|--|
| | | | | | | | | | | | | | | |
| NOV 02... | 1230 | 61 | -- | .089 | .068 | 757 | 110 | 12.6 | 8.4 | 530 | 20.0 | 9.0 | 240 | |
| FEB 13... | 1220 | 258 | -- | .113 | .085 | 763 | 114 | 15.3 | 8.3 | 503 | 8.5 | 3.0 | 200 | |
| MAY 16... | 0910 | 109 | 4.8 | -- | -- | 755 | 97 | 10.3 | 8.4 | 540 | 21.0 | 12.0 | 230 | |
| AUG 09... | 1140 | 38 | 1.3 | .073 | .056 | 744 | 129 | 10.8 | 8.5 | 511 | 43.5 | 23.0 | 230 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| | | | | | | | | | | | | | | |
| NOV 02... | 53.9 | 25.0 | 1.95 | 17.9 | 209 | 34.0 | <.2 | 7.0 | 22.3 | 302 | 294 | .080 | .24 | |
| FEB 13... | 47.1 | 20.1 | 1.48 | 20.3 | 177 | 41.4 | <.2 | 7.6 | 24.0 | 290 | 274 | .060 | .23 | |
| MAY 16... | 53.6 | 23.8 | 1.70 | 17.3 | 210 | 34.4 | E.1 | 7.1 | 21.6 | 348 | 292 | <.030 | .21 | |
| AUG 09... | 50.6 | 25.5 | 2.04 | 20.9 | 206 | 37.7 | E.1 | 7.8 | 24.9 | 318 | 299 | .040 | -- | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TITICULTE WAT FLT (MG/L AS N) (00600) | NITRO-GEN, PAR TICULTE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| | | | | | | | | | | | | | | |
| NOV 02... | .05 | .28 | 1.31 | .016 | 1.5 | 1.6 | <.022 | .056 | .062 | .3 | <.1 | 2.9 | .3 | |
| FEB 13... | .04 | .43 | 1.28 | .008 | 1.5 | 1.7 | .046 | .025 | .050 | .8 | <.1 | 3.6 | .8 | |
| MAY 16... | <.03 | .35 | 1.46 | .036 | 1.7 | 1.8 | .150 | .050 | .070 | 1.0 | <.1 | 2.4 | 1.0 | |
| AUG 09... | .08 | .37 | 1.37 | .016 | -- | 1.7 | .066 | .122 | .132 | .5 | <.1 | 2.3 | .5 | |
| DATE | | OXYGEN DEMAND, BIO-CHEM-ICAL, METHOD 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | | | | | |
| | | | | | | | | | | | | | | |
| NOV 02... | E1.7 | -- | E13 | 5 | | | | | | | | | | |
| FEB 13... | <1.0 | -- | 14 | 11 | | | | | | | | | | |
| MAY 16... | E1.4 | 3.80 | E13 | 4 | | | | | | | | | | |
| AUG 09... | E1.8 | 3.60 | E13 | 3 | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01446400 PEQUEST RIVER AT BELVIDERE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 01... | 1000 | 1300 | 500 | 840 | 15... | 0950 | 1400 | 1300 | 340 |
| 08... | 0940 | 460 | 200 | 410 | 22... | 1015 | 330 | 200 | 160 |
| | | | | | 29... | 1000 | 170 | 400 | 460 |

DELAWARE RIVER BASIN

365

01451800 JORDAN CREEK NEAR SCHNECKSVILLE, PA

LOCATION.--Lat 40°39'42", long 75°37'38", Lehigh County, PA, Hydrologic Unit 02040106, at wooden covered bridge at Trexler-Lehigh County Game Preserve, 1.0 mi downstream from Mill Creek, and 1.1 mi southwest of Schnecksville.

DRAINAGE AREA.--53.0 mi².

PERIOD OF RECORD.--Water years 1996 to September 2001 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1999 to June 1999, October 2000 to September 2001.

INSTRUMENTATION.--Water-temperature data logger (in-situ system; measurements recorded every 15 or 30 minutes), located 50 ft downstream from bridge.

REMARKS.--These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (DELR NAWQA). For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Fish community for this and other sites are presented in "Water-Quality at Miscellaneous Surface-Water Sites."

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO- METRIC PRES- SURE (MM HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | | |
|--------------|------|---|--|---|--|--|---|--|---|--|--|--|---|--|
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| OCT 12... | 0850 | ENVIRONMENTAL | 16 | 758 | 105 | 12.5 | 7.9 | 213 | 4.5 | 7.4 | 82 | 22.1 | | |
| NOV 06... | 1020 | ENVIRONMENTAL | 13 | 756 | 120 | 15.2 | 8.2 | 218 | 13.5 | 5.0 | 83 | 23.0 | | |
| DEC 12... | 1310 | ENVIRONMENTAL | 27 | 753 | 134 | 18.7 | 8.0 | 185 | 5.0 | 1.2 | 70 | 19.4 | | |
| FEB 06... | 1500 | ENVIRONMENTAL | 95 | 748 | 128 | 16.4 | 7.5 | 218 | 6.0 | 4.1 | 69 | 19.0 | | |
| MAR 13... | 1020 | ENVIRONMENTAL | 346 | 743 | 100 | 12.8 | 7.3 | 210 | 3.0 | 3.7 | 61 | 17.0 | | |
| APR 03... | 1119 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 03... | 1120 | ENVIRONMENTAL | 157 | 754 | 106 | 13.1 | 7.5 | 187 | 14.5 | 5.7 | 65 | 17.7 | | |
| 03... | 1121 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MAY 07... | 1450 | ENVIRONMENTAL | 27 | 761 | 142 | 12.8 | 8.6 | 196 | 21.5 | 20.4 | 73 | 20.3 | | |
| JUN 05... | 1420 | ENVIRONMENTAL | 75 | 760 | -- | -- | 8.6 | 198 | 26.0 | 20.0 | 75 | 20.7 | | |
| 05... | 1421 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | 75 | 20.6 | | |
| 26... | 1400 | ENVIRONMENTAL | 184 | 757 | -- | -- | 7.6 | 201 | 29.0 | 19.7 | 72 | 19.8 | | |
| AUG 20... | 1040 | ENVIRONMENTAL | 9.4 | 747 | 141 | 11.5 | 8.4 | 220 | 27.5 | 24.5 | 84 | 23.1 | | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086) | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453) | CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) |
| OCT 12... | 6.53 | 1.62 | 6.0 | 48 | 59 | -- | 11.8 | <.2 | 3.2 | 21.0 | .22 | .25 | <.041 | |
| NOV 06... | 6.21 | 1.60 | 6.3 | 46 | 57 | -- | 11.2 | E.1 | 2.0 | 21.4 | .14 | .45 | <.041 | |
| DEC 12... | 5.26 | 1.16 | 5.6 | -- | -- | -- | 10.3 | <.2 | 5.3 | 20.8 | .12 | .12 | <.041 | |
| FEB 06... | 5.18 | 1.21 | 10.9 | 22 | 27 | -- | 21.9 | <.2 | 6.7 | 19.0 | .18 | .20 | <.041 | |
| MAR 13... | 4.42 | 1.39 | 12.7 | 23 | 28 | -- | 26.0 | <.2 | 5.0 | 16.4 | .24 | .84 | E.025 | |
| APR 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 03... | 5.03 | 1.05 | 6.8 | 21 | 26 | -- | 13.8 | <.2 | 5.8 | 18.0 | .15 | .18 | <.041 | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| MAY 07... | 5.52 | 1.12 | 6.8 | 38 | 46 | -- | 13.8 | <.2 | 2.9 | 19.1 | .18 | .24 | <.041 | |
| JUN 05... | 5.74 | 1.00 | 6.8 | 33 | 37 | 1 | 14.0 | <.2 | 6.0 | 18.8 | .14 | .20 | <.040 | |
| 05... | 5.69 | 1.00 | 6.8 | -- | -- | -- | 13.8 | <.2 | 6.0 | 18.6 | .18 | .25 | <.040 | |
| 26... | 5.56 | 1.36 | 6.3 | 30 | 37 | -- | 12.5 | <.2 | 7.9 | 17.5 | .12 | .20 | <.040 | |
| AUG 20... | 6.37 | 1.58 | 7.6 | 57 | 62 | 4 | 15.2 | E.1 | 3.7 | 17.9 | .21 | .27 | E.024 | |

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01451800 JORDAN CREEK NEAR SCHNECKSVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) |
|-----------|--|--|--|--|--|--|--|---|---|---|---|--|---|
| OCT 12... | 3.3 | 3.2 | 3.02 | E.004 | -- | E.003 | <.018 | .020 | -- | -- | 1.9 | <.2 | 118 |
| NOV 06... | 3.3 | 3.0 | 2.90 | .006 | -- | E.005 | E.009 | .020 | -- | -- | 1.6 | <.2 | 118 |
| DEC 12... | 4.2 | 4.2 | 4.12 | E.005 | -- | E.005 | <.018 | .008 | -- | -- | 1.1 | -- | 107 |
| FEB 06... | 5.7 | 5.6 | 5.46 | .008 | <.022 | .008 | <.018 | .014 | .4 | -- | 1.2 | -- | 123 |
| MAR 13... | 4.6 | 4.0 | 3.79 | .006 | .500 | .010 | <.018 | .178 | 4.6 | <.1 | 2.9 | 4.6 | 127 |
| APR 03... | -- | -- | -- | -- | .087 | -- | -- | -- | .1 | <.1 | <.15 | .1 | -- |
| 03... | 5.7 | 5.6 | 5.50 | E.005 | .040 | E.005 | <.018 | .012 | E.4 | <.1 | 1.1 | E.4 | 115 |
| 03... | -- | -- | -- | -- | .098 | -- | -- | -- | .3 | <.1 | 1.0 | .3 | -- |
| MAY 07... | 3.4 | 3.4 | 3.19 | .011 | .087 | .007 | <.018 | .013 | E.7 | <.1 | 1.6 | E.7 | 108 |
| JUN 05... | 4.7 | 4.6 | 4.48 | .011 | .038 | .007 | <.020 | .016 | .3 | <.1 | 1.8 | .3 | 117 |
| 05... | 4.8 | 4.7 | 4.53 | .011 | -- | .007 | <.020 | .016 | -- | -- | -- | -- | 131 |
| 26... | 5.2 | 5.1 | 5.03 | .028 | .052 | .015 | <.020 | .026 | .6 | <.1 | 4.2 | .6 | 133 |
| AUG 20... | 1.9 | 1.9 | 1.65 | .013 | .050 | E.004 | <.020 | .013 | .3 | <.1 | 2.8 | .3 | 127 |

| DATE | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155) | SEDI- MENT, SUS- PENDE (MG/L) (80154) |
|-----------|---|--|---|---|---|--|--|
| OCT 12... | 114 | <2.0 | E12 | 10 | 5.8 | .64 | 15 |
| NOV 06... | 112 | <2.0 | 13 | 10 | 3.6 | .40 | 11 |
| DEC 12... | 106 | 3.3 | E9 | M | 5.2 | .23 | 3 |
| FEB 06... | 121 | 9.4 | E10 | <10 | 6.3 | 1.7 | 7 |
| MAR 13... | 114 | 150 | E6 | 40 | 11.3 | 147 | 158 |
| APR 03... | -- | -- | -- | -- | -- | -- | -- |
| 03... | 105 | 6.7 | 16 | M | 6.2 | 2.4 | 6 |
| 03... | -- | -- | -- | -- | -- | -- | -- |
| MAY 07... | 107 | -- | E6 | 20 | 6.9 | -- | <1 |
| JUN 05... | 113 | -- | E10 | 30 | 5.5 | 1.1 | 5 |
| 05... | -- | -- | E12 | 20 | 4.8 | -- | 6 |
| 26... | 111 | 10 | E12 | 10 | 6.3 | 3.3 | 7 |
| AUG 20... | 117 | 4.7 | 15 | 20 | E2.6 | .03 | 1 |

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020/2021 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34501) | ACETONE WHOLE TOTAL (UG/L) (81552) | 1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613) | BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551) | BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222) | BENZENE 135-TRI METHYL UNFLTRD REC (UG/L) (77226) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) |
|-----------|------|---|--|--|--|--|---|--|---|---|---|--|---|
| OCT 12... | 0850 | <.03 | <.04 | <.04 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

01451800 JORDAN CREEK NEAR SCHNECKSVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | |
|--------------|--|--|--|--|--|--|---|--|---|--|---|---|---|--|
| | | | DI- SULFIDE | | | | | | | | | | | WATER WHOLE TOTAL (UG/L) (77041) |
| | | | | | | | | | | | | | | |
| OCT 12... | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 | |
| DATE | FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL- CHLO- RIDE TOTAL (UG/L) (34418) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | | |
| | | | | | | | | | | | | | | |
| | OCT 12... | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | E.02 | <.04 | <.09 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| | | | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | |
|--------------|--|---|--|---|---|---|---|---|---|--|--|---|---|
| DATE | TIME | SAMPLE TYPE | | | | | | | | | | | |
| OCT 12... | 0850 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .016 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| FEB 06... | 1500 | ENVIRONMENTAL | <.004 | <.002 | <.005 | E.002 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| APR 03... | 1119 | FIELD BLANK | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| 03... | 1120 | ENVIRONMENTAL | <.004 | <.005 | <.005 | .026 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| 03... | 1121 | SPLIT REPLICATE | <.004 | <.004 | <.005 | .021 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| MAY 07... | 1450 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .022 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| JUN 05... | 1420 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .060 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| 26... | 1400 | ENVIRONMENTAL | .005 | <.002 | <.005 | .177 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| AUG 20... | 1040 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .025 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | |
| DATE | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) |
| OCT 12... | E.016 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.009 | <.006 | <.002 | <.007 | <.003 |
| FEB 06... | <.006 | <.015 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 |
| APR 03... | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.008 | <.007 | <.003 |
| 03... | E.027 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .026 | <.006 | <.010 | <.007 | <.003 |
| 03... | E.020 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .024 | <.006 | <.002 | <.007 | <.003 |
| MAY 07... | E.013 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.011 | <.006 | <.002 | <.007 | <.003 |
| JUN 05... | E.030 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .032 | <.006 | <.002 | <.007 | <.003 |
| 26... | E.025 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .154 | <.006 | <.002 | <.007 | E.002 |
| AUG 20... | E.012 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.006 | <.006 | <.002 | <.007 | <.003 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01451800 JORDAN CREEK NEAR SCHNECKSVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|--------------|---|---|---|---|--|---|---|
| OCT 12... | <.010 | E.002 | .016 | <.016 | <.034 | <.005 | <.009 |
| FEB 06... | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 |
| APR 03... | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 |
| 03... | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 |
| 03... | <.010 | <.015 | E.006 | <.016 | <.034 | <.005 | <.009 |
| MAY 07... | <.010 | E.007 | .616 | <.016 | <.034 | <.005 | <.009 |
| JUN 05... | <.010 | <.015 | .064 | <.016 | <.034 | <.005 | <.009 |
| 26... | <.010 | <.015 | E.009 | <.016 | <.034 | <.005 | <.009 |
| AUG 20... | <.010 | <.015 | .012 | <.016 | <.034 | <.005 | <.009 |

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|------|------|----------|------|------|----------|-----|------|---------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | --- | --- | --- | 10.5 | 5.0 | 7.5 | 4.5 | 2.0 | 3.0 | .0 | .0 | .0 |
| 2 | --- | --- | --- | 10.5 | 5.0 | 7.5 | 2.5 | .0 | 1.0 | .0 | .0 | .0 |
| 3 | --- | --- | --- | 10.5 | 5.0 | 8.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 4 | --- | --- | --- | 11.0 | 7.5 | 9.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 5 | --- | --- | --- | 9.5 | 6.0 | 7.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 6 | --- | --- | --- | 9.0 | 3.5 | 6.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 7 | --- | --- | --- | 9.0 | 3.5 | 6.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 8 | --- | --- | --- | 9.5 | 5.0 | 7.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 9 | --- | --- | --- | 10.5 | 8.5 | 9.5 | .5 | .0 | .0 | .5 | .0 | .0 |
| 10 | --- | --- | --- | 12.0 | 10.5 | 11.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 11 | --- | --- | --- | 11.5 | 8.5 | 10.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 12 | --- | --- | --- | 10.0 | 7.0 | 8.5 | 1.5 | .0 | .5 | .5 | .0 | .0 |
| 13 | 14.5 | 7.5 | 11.0 | 10.0 | 8.0 | 9.0 | .0 | .0 | .0 | .5 | .0 | .0 |
| 14 | 15.5 | 9.0 | 12.0 | 9.5 | 6.5 | 9.0 | .5 | .0 | .0 | .0 | .0 | .0 |
| 15 | 16.5 | 10.0 | 13.0 | 7.0 | 4.5 | 5.5 | 1.0 | .0 | .5 | .0 | .0 | .0 |
| 16 | 14.5 | 13.0 | 13.5 | 6.0 | 3.5 | 5.0 | 2.0 | .0 | 1.0 | .5 | .0 | .0 |
| 17 | 14.0 | 12.0 | 13.0 | 7.5 | 4.0 | 5.5 | 7.0 | 1.5 | 5.0 | .0 | .0 | .0 |
| 18 | 14.0 | 12.0 | 13.0 | 5.0 | 3.0 | 4.0 | 5.0 | 3.0 | 3.5 | .0 | .0 | .0 |
| 19 | 14.5 | 10.5 | 12.0 | 4.0 | 1.5 | 2.5 | 3.5 | 2.5 | 3.0 | .0 | .0 | .0 |
| 20 | 14.0 | 7.5 | 10.5 | 2.5 | .0 | 1.0 | 3.0 | .5 | 2.0 | .0 | .0 | .0 |
| 21 | 15.0 | 8.5 | 11.5 | 2.0 | .0 | .5 | 1.5 | .0 | .5 | .0 | .0 | .0 |
| 22 | 14.5 | 9.5 | 11.5 | 1.0 | .0 | .0 | 2.5 | .0 | 1.0 | .0 | .0 | .0 |
| 23 | 12.5 | 6.5 | 9.0 | .5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 24 | 12.0 | 7.5 | 9.5 | .5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 25 | 15.0 | 9.0 | 11.5 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 26 | 14.5 | 9.5 | 12.0 | 3.0 | .0 | 1.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 27 | 15.0 | 9.5 | 12.0 | 6.0 | 3.0 | 4.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 28 | 14.0 | 8.0 | 11.5 | 7.0 | 5.0 | 6.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 29 | 10.0 | 5.5 | 7.5 | 6.0 | 3.5 | 4.5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 30 | 9.5 | 5.0 | 7.0 | 6.0 | 4.0 | 5.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 31 | 10.5 | 5.0 | 7.0 | --- | --- | --- | .0 | .0 | .0 | .5 | .0 | .0 |
| MONTH | --- | --- | --- | 12.0 | .0 | 5.4 | 7.0 | .0 | .7 | .5 | .0 | .0 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01454700 LEHIGH RIVER AT GLENDON, PA

LOCATION.--Lat 40°40'09", long 75°14'12", Northampton County, PA, Hydrologic Unit 02040106, on right bank 140 ft upstream from highway bridge in Hugh Moore Parkway at Glendon, 1.9 mi upstream from mouth and 2.0 mi southeast of Easton.

DRAINAGE AREA.--1,359 mi².

PERIOD OF RECORD.--November 1998, revised, to August 2001 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1998 to April 1999.

REMARKS.--These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (NAWQA). For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Minimum, -1.0°C, Feb. 24, 1999, but may have been lower during period of missing record.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STANDARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | | |
|-----------|------|---|---|--|--|--|---|---|---|--|--|---|--|--------------------------------------|
| DATE | TIME | SAMPLE TYPE | | | | | | | | | | | | |
| OCT 12... | 1110 | ENVIRONMENTAL | | 844 | 764 | 111 | 12.1 | 8.2 | 394 | 16.5 | 11.7 | 130 | 30.9 | |
| NOV 06... | 1359 | FIELD BLANK | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 06... | 1400 | ENVIRONMENTAL | | 759 | 760 | 109 | 12.2 | 8.3 | 415 | 13.5 | 10.4 | 130 | 31.8 | |
| 06... | 1401 | SPLIT REPLICATE | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| DEC 12... | 1040 | ENVIRONMENTAL | | 861 | 754 | 114 | 14.7 | 7.8 | 354 | 5.0 | 4.2 | 120 | 28.9 | |
| FEB 06... | 1050 | ENVIRONMENTAL | | 2190 | 756 | 111 | 15.7 | 7.7 | 277 | 8.0 | .9 | 81 | 20.6 | |
| MAR 13... | 1320 | ENVIRONMENTAL | | 4190 | 746 | 101 | 12.5 | 7.7 | 294 | 7.5 | 5.5 | 80 | 20.9 | |
| APR 03... | 1440 | ENVIRONMENTAL | | 5550 | 754 | 107 | 12.9 | 7.5 | 170 | 14.5 | 6.7 | 51 | 13.0 | |
| MAY 07... | 1050 | ENVIRONMENTAL | | 1710 | 770 | 106 | 10.5 | 7.9 | 267 | 14.5 | 16.5 | 92 | 22.2 | |
| JUN 05... | 0930 | ENVIRONMENTAL | | 2730 | 761 | -- | -- | 7.6 | 265 | 17.5 | 16.0 | 82 | 20.5 | |
| 26... | 0930 | ENVIRONMENTAL | | 2420 | 765 | -- | -- | 7.6 | 260 | 25.0 | 20.5 | 90 | 22.8 | |
| AUG 20... | 1550 | ENVIRONMENTAL | | 952 | 752 | 109 | 9.0 | 8.2 | 335 | 28.0 | 24.3 | 120 | 26.7 | |
| | | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ALKA-LINITY WAT DIS TOT IT (MG/L AS CaCO3) (39086) | BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, TOTAL (MG/L AS N) (00600) |
| OCT 12... | 13.4 | 3.14 | 22.1 | 90 | 110 | 34.6 | E.1 | 6.0 | 40.9 | .27 | .34 | E.033 | 3.4 | |
| NOV 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 06... | 12.9 | 3.44 | 26.5 | 91 | 111 | 34.3 | .3 | 4.3 | 39.8 | .27 | .34 | <.041 | 2.9 | |
| 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC 12... | 11.9 | 2.87 | 21.0 | 82 | 100 | 29.9 | E.1 | 5.5 | 35.8 | .26 | .37 | E.031 | 3.4 | |
| FEB 06... | 7.22 | 1.79 | 18.2 | 47 | 57 | 31.5 | <.2 | 5.5 | 23.5 | .30 | .39 | .144 | 2.9 | |
| MAR 13... | 6.88 | 1.88 | 22.6 | 48 | 59 | 38.9 | <.2 | 4.4 | 23.8 | .29 | .57 | .149 | 2.6 | |
| APR 03... | 4.43 | 1.18 | 10.8 | 26 | 32 | 17.6 | <.2 | 4.6 | 17.1 | .15 | .20 | E.029 | 1.7 | |
| MAY 07... | 8.79 | 2.09 | 14.4 | 58 | 71 | 22.1 | <.2 | 4.2 | 26.4 | .26 | .32 | <.041 | 2.1 | |
| JUN 05... | 7.47 | 1.69 | 13.8 | 49 | 59 | 22.7 | <.2 | 5.5 | 23.0 | .24 | .35 | .051 | 2.2 | |
| 26... | 7.97 | 2.00 | 13.1 | 54 | 66 | 21.1 | <.2 | 6.6 | 24.5 | .20 | .44 | <.040 | 2.8 | |
| AUG 20... | 11.8 | 2.60 | 17.8 | 76 | 93 | 28.2 | E.1 | 5.9 | 34.6 | .20 | .25 | E.031 | 2.4 | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

371

01454700 LEHIGH RIVER AT GLENDON, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) |
|-----------|--|--|--|---|---|--|--|---|--|---|---|--|---|
| OCT 12... | 3.3 | 3.04 | .025 | -- | -- | .319 | .302 | .350 | -- | -- | 2.1 | .2 | 224 |
| NOV 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <.33 | <.2 | -- |
| 06... | 2.8 | 2.58 | .014 | -- | -- | .311 | .276 | .322 | -- | -- | 2.0 | <.2 | 221 |
| 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2.2 | <.2 | -- |
| DEC 12... | 3.3 | 3.01 | .023 | -- | -- | .277 | .242 | .320 | -- | -- | 1.8 | .4 | 204 |
| FEB 06... | 2.8 | 2.49 | .022 | .25 | .037 | .109 | .108 | .126 | .4 | -- | 2.0 | -- | 165 |
| MAR 13... | 2.4 | 2.08 | .022 | .42 | .247 | .096 | .084 | .163 | 2.8 | <.1 | 2.1 | 2.8 | 163 |
| APR 03... | 1.6 | 1.48 | .007 | -- | .090 | .034 | .027 | .050 | .6 | <.1 | 1.7 | .6 | 100 |
| MAY 07... | 2.0 | 1.74 | .033 | -- | .130 | .149 | .116 | .165 | E.8 | <.1 | 1.9 | E.8 | 146 |
| JUN 05... | 2.1 | 1.83 | .019 | .30 | .230 | .115 | .091 | .158 | 1.1 | <.1 | 2.5 | 1.0 | 134 |
| 26... | 2.5 | 2.35 | .027 | -- | .122 | .111 | .072 | .134 | 1.2 | <.1 | 4.9 | 1.1 | 153 |
| AUG 20... | 2.4 | 2.18 | .019 | -- | .065 | .189 | .175 | .186 | .6 | <.1 | 1.9 | .6 | 196 |

| DATE | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155) | SEDI- MENT, SUS- PENDE (MG/L) (80154) |
|-----------|---|--|---|---|---|--|--|
| OCT 12... | 220 | 2.3 | 37 | 30 | 17.2 | 5.9 | 3 |
| NOV 06... | -- | -- | -- | -- | -- | -- | -- |
| 06... | 220 | <2.0 | 52 | 30 | 17.1 | 3.7 | 2 |
| 06... | -- | -- | -- | -- | -- | -- | -- |
| DEC 12... | 199 | 3.5 | 34 | 10 | 28.6 | 18 | 8 |
| FEB 06... | 148 | 2.1 | 19 | 30 | 40.1 | 13 | 2 |
| MAR 13... | 158 | 37 | E12 | 30 | 32.8 | 334 | 30 |
| APR 03... | 91 | 4.7 | 21 | 20 | 38.9 | 79 | 5 |
| MAY 07... | 143 | -- | 24 | 30 | 24.8 | 8.3 | 2 |
| JUN 05... | 132 | -- | 18 | 40 | 28.5 | 78 | 11 |
| 26... | 141 | 13 | 21 | 40 | 28.3 | 63 | 10 |
| AUG 20... | 184 | 6.1 | 28 | 30 | 48.2 | 9.0 | 4 |

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020/2021 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | ACETONE WATER WHOLE TOTAL (UG/L) (81552) | 1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613) | BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551) | BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222) | BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) |
|-----------|------|---|--|---|---|--|---|--|--|---|---|--|---|
| OCT 12... | 1110 | E.04 | E.01 | <.04 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01454700 LEHIGH RIVER AT GLENDON, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | CARBON DI- SULFIDE | | CHLORO- DI- BROMO- | | CIS-1,2 -DI- CHLORO- | | DI- CHLORO- DI- | | ETHER TERT- PENTYL | | FREON- 113 |
|--------------|--|--|--|--|--|--|--|--|--|---------------------------------------|--|---|--------------------------|
| | BENZENE | BROMO- FORM | WATER WHOLE | CHLORO- BENZENE | METHANE | CHLORO- FORM | ETHENE WATER | CHLORO- METHANE | FLUORO- METHANE | WATER UNFLTRD | ETHYL RECOVER | ETHYL- BENZENE | WATER UNFLTRD |
| DATE | TOTAL (UG/L) (34030) | TOTAL (UG/L) (32104) | TOTAL (UG/L) (77041) | TOTAL (UG/L) (34301) | TOTAL (UG/L) (32105) | TOTAL (UG/L) (32106) | TOTAL (UG/L) (77093) | TOTAL (UG/L) (32101) | TOTAL (UG/L) (34668) | RECOVER (UG/L) (81576) | RECOVER (UG/L) (50005) | TOTAL (UG/L) (34371) | REC (UG/L) (77652) |
| OCT 12... | <.04 | <.06 | <.07 | <.03 | <.2 | .18 | .16 | E.04 | <.3 | <.2 | <.1 | <.03 | <.06 |
| DATE | FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL- CHLO- RIDE TOTAL (UG/L) (34418) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | |
| OCT 12... | <2 | <.2 | M | <.2 | <.06 | <.03 | <.04 | <.07 | E.1 | E.02 | .17 | <.09 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| | | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|-------|---|--|---|---|---|--|--|--|---|---|---|---|
| OCT 12... | 1110 | <.004 | <.002 | <.005 | .061 | <.010 | <.041 | <.025 | <.005 | <.018 | <.003 | E.068 | <.005 |
| FEB 06... | 1050 | <.004 | <.002 | <.005 | .024 | <.010 | <.041 | <.100 | <.005 | <.018 | <.003 | E.032 | <.005 |
| APR 03... | 1440 | <.004 | <.002 | <.005 | .018 | <.010 | <.041 | <.030 | <.005 | <.018 | <.003 | E.018 | <.005 |
| MAY 07... | 1050 | <.004 | <.002 | <.005 | .029 | <.010 | <.041 | <.025 | <.005 | <.018 | <.003 | E.028 | <.005 |
| JUN 05... | 0930 | <.004 | <.002 | <.005 | .069 | <.010 | E.017 | <.020 | <.005 | <.018 | <.003 | E.033 | <.005 |
| JUN 26... | 0930 | <.004 | <.002 | <.005 | .126 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.019 | <.005 |
| AUG 20... | 1550 | <.004 | <.002 | <.005 | .042 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.040 | E.004 |
| | | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| OCT 12... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.013 | <.006 | <.002 | <.007 | <.003 | <.010 | E.013 |
| FEB 06... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.010 | <.006 | <.002 | <.007 | <.003 | <.010 | E.004 |
| APR 03... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.009 | <.006 | <.002 | <.007 | <.003 | <.010 | .004 |
| MAY 07... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.009 | <.006 | <.002 | <.007 | <.003 | <.010 | E.006 |
| JUN 05... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .028 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| JUN 26... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .073 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| AUG 20... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.007 | <.006 | <.002 | <.007 | <.003 | <.010 | E.011 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

01454700 LEHIGH RIVER AT GLENDON, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-------|---|---|--|--|---|---|
| OCT | | | | | | |
| 12... | E.010 | <.016 | <.034 | E.006 | <.005 | <.009 |
| FEB | | | | | | |
| 06... | E.005 | <.016 | <.034 | -- | <.005 | <.009 |
| APR | | | | | | |
| 03... | E.009 | <.016 | <.034 | -- | <.005 | <.009 |
| MAY | | | | | | |
| 07... | E.006 | <.016 | <.034 | -- | <.005 | <.009 |
| JUN | | | | | | |
| 05... | .015 | <.016 | <.034 | -- | <.005 | <.009 |
| 26... | .013 | <.016 | <.034 | -- | <.005 | <.009 |
| AUG | | | | | | |
| 20... | .020 | <.016 | <.034 | -- | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'32", long 75°11'11", revised, Warren County, Hydrologic Unit 02040105, at bridge on Riegelsville-Milford Road (County Route 627) in Riegelsville, 0.2 mi north of Mount Joy, and 0.2 mi upstream from mouth.

DRAINAGE AREA.--156 mi².

PERIOD OF RECORD.--Water years 1962, 1976 to current year.

REMARKS.--Water-quality samples do not include Riegelsville Paper Company bypass flow. Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (000061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|--|---|--|--|--|--|--|--|--|---|---|---|--|
| NOV 08... | 1210 | 97 | -- | .038 | .030 | 759 | 117 | 13.8 | 8.4 | 440 | 14.0 | 8.0 | 170 | |
| FEB 12... | 0920 | 241 | -- | .057 | .043 | 776 | 100 | 14.4 | 7.5 | 454 | -4.0 | 1.0 | 120 | |
| MAY 16... | 1320 | 145 | 2.6 | .043 | .033 | 760 | 107 | 10.7 | 8.4 | 441 | 20.0 | 15.0 | 170 | |
| AUG 23... | 1100 | 109 | 5.0 | .041 | .031 | 759 | 100 | 9.0 | 8.4 | 454 | 26.0 | 20.0 | 170 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 08... | 36.7 | 19.3 | 1.83 | 19.4 | 141 | 39.1 | E.1 | 6.5 | 19.2 | 242 | 237 | .060 | .41 | |
| FEB 12... | 27.9 | 11.8 | 1.59 | 37.6 | 83 | 73.9 | <.2 | 8.0 | 16.5 | 242 | 235 | <.030 | .16 | |
| MAY 16... | 37.1 | 18.4 | 1.69 | 21.0 | 131 | 42.3 | <.2 | 8.0 | 18.2 | 228 | 236 | <.030 | .66 | |
| AUG 23... | 35.9 | 19.7 | 2.38 | 21.2 | 135 | 46.1 | <.2 | 7.7 | 19.5 | 251 | 244 | .030 | .28 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 08... | .05 | .47 | 2.41 | .010 | 2.8 | 2.9 | .072 | .004 | .011 | .4 | <.1 | 1.9 | .4 | |
| FEB 12... | .08 | .22 | 1.82 | <.003 | 2.0 | 2.0 | .128 | .006 | .031 | .9 | <.1 | 2.3 | .9 | |
| MAY 16... | .03 | .82 | 2.53 | .021 | 3.2 | 3.3 | .100 | .012 | .033 | .6 | <.1 | 1.3 | .6 | |
| AUG 23... | .11 | .35 | 2.35 | .036 | 2.6 | 2.7 | .101 | .025 | .043 | .7 | <.1 | 1.8 | .7 | |
| | | | | | | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | |
| NOV 08... | | | | | | E1.1 | -- | 19 | 9 | | | | | |
| FEB 12... | | | | | | 3.1 | -- | E12 | 9 | | | | | |
| MAY 16... | | | | | | E1.6 | 9.00 | 21 | 1 | | | | | |
| AUG 23... | | | | | | <1.0 | 5.80 | 19 | 3 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01457400 MUSCONETCONG RIVER AT RIEGELSVILLE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 01... | 0920 | 2400 | 200 | 140 | 15... | 0915 | 9200 | 700 | 520 |
| 08... | 1030 | 790 | 200 | 260 | 22... | 0929 | 1700 | 700 | 170 |
| | | | | | 29... | 0925 | 330 | 600 | 330 |

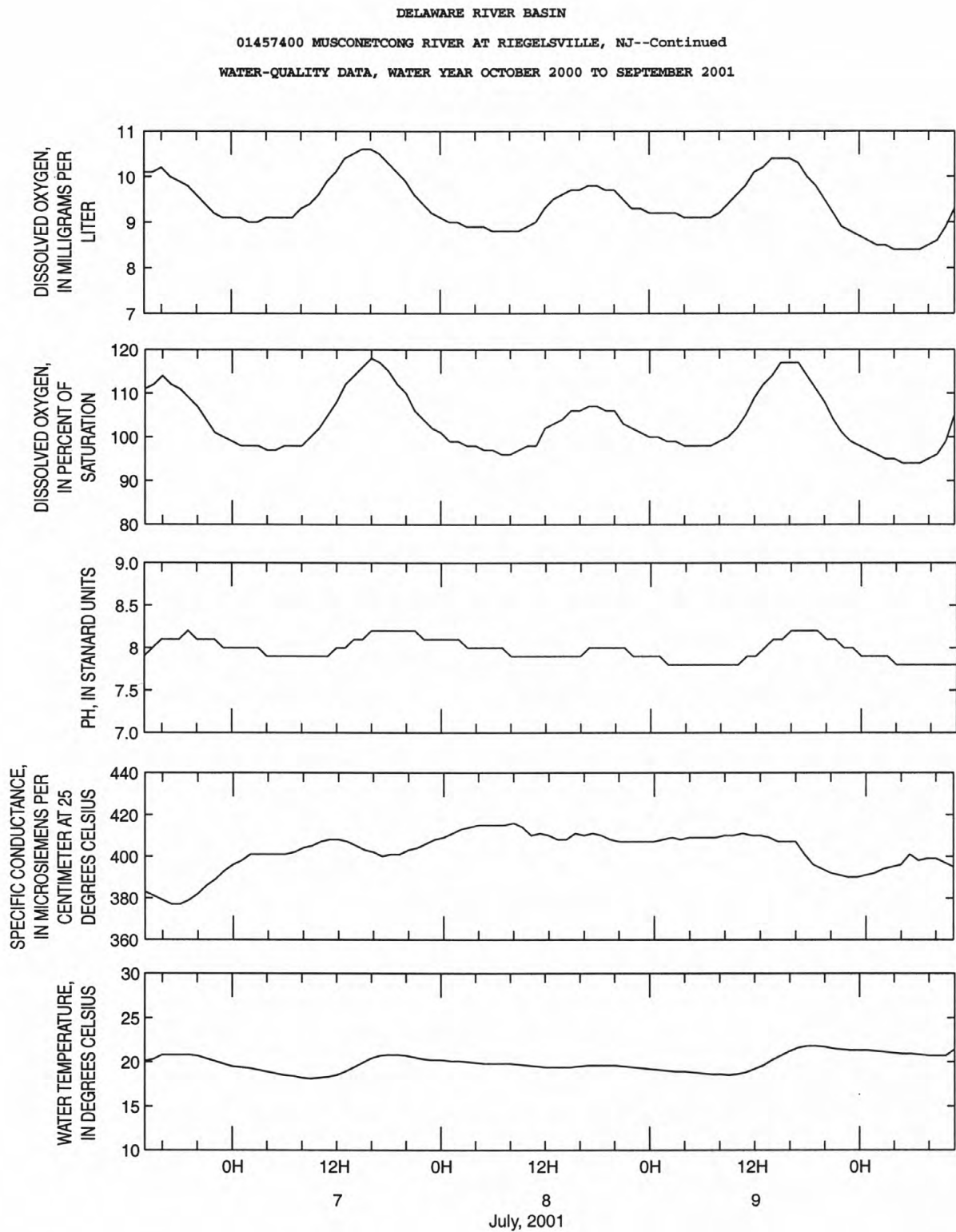


Figure 50. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01457400 Musconetcong River at Riegelsville, water year 2001.

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ

LOCATION.--Lat 40°35'36", long 75°11'17", Warren County, Hydrologic Unit 02040105, at suspension bridge at Riegelsville, 600 ft upstream from Musconetcong River (flow of which is included in the records for this station since Oct.1, 1931). Water-quality samples are collected from the bridge and do not include flow of the Musconetcong River.

DRAINAGE AREA.--6,328 mi².

PERIOD OF RECORD.--Water years 1934, 1943, 1950, 1960-79, 1991 to current year.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Delaware River Main Stem, New Jersey Department of Environmental Protection Watershed Management Area 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 29... | 1030 | 5980 | -- | .068 | .052 | 763 | 88 | 11.3 | 7.6 | 186 | 10.5 | 5.0 | 60 |
| FEB 08... | 1045 | 7650 | -- | .061 | .047 | 772 | 90 | 12.4 | 7.8 | 233 | 2.0 | 2.5 | 65 |
| MAY 16... | 1045 | 3870 | 1.8 | -- | -- | 758 | 88 | 8.4 | 8.0 | 253 | -- | 17.5 | 85 |
| AUG 22... | 1100 | 3010 | 2.8 | .046 | .035 | 760 | 90 | 7.5 | 8.2 | 232 | 25.0 | 24.5 | 79 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|---|
| NOV 29... | 15.9 | 4.97 | 1.46 | 10.4 | 43 | 14.2 | <.2 | 3.2 | 17.4 | 105 | 98 | .030 | .20 |
| FEB 08... | 17.5 | 5.23 | 1.28 | 15.5 | 42 | 27.4 | <.2 | 5.0 | 16.3 | 123 | 119 | .040 | .14 |
| MAY 16... | 21.9 | 7.50 | 1.67 | 13.2 | 61 | 21.5 | <.2 | 3.7 | 21.1 | 163 | 133 | .030 | .20 |
| AUG 22... | 19.4 | 7.37 | 1.72 | 13.4 | 57 | 20.3 | <.2 | 3.5 | 22.8 | 137 | 129 | <.030 | .21 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|--|---|---|--|-------------------------------------|---|--|---------------------------------------|---|---|--|--|
| NOV 29... | .03 | .78 | .999 | .010 | 1.2 | 1.8 | .026 | .062 | .068 | .4 | <.1 | 2.4 | .4 |
| FEB 08... | .06 | .24 | 1.24 | .007 | 1.4 | 1.5 | .055 | .042 | .051 | .4 | <.1 | 2.1 | .4 |
| MAY 16... | <.03 | .29 | 1.30 | .021 | 1.5 | 1.6 | .079 | .089 | .102 | .6 | <.1 | 2.0 | .6 |
| AUG 22... | <.03 | .40 | 1.33 | .011 | 1.5 | 1.7 | .038 | .103 | .114 | .4 | <.1 | 1.8 | .4 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|--|--|---------------------------------------|--|
| NOV 29... | <1.0 | -- | 20 | <1 |
| FEB 08... | E1.4 | -- | 14 | 1 |
| MAY 16... | E1.6 | 4.40 | 17 | <1 |
| AUG 22... | E1.3 | 3.90 | 21 | 14 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01457500 DELAWARE RIVER AT RIEGELSVILLE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 01... | 0910 | 130 | 300 | 220 | 15... | 0910 | 330 | 100 | 260 |
| 08... | 1015 | 110 | <100 | 140 | 22... | 0915 | 80 | 100 | 110 |
| | | | | | 29... | 0915 | 80 | 200 | 160 |

< Actual value is known to be less than the value shown.

01458570 NISHISAKAWICK CREEK NEAR FRENCHTOWN, NJ

LOCATION.--Lat 40°32'32", long 75°02'49", Hunterdon County, Hydrologic Unit 02040105, 1.3 mi north of Frenchtown, 2.1 mi upstream from Delaware River, and 3.1 mi southeast of Milford.

DRAINAGE AREA.--10.1 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTDR (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) |
|------|------|---|---|---|---|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
|------|------|---|---|---|---|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|

| | | | | | | | | | | | | | |
|-----------|------|-----|-----|------|------|-----|-----|------|-----|-----|------|------|----|
| NOV 08... | 0910 | 1.4 | -- | .043 | .034 | 760 | 101 | 12.7 | 7.8 | 205 | 6.0 | 5.5 | 59 |
| FEB 12... | 1210 | 26 | -- | .045 | .034 | 772 | 99 | 14.1 | 6.6 | 190 | -0.5 | 1.5 | 57 |
| MAY 30... | 1100 | 15 | 5.0 | .063 | .047 | 754 | 96 | 9.8 | 7.7 | 189 | 17.0 | 14.0 | 62 |
| AUG 09... | 1220 | 5.3 | 1.9 | .055 | .042 | 745 | 99 | 8.1 | 7.7 | 193 | 31.5 | 24.0 | 66 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|------|---|---|--|---|---|--|---|---|--|---|---|---|--|
|------|---|---|--|---|---|--|---|---|--|---|---|---|--|

| | | | | | | | | | | | | | |
|-----------|------|------|------|------|----|------|-----|------|------|-----|-----|-------|-----|
| NOV 08... | 15.0 | 5.25 | -- | -- | 61 | -- | <.2 | -- | -- | 115 | -- | .040 | .11 |
| FEB 12... | 14.5 | 5.04 | 1.67 | 11.4 | 26 | 19.2 | <.2 | 10.8 | 16.9 | 122 | 109 | <.030 | .10 |
| MAY 30... | 15.6 | 5.51 | 1.46 | 9.9 | 39 | 15.3 | <.2 | 11.8 | 16.4 | 119 | 111 | .050 | .18 |
| AUG 09... | 17.0 | 5.78 | 1.95 | 9.9 | 54 | 13.6 | <.2 | 11.1 | 11.9 | 122 | 110 | .050 | .13 |

| DATE | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|------|--|---|---|---|---|--------------------------------------|--|--|---------------------------------------|---|---|--|--|
|------|--|---|---|---|---|--------------------------------------|--|--|---------------------------------------|---|---|--|--|

| | | | | | | | | | | | | | |
|-----------|------|-----|------|-------|-----|-----|-------|------|------|----|-----|-----|----|
| NOV 08... | .03 | .17 | 1.22 | <.003 | 1.3 | 1.4 | .035 | .013 | .025 | .1 | <.1 | 1.4 | .1 |
| FEB 12... | <.03 | .10 | 3.08 | <.003 | 3.2 | 3.2 | .071 | .026 | .031 | .3 | <.1 | 1.6 | .3 |
| MAY 30... | .03 | .19 | 2.72 | .005 | 2.9 | 2.9 | .051 | .043 | .050 | .4 | <.1 | 1.9 | .4 |
| AUG 09... | .06 | .14 | 1.37 | <.003 | 1.5 | 1.5 | <.022 | .050 | .051 | .2 | <.1 | 1.5 | .2 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, METHOD 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|---|--|---------------------------------------|--|
|------|---|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|----|----|
| NOV 08... | <1.0 | -- | 32 | 15 |
| FEB 12... | E1.0 | -- | 19 | <1 |
| MAY 30... | E1.2 | 1.90 | 25 | 3 |
| AUG 09... | E2.1 | 2.10 | 31 | 1 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01458570 NISHISAKAWICK CREEK NEAR FRENCHTOWN, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 12... | 1000 | 110 | 100 | 1100 | 02... | 0915 | 80 | 200 | 580 |
| 19... | 1000 | 1100 | 600 | 2500 | 09... | 1125 | 490 | 600 | 670 |

01461000 DELAWARE RIVER AT LUMBERVILLE, PA

LOCATION.--Lat 40°24'27", long 75°02'16", Bucks County, Hydrologic Unit 02040105, at pedestrian bridge at Lumberville, 1.4 mi upstream from Lockatong Creek.

DRAINAGE AREA.--6,598 mi².

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Delaware River Main Stem, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|---|--|--|--|---|---|---|---|---|
| NOV 15... | 1100 | 5130 | -- | .078 | .061 | 754 | 92 | 10.7 | 7.8 | 183 | -- | 8.5 | 63 | |
| FEB 27... | 1000 | 12650 | -- | .082 | .062 | 764 | 92 | 12.6 | 7.5 | 233 | 6.0 | 2.5 | 65 | |
| MAY 15... | 1000 | 3700 | 2.8 | .051 | .039 | 758 | 82 | 7.9 | 8.1 | 250 | 21.0 | 17.0 | 88 | |
| AUG 01... | 1000 | 3130 | 4.3 | .062 | .047 | 768 | 90 | 7.6 | 8.2 | 248 | 21.5 | 24.0 | 85 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA, DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 15... | 16.4 | 5.43 | 1.49 | 10.2 | 46 | 14.6 | <.2 | 2.2 | 15.8 | 103 | 98 | <.030 | .21 | |
| FEB 27... | 17.1 | 5.39 | 1.54 | 18.4 | 42 | 31.0 | <.2 | 4.6 | 17.2 | 134 | 125 | .030 | .17 | |
| MAY 15... | 22.2 | 7.82 | 1.49 | 13.5 | 62 | 21.2 | E.1 | 3.7 | 20.2 | 148 | 133 | <.030 | .27 | |
| AUG 01... | 21.3 | 7.81 | 1.78 | 13.6 | 62 | 22.1 | <.2 | 3.4 | 20.2 | 144 | 132 | <.030 | .22 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (00600) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689) | |
| NOV 15... | <.03 | .56 | .878 | .003 | 1.1 | 1.4 | .071 | .058 | .067 | .6 | <.1 | 2.7 | .6 | |
| FEB 27... | .05 | .30 | 1.13 | .004 | 1.3 | 1.4 | .101 | .022 | .041 | 1.3 | <.1 | 2.6 | 1.3 | |
| MAY 15... | <.03 | .33 | 1.25 | .013 | 1.5 | 1.6 | .090 | .070 | .087 | .6 | <.1 | 2.1 | .6 | |
| AUG 01... | <.03 | .28 | 1.04 | .005 | 1.3 | 1.3 | .083 | .076 | .089 | .5 | <.1 | 2.6 | .5 | |
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E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01461000 DELAWARE RIVER AT LUMBERVILLE, PA--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 12... | 1030 | 130 | 200 | 10 | 02... | 1000 | 210 | <100 | 10 |
| 19... | 1030 | 170 | 100 | 50 | 09... | 1050 | 110 | 100 | 220 |

< Actual value is known to be less than the value shown.

01461282 WICKECHEOKE CREEK NEAR SERGEANTSVILLE, NJ

LOCATION.--Lat 40°26'38", long 74°57'59", Hunterdon County, Hydrologic Unit 02040105, at Green Sergeants Covered Bridge on County Route 604, 1.0 mi downstream of confluence with Plum Brook, and 1.2 mi west of Sergeantsville.

DRAINAGE AREA.--22.3 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|---|---|---|--|--|--|--|---|--|---|
| NOV 20... | 0930 | -- | .087 | .067 | 758 | 105 | 14.4 | 7.6 | 198 | -- | 2.0 | 60 | 14.3 | |
| FEB 27... | 0915 | -- | .189 | .148 | 765 | 99 | 14.1 | 7.3 | 143 | 5.5 | 1.0 | 34 | 8.43 | |
| MAY 30... | 1000 | 5.4 | .196 | .151 | 757 | 120 | 12.3 | 7.5 | 148 | 17.0 | 14.0 | 45 | 11.0 | |
| AUG 01... | 0930 | 1.8 | .036 | .028 | 768 | 92 | 9.0 | 7.4 | 176 | 21.0 | 17.0 | 56 | 13.0 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| NOV 20... | 5.85 | 2.28 | 12.6 | 45 | 16.2 | <.2 | 10.5 | 19.4 | 113 | 111 | <.030 | .13 | <.03 | |
| FEB 27... | 3.26 | 1.49 | 10.9 | 19 | 16.4 | <.2 | 8.1 | 14.3 | 81 | 78 | .040 | .22 | .04 | |
| MAY 30... | 4.21 | 2.03 | 10.9 | 31 | 11.1 | E.1 | 10.7 | 15.1 | 103 | 89 | <.030 | .34 | <.03 | |
| AUG 01... | 5.75 | 1.90 | 10.7 | 38 | 11.4 | <.2 | 15.8 | 16.0 | 113 | 111 | <.030 | E.09 | <.03 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 20... | .18 | .539 | <.003 | .67 | .72 | <.022 | .015 | .018 | .2 | <.1 | 3.0 | .2 | <1.0 | |
| FEB 27... | .31 | .753 | <.003 | .97 | 1.1 | .060 | .016 | .036 | .4 | <.1 | 4.2 | .4 | 3.0 | |
| MAY 30... | .36 | 1.15 | <.003 | 1.5 | 1.5 | <.022 | .033 | .044 | <.1 | <.1 | 5.0 | <.1 | 1.6 | |
| AUG 01... | .12 | 3.00 | <.003 | -- | 3.1 | .034 | .055 | .059 | .2 | <.1 | 1.2 | .2 | 2.3 | |
| | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEd (MG/L) (00530) | | | | | | |
| | | | | | | NOV 20... | -- | E11 | <1 | | | | | |
| | | | | | | FEB 27... | -- | 18 | 1 | | | | | |
| | | | | | | MAY 30... | 1.20 | 17 | 3 | | | | | |
| | | | | | | AUG 01... | 4.40 | 14 | 2 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01461282 WICKECHEOKE CREEK NEAR SERGEANTSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|--------------|------|--|--|--|--|--|---|--|--|--|--|--|--|
| AUG 01... | 0930 | M | 52.3 | <.06 | 12 | <.04 | <1 | 1.0 | 40 | <1 | 3 | <.01 | <1 |

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|--------------|---|--|--|
| AUG 01... | <.4 | <.05 | 2 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|--------------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|
| FEB 27... | 0915 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |

| DATE | TIME | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER REC (UG/L) (78032) |
|--------------|------|--|---|---|---|---|---|---|--|--|---|---|---|---|
| FEB 27... | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|--------------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
| FEB 27... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC (UG/L) (46342) | ALPHA BHC DISS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|--|---|--|---|---|--|--|--|--|---|--|---|
| MAY 30... | 1000 | .152 | .034 | <.005 | .756 | <.010 | <.041 | <.020 | E.002 | <.018 | <.003 | E.065 | <.005 |

< Actual value is known to be less than the value shown.
M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

385

01461282 WICKECHEOKE CREEK NEAR SERGEANTSVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|--|---|--|---|---|---|--|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| MAY 30... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .124 | <.006 | <.002 | <.007 | <.003 | <.010 | E.003 |
| DATE | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | |
| MAY 30... | | | | | | E.006 | <.016 | <.034 | <.005 | E.005 | | | |

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 12... | 0930 | 490 | 100 | 330 | 02... | 0930 | 50 | 100 | 380 |
| 19... | 1100 | 1100 | 800 | 1900 | 09... | 1030 | 1700 | 500 | 860 |
| 26... | 0900 | <20 | <100 | 220 | | | | | |
| 26... | 1000 | 3500 | 2500 | 1000 | | | | | |
| 26... | 1030 | 790 | 400 | 500 | | | | | |
| 26... | 1100 | 130 | 200 | 150 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ

LOCATION.--Lat 40°13'18", long 74°46'42", Mercer County, Hydrologic Unit 02040105, New Jersey Department of Environmental Protection Watershed Management Area 11, at Calhoun Street Bridge at Trenton, 0.5 mi upstream from Assunpink Creek, and at river mile 134.5.

DRAINAGE AREA.--6,780 mi².

PERIOD OF RECORD.--October 1944 to current year.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: October 1962 to current year. Recorded as once daily during 1979.

pH: June 1968 to current year. Recorded as once daily during 1979.

SPECIFIC CONDUCTANCE: October 1963 to current year. Recorded as once daily during years 1964 to 1968, 1979.

SUSPENDED SEDIMENT DISCHARGE: September 1949 to September 1981.

WATER TEMPERATURE: October 1944 to current year. Recorded as once daily during years 1945 to 1953, 1962, 1964, 1979.

TURBIDITY: Water year 2000 to current year.

INSTRUMENTATION.--

TEMPERATURE MONITOR (graphic recorder at gage house, in situ system):

October 1953 to September 1961.

TEMPERATURE / DISSOLVED-OXYGEN MONITOR:

October 1962 to September 1965: graphic recorder; only dissolved-oxygen concentration recorded during water year 1964.

October 1965 to May 1968: digital recorder.

WATER-QUALITY MONITOR (continuous pumping system, measurements recorded hourly):

June 1968 to August 1975: water withdrawn from raw-water intake within Trenton Water Filtration Plant, Trenton, NJ.

November 1975 to November 1978: water withdrawn from river through PVC pipe to gage house outside Trenton Water Filtration Plant, Trenton, NJ.

December 1979 to September 1986: water withdrawn from raw-water intake within Trenton Water Filtration Plant, Trenton, NJ.

WATER-QUALITY MONITOR (in situ system, measurements recorded hourly):

October 1986 to September 1995: probes located inside raw-water intake of Trenton Water Filtration Plant, Trenton, NJ.

October 1995 to current year: monitor suspended within stilling well of Morrisville Water Filtration Plant, Morrisville, PA., 1600 feet upstream from the gage house.

REMARKS.--Replicate nutrient samples on Dec. 19 at 0931, Mar. 14 at 1121, June 4 at 1111, and Sep. 10 at 1201 were collected to fulfill the requirements of the Ambient Stream Monitoring Program. For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Unpublished records of suspended-sediment discharge for the period Oct. 1, 1981, to Mar. 31, 1982, are available at the U.S. Geological Survey Office in West Trenton, NJ. Beginning October, 1999, pH daily value tables reported maximum, minimum and median values. Continuous turbidity-record values less than 2 were below the instrument detection level. Missing continuous water-quality records are the result of instrument malfunction or interruption of flow through the filtration plant. The calibration of water-quality sensors is verified by regular inspections. Cleaning or recalibration is needed occasionally as a result of sensor fouling or drift. When a sensor is reclassified, the continuous-record water-quality data for the period between inspections are adjusted to account for the difference between the sensor's response and a known value. The adjustment may be constant over the period or may be prorated. Continuous-record water-quality data for periods for which the difference between the sensor's response and a known value does not exceed recalibration criteria are considered to be reliable and are not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection"). Data from the following periods were adjusted:

DISSOLVED OXYGEN: Oct. 3 to Dec. 14, Feb. 15 to Feb. 23, Apr. 17 to May 15, May 18 to June 1, June 14 to July 2, Aug. 1 to Sep. 13.

pH: Aug. 1 to Aug. 10.

TURBIDITY: Jan. 2 to Jan. 16, Mar. 22 to Apr. 3, Apr. 17 to May 1, May 18 to June 1.

COOPERATION.--Samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (NAWQA) with cooperation from the Delaware River Basin Commission. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, fecal coliform, E. coli, enterococcus bacteria, and dissolved hexavalent chromium on Dec. 19 at 0932, Mar. 14 at 1122, June 4 at 1112, and Sept. 10 at 1202 were performed by the New Jersey Department of Health, Public Health and Environmental Laboratories.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: maximum, 20.0 mg/L, Feb. 11, 1989; minimum, 4.0 mg/L, Nov. 9, 1972, Sept. 9, 1995.

pH: maximum, 10.3, Aug. 9, 10, 1983; minimum 5.3, June 22, 1972.

SPECIFIC CONDUCTANCE: maximum, 468 uS/cm, Jan. 11, 1999; minimum, 63 uS/cm, July 7, 1984.

WATER TEMPERATURE: maximum, 34.0°C, June 18, 1957; minimum -0.6°C, on many days during winter months in water years 1954-57.

TURBIDITY: maximum, 1,300 ntu, Apr. 11, 2001; minimum, <2.0 ntu, on many days in water years 2000-01.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 17.5 mg/L, Mar. 12; minimum, 6.1 mg/L, Aug. 11.

pH: Maximum, 9.2 units, May 1; minimum, 6.3 units, Dec. 19.

SPECIFIC CONDUCTANCE: Maximum, 305 uS/cm, Dec. 17; minimum, 93 uS/cm, Dec. 19.

WATER TEMPERATURE: Maximum, 32.0°C, Aug. 9; minimum, 0.0°C, on several days during winter months.

TURBIDITY: Maximum, 1,300 ntu, Apr. 11; minimum, <2.0 ntu, on many days.

DELAWARE RIVER BASIN

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01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | TURBID-ITY LAB HACH 2100AN (NTU) (99872) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) |
|-------|------|-----------------|---|---|--|--|--|---------------------------------------|---|-----------------------------------|--|---|
| OCT | | | | | | | | | | | | |
| 10... | 1030 | ENVIRONMENTAL | 4450 | 2.0 | -- | -- | -- | 765 | 96 | 10.3 | 8.2 | 210 |
| NOV | | | | | | | | | | | | |
| 02... | 1340 | ENVIRONMENTAL | 3160 | <2.0 | -- | -- | -- | 762 | 142 | 15.6 | 9.0 | 231 |
| DEC | | | | | | | | | | | | |
| 19... | 0930 | ENVIRONMENTAL | 69500 | 200 | 72 | .186 | .146 | 760 | 102 | 14.3 | 7.1 | 87 |
| 19... | 0931 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 19... | 0932 | ENVIRONMENTAL | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | | |
| 05... | 0920 | ENVIRONMENTAL | 7980 | 2.6 | -- | -- | -- | 761 | 111 | 15.3 | 7.3 | 223 |
| MAR | | | | | | | | | | | | |
| 14... | 1120 | ENVIRONMENTAL | 16100 | 22 | 14 | .079 | .060 | 754 | 110 | 13.7 | 7.7 | 244 |
| 14... | 1121 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | 1122 | ENVIRONMENTAL | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR | | | | | | | | | | | | |
| 02... | 1020 | ENVIRONMENTAL | 34500 | 13 | -- | -- | -- | 759 | 103 | 13.3 | 7.1 | 129 |
| 30... | 0900 | ENVIRONMENTAL | 8340 | 2.7 | -- | -- | -- | 759 | 109 | 11.0 | 8.5 | 183 |
| JUN | | | | | | | | | | | | |
| 04... | 1110 | ENVIRONMENTAL | 14000 | -- | 9.5 | .101 | .076 | 753 | 104 | 9.8 | 7.8 | 197 |
| 04... | 1111 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 04... | 1112 | ENVIRONMENTAL | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | | | |
| 02... | 1329 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 02... | 1330 | ENVIRONMENTAL | 8290 | 42 | -- | -- | -- | 764 | 108 | 8.9 | 8.2 | 207 |
| 02... | 1331 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | | |
| 07... | 1400 | ENVIRONMENTAL | 3900 | 9.0 | -- | -- | -- | 763 | 126 | 9.5 | 8.2 | 239 |
| SEP | | | | | | | | | | | | |
| 10... | 1200 | ENVIRONMENTAL | 3220 | <2.0 | 2.6 | .043 | .032 | 762 | 128 | 10.6 | 8.6 | 232 |
| 10... | 1201 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | 1202 | ENVIRONMENTAL | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086) | BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453) | CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) |
|-------|----------------------------------|------------------------------------|---|---|---|--|---|---|--|--|---|--|---|
| OCT | | | | | | | | | | | | | |
| 10... | 14.0 | 12.2 | 66 | 17.2 | 5.52 | 1.45 | 11.6 | -- | 46 | 56 | -- | 18.2 | <.2 |
| NOV | | | | | | | | | | | | | |
| 02... | 19.0 | 11.3 | 76 | 19.2 | 6.86 | 1.70 | 13.2 | -- | 55 | 61 | 3 | 16.9 | <.2 |
| DEC | | | | | | | | | | | | | |
| 19... | -0.5 | 1.3 | 25 | 6.76 | 1.86 | 1.79 | 5.2 | 58 | -- | -- | -- | 9.2 | <.2 |
| 19... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 19... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | | | |
| 05... | 2.0 | 2.0 | 65 | 17.1 | 5.45 | 1.31 | 14.4 | -- | 40 | 49 | -- | 25.3 | <.2 |
| MAR | | | | | | | | | | | | | |
| 14... | 9.0 | 5.4 | 73 | 19.1 | 6.11 | 1.55 | 17.7 | 46 | 42 | 51 | -- | 30.3 | <.2 |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR | | | | | | | | | | | | | |
| 02... | 7.5 | 4.4 | 35 | 9.71 | 2.71 | .90 | 8.1 | -- | 19 | 23 | -- | 14.0 | <.2 |
| 30... | 17.5 | 14.7 | 63 | 16.5 | 5.25 | 1.17 | 10 | -- | 42 | 51 | -- | 17.9 | <.2 |
| JUN | | | | | | | | | | | | | |
| 04... | 21.5 | 17.4 | 69 | 18.2 | 5.68 | 1.22 | 11.5 | 47 | 45 | 55 | -- | 18.2 | E.1 |
| 04... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 04... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | | | | | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 02... | 25.0 | 25.1 | 71 | 18.1 | 6.28 | 1.54 | 11.4 | -- | 47 | 57 | -- | 18.5 | <.2 |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | | | |
| 07... | 35.0 | 30.2 | 80 | 19.9 | 7.49 | 1.70 | 13.5 | -- | 55 | 62 | 2 | 20.7 | E.1 |
| SEP | | | | | | | | | | | | | |
| 10... | 29.5 | 25.0 | 75 | 18.3 | 7.18 | 1.74 | 13.1 | 56 | 53 | 52 | 6 | 20.5 | <.2 |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN, PAR- TICULATE WAT FLT SUSP (MG/L AS N) (49570) |
|-------|--|--|---|---|--|--|---|---|--|--|--|--|---|
| OCT | | | | | | | | | | | | | |
| 10... | 2.1 | 16.6 | 108 | 103 | <.041 | .20 | -- | .24 | .748 | E.005 | .95 | .99 | -- |
| NOV | | | | | | | | | | | | | |
| 02... | .6 | 19.8 | 125 | 115 | <.041 | .19 | -- | .27 | .745 | .006 | .93 | 1.0 | -- |
| DEC | | | | | | | | | | | | | |
| 19... | 3.0 | 8.8 | 63 | 49 | .047 | .33 | -- | .95 | .753 | E.003 | 1.1 | 1.7 | 1.2 |
| 19... | -- | -- | -- | -- | -- | .33 | -- | -- | .721 | -- | 1.0 | -- | -- |
| 19... | -- | -- | -- | -- | .070 | -- | .08 | -- | -- | <.003 | -- | -- | -- |
| FEB | | | | | | | | | | | | | |
| 05... | 4.5 | 16.5 | 133 | 115 | <.041 | .16 | -- | .17 | 1.30 | E.005 | 1.5 | 1.5 | -- |
| MAR | | | | | | | | | | | | | |
| 14... | 3.7 | 18.4 | 147 | 128 | <.041 | .23 | -- | .54 | 1.35 | .009 | 1.6 | 1.9 | .250 |
| 14... | -- | -- | -- | -- | -- | .22 | -- | -- | 1.38 | -- | 1.6 | -- | -- |
| 14... | -- | -- | -- | -- | .030 | -- | .05 | -- | -- | .007 | -- | -- | -- |
| APR | | | | | | | | | | | | | |
| 02... | 3.6 | 10.7 | 77 | 64 | E.030 | .16 | -- | .56 | .748 | E.004 | .90 | 1.3 | .184 |
| 30... | 1.2 | 14.3 | 120 | 94 | <.041 | .17 | -- | .26 | .561 | .010 | .73 | .83 | .130 |
| JUN | | | | | | | | | | | | | |
| 04... | 4.9 | 14.8 | 116 | 106 | <.040 | .18 | -- | .40 | .971 | .007 | 1.2 | 1.4 | .240 |
| 04... | -- | -- | -- | -- | -- | .18 | -- | -- | .940 | -- | 1.1 | -- | -- |
| 04... | -- | -- | -- | -- | <.030 | -- | <.03 | -- | -- | .004 | -- | -- | -- |
| JUL | | | | | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <.022 |
| 02... | 4.1 | 16.8 | 120 | 109 | .045 | .18 | -- | .48 | .865 | .021 | 1.0 | 1.4 | .215 |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | .230 |
| AUG | | | | | | | | | | | | | |
| 07... | 3.4 | 21.3 | 127 | 125 | E.028 | .20 | -- | .39 | .929 | .009 | 1.1 | 1.3 | .144 |
| SEP | | | | | | | | | | | | | |
| 10... | 1.0 | 20.3 | 124 | 117 | <.040 | .22 | -- | .27 | .738 | .009 | .96 | 1.0 | .067 |
| 10... | -- | -- | -- | -- | -- | .23 | -- | -- | .794 | -- | 1.0 | -- | -- |
| 10... | -- | -- | -- | -- | <.030 | -- | <.03 | -- | -- | .005 | -- | -- | -- |

| DATE | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORG- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | OXYGEN DEMAND, CHEM- ICAL, (HIGH LEVEL) (MG/L) (00340) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155) | SEDI- MENT, SUS- PENDE (MG/L) (80154) |
|-------|--|--|---|--|--|---|--|---|---|--|--|
| OCT | | | | | | | | | | | |
| 10... | .062 | .048 | .083 | -- | -- | 2.3 | .4 | -- | -- | 47 | 4 |
| NOV | | | | | | | | | | | |
| 02... | .050 | .037 | .066 | -- | -- | 2.5 | <.2 | -- | -- | -- | <1 |
| DEC | | | | | | | | | | | |
| 19... | .034 | .018 | .266 | 12 | .4 | 4.8 | 12 | -- | 43 | 39200 | 209 |
| 19... | .033 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 19... | -- | -- | -- | -- | -- | -- | -- | 4.0 | -- | -- | -- |
| FEB | | | | | | | | | | | |
| 05... | .031 | .021 | .043 | -- | -- | 2.1 | -- | -- | -- | 1420 | 66 |
| MAR | | | | | | | | | | | |
| 14... | .022 | E.016 | .099 | 1.7 | <.1 | 2.6 | 1.6 | -- | 13 | 982 | 23 |
| 14... | .024 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | -- | -- | -- | -- | -- | -- | -- | 2.6 | -- | -- | -- |
| APR | | | | | | | | | | | |
| 02... | .012 | <.018 | .078 | 1.3 | <.1 | 2.7 | 1.3 | -- | -- | 2490 | 27 |
| 30... | .019 | <.018 | .031 | .6 | <.1 | 2.1 | .6 | -- | -- | 47 | 2 |
| JUN | | | | | | | | | | | |
| 04... | .046 | .039 | .086 | 1.4 | <.1 | 3.0 | 1.4 | -- | 17 | 643 | 17 |
| 04... | .046 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 04... | -- | -- | -- | -- | -- | -- | -- | 2.8 | -- | -- | -- |
| JUL | | | | | | | | | | | |
| 02... | -- | -- | -- | .2 | <.1 | .49 | .2 | -- | -- | -- | -- |
| 02... | .059 | .028 | .126 | 2.0 | <.1 | 4.3 | 1.9 | -- | -- | 611 | 27 |
| 02... | -- | -- | -- | 2.0 | <.1 | 3.8 | 2.0 | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 07... | .084 | .067 | .109 | 1.1 | <.1 | 2.4 | 1.1 | -- | -- | 126 | 12 |
| SEP | | | | | | | | | | | |
| 10... | .060 | .044 | .069 | .4 | <.1 | 2.1 | .4 | -- | <10 | 12 | 1 |
| 10... | .059 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | -- | -- | -- | -- | -- | -- | <1.0 | -- | -- | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

389

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC | BARIUM, | BERYL- | BORON, | BORON, | CADMIUM | CHRO- | CHRO- | COPPER, | COPPER, | IRON, | | |
|------|-------|--|---|--|---|--|---|--|---|--|---|--|---|--|
| | | TOTAL | TOTAL | L-IUM, | DIS- | TOTAL | WATER | MIUM, | MIUM, | | | | | |
| | | RECOV- ERABLE (UG/L AS AS) (01002) | RECOV- ERABLE (UG/L AS BA) (01007) | TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | DIS- SOLVED (UG/L AS B) (01020) | RECOV- ERABLE (UG/L AS B) (01022) | UNFLTRD TOTAL (UG/L AS CD) (01027) | DIS- SOLVED (UG/L AS CR) (01030) | HEXA- VALENT, DIS. (UG/L AS CR) (01032) | | TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | | DIS- SOLVED (UG/L AS CU) (01040) | TOTAL RECOV- ERABLE (UG/L AS CU) (01042) |
| OCT | 10... | 1030 | -- | -- | -- | 15 | -- | -- | -- | -- | -- | -- | 20 | |
| NOV | 02... | 1340 | -- | -- | -- | 20 | -- | -- | -- | -- | -- | -- | 20 | |
| DEC | 19... | 0930 | E2 | 67.6 | .26 | E8 | 8 | .30 | <.8 | -- | 2 | 1.3 | 6.3 | 60 |
| | 19... | 0932 | -- | -- | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- |
| FEB | 05... | 0920 | -- | -- | -- | 15 | -- | -- | -- | -- | -- | -- | -- | 40 |
| MAR | 14... | 1120 | <2 | 27.9 | E.05 | 13 | 16 | .10 | <.8 | -- | M | 1.5 | 2.2 | 30 |
| | 14... | 1122 | -- | -- | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- |
| APR | 02... | 1020 | -- | -- | -- | 16 | -- | -- | -- | -- | -- | -- | -- | 30 |
| | 30... | 0900 | -- | -- | -- | 14 | -- | -- | -- | -- | -- | -- | -- | 30 |
| JUN | 04... | 1110 | <2 | 26.2 | E.05 | E12 | 13 | .09 | <.8 | -- | <1 | 1.3 | 2.0 | 40 |
| | 04... | 1112 | -- | -- | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- |
| JUL | 02... | 1330 | -- | -- | -- | 17 | -- | -- | -- | -- | -- | -- | -- | 30 |
| AUG | 07... | 1400 | -- | -- | -- | 22 | -- | -- | -- | -- | -- | -- | -- | 10 |
| SEP | 10... | 1200 | <2 | 24.4 | <.06 | 22 | 21 | E.03 | <.8 | -- | <1 | 1.6 | 1.8 | 10 |
| | 10... | 1202 | -- | -- | -- | -- | -- | -- | -- | <5 | -- | -- | -- | -- |
| | | | | | | | | | | | | | | |
| DATE | | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY DIS- SOLVED (UG/L AS HG) (71890) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
| OCT | 10... | -- | -- | -- | 6.6 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | 02... | -- | -- | -- | 5.7 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC | 19... | 3770 | .20 | 10 | 10.0 | 634 | <.23 | <.14 | .69 | 5 | <.4 | .06 | 6 | 56 |
| | 19... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | 05... | -- | -- | -- | 15.7 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR | 14... | 460 | .21 | 2 | 21.7 | 56 | <.23 | <.14 | .76 | 2 | <.4 | E.03 | 10 | 28 |
| | 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR | 02... | -- | -- | -- | 12.1 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 30... | -- | -- | -- | 10.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUN | 04... | 400 | .15 | 2 | 4.3 | 60 | <.01 | <.01 | .66 | 1 | <.4 | E.04 | 5 | 14 |
| | 04... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL | 02... | -- | -- | -- | 3.9 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | 07... | -- | -- | -- | 8.5 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | 10... | 60 | .15 | <1 | 5.5 | 18 | <.01 | <.01 | .47 | 1 | .5 | <.05 | 2 | 3 |
| | 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

The sample collected on Oct. 10 was analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analysis in one or more samples from this and other stations are listed for that date in the following table. Samples collected on Dec. 19, Mar. 14, June 4, and Sep. 10 were analyzed for VOCs with laboratory schedule 1307. All compounds in schedule 1307 are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHYL- ENE | 1,2-DI- CHLORO- ETHANE | 1,2-DI- CHLORO- PROPANE | TRANS- 1,2-DI- CHLORO- ETHENE | ACETONE WATER WHOLE | BENZENE 1,3-DI- CHLORO- WATER | BENZENE 1,4-DI- CHLORO- WATER | BENZENE O-DI- CHLORO- WATER | BENZENE TOTAL | BROMO- FORM TOTAL | |
|--------------|------|--|--|--|--|---|---|---|---|---|---|---|---|---|
| | | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (32103) | TOTAL (UG/L) (34541) | TOTAL (UG/L) (34546) | TOTAL (UG/L) (81552) | TOTAL (UG/L) (34566) | TOTAL (UG/L) (34571) | TOTAL (UG/L) (34536) | TOTAL (UG/L) (34030) | TOTAL (UG/L) (32104) | |
| OCT 10... | 1030 | <.03 | <.04 | <.04 | <.1 | <.03 | <.03 | E6 | <.03 | <.05 | <.03 | <.04 | <.06 | |
| DEC 19... | 0930 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | -- | <.10 | <.10 | <.10 | <.10 | <.20 | |
| MAR 14... | 1120 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | -- | <.10 | <.10 | <.10 | <.10 | <.20 | |
| JUN 04... | 1110 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | -- | <.10 | <.10 | <.10 | <.10 | <.20 | |
| SEP 10... | 1200 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | -- | <.10 | <.10 | <.10 | <.10 | <.20 | |
| DATE | | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) |
| OCT 10... | | <.06 | <.03 | <.2 | E.04 | <.04 | <.05 | <.3 | <.1 | <.2 | <.05 | <.1 | <.03 | <.06 |
| DEC 19... | | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 |
| MAR 14... | | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 |
| JUN 04... | | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 |
| SEP 10... | | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 |
| DATE | | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | |
| OCT 10... | | E.1 | <.2 | <.06 | <.04 | <.04 | <.1 | <.05 | <.04 | <.09 | <.1 | | | |
| DEC 19... | | <.2 | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |
| MAR 14... | | E.1 | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |
| JUN 04... | | .3 | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |
| SEP 10... | | 2.7 | <.2 | E.14 | <.10 | <.10 | <.1 | .29 | <.10 | <.20 | <.2 | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

FILTERED-WATER PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD GF, REC (UG/L) (82682) |
|-------|------|-----------------|---|--|---|---|--|---|---|--|--|--|
| OCT | | | | | | | | | | | | |
| 10... | 1030 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .020 | <.010 | E.006 | <.020 | <.005 | <.018 | <.003 |
| FEB | | | | | | | | | | | | |
| 05... | 0920 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .020 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 |
| APR | | | | | | | | | | | | |
| 02... | 1020 | ENVIRONMENTAL | <.004 | <.002 | <.005 | E.006 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 |
| 30... | 0900 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .018 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 |
| JUN | | | | | | | | | | | | |
| 04... | 1110 | ENVIRONMENTAL | .012 | <.002 | <.005 | .120 | <.010 | E.002 | <.020 | <.005 | <.018 | <.003 |
| JUL | | | | | | | | | | | | |
| 02... | 1329 | FIELD BLANK | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 |
| 02... | 1330 | ENVIRONMENTAL | .016 | <.002 | <.005 | .426 | <.010 | E.005 | <.020 | E.002 | .028 | <.003 |
| 02... | 1331 | SPLIT REPLICATE | .012 | <.002 | <.005 | .302 | <.010 | E.002 | <.020 | <.005 | .028 | <.003 |
| AUG | | | | | | | | | | | | |
| 07... | 1400 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .046 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 |
| SEP | | | | | | | | | | | | |
| 10... | 1200 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .027 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 |

| DATE | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN, DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) |
|-------|--|---|---|--|--|--|--|--|---|--|---|--|---|
| OCT | | | | | | | | | | | | | |
| 10... | E.024 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.004 | <.006 | <.002 | <.007 | <.003 |
| FEB | | | | | | | | | | | | | |
| 05... | E.019 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.005 | <.006 | <.002 | <.007 | <.003 |
| APR | | | | | | | | | | | | | |
| 02... | E.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.002 | <.006 | <.002 | <.007 | <.003 |
| 30... | E.017 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.008 | <.006 | <.002 | <.007 | <.003 |
| JUN | | | | | | | | | | | | | |
| 04... | E.023 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .051 | <.006 | <.002 | <.007 | <.003 |
| JUL | | | | | | | | | | | | | |
| 02... | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 |
| 02... | <.006 | E.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .156 | <.006 | <.002 | <.007 | <.003 |
| 02... | E.053 | E.004 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .108 | <.006 | <.002 | <.007 | <.003 |
| AUG | | | | | | | | | | | | | |
| 07... | E.023 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .018 | <.006 | <.002 | <.007 | <.003 |
| SEP | | | | | | | | | | | | | |
| 10... | E.025 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.008 | <.006 | <.002 | <.007 | <.003 |

| DATE | PENDI- METH- ALIN WAT FLT GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT GF, REC (UG/L) (82661) |
|-------|--|---|---|--|---|--|--|
| OCT | | | | | | | |
| 10... | <.010 | <.015 | E.004 | <.016 | <.034 | <.005 | <.009 |
| FEB | | | | | | | |
| 05... | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 |
| APR | | | | | | | |
| 02... | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 |
| 30... | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 |
| JUN | | | | | | | |
| 04... | <.010 | <.015 | .028 | E.005 | <.034 | <.005 | <.009 |
| JUL | | | | | | | |
| 02... | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 |
| 02... | E.006 | E.018 | .054 | <.016 | <.034 | <.005 | <.009 |
| 02... | <.010 | E.010 | .040 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 07... | <.010 | E.012 | .014 | <.016 | <.034 | <.005 | <.009 |
| SEP | | | | | | | |
| 10... | <.010 | <.015 | E.007 | <.016 | <.034 | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

WHOLE-WATER PESTICIDE ANALYSES

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ALDRIN, TOTAL (UG/L) (39330) | ALPHA BHC TOTAL (UG/L) (39337) | AROCLO 1016/ 1242 PCB WATER UNFLTRD (UG/L) (81648) | AROCLO 1221 PCB TOTAL (UG/L) (39488) | AROCLO 1232 PCB TOTAL (UG/L) (39492) | AROCLO 1248 PCB TOTAL (UG/L) (39500) | AROCLO 1254 PCB TOTAL (UG/L) (39504) | AROCLO 1260 PCB TOTAL (UG/L) (39508) | BETA BENZENE HEXA- CHLOR- IDE TOTAL (UG/L) (39338) | CHLOR- DANE CIS WATER TOTAL (UG/L) (39062) | CHLOR- DANE, TECH- NICAL TOTAL (UG/L) (39350) | CHLOR- DANE TRANS WATER TOTAL (UG/L) (39065) |
|-----------|------|---------------------------------------|--|---|---|---|---|---|---|---|--|---|--|
| | | | | | | | | | | | | | |
| DEC 19... | 0930 | <.040 | <.03 | <.10 | <1 | <.1 | <.1 | <.1 | <.1 | <.03 | <.1 | <.1 | <.1 |
| SEP 10... | 1200 | <.040 | <.03 | <.10 | <1 | <.1 | <.1 | <.1 | <.1 | <.03 | <.1 | <.1 | <.1 |

| DATE | DELTA | ENDO- | | | | | | | | | | | |
|---------|---------------|---------------|----------------|--------------|----------------------------|-------------------------|----------------------------|----------------------------|------------------|---------|--------------|--------------|--------------|
| | BENZENE | SULFAN- | | | | | | | | | | | |
| | HEXA- | DI- ELDRIN | WATER WHOLE | SULFAN II | ENDO- SULFAN SULFATE | ENDRIN ALDE- HYDE | ENDRIN WATER UNFLTRD | HEPTA- CHLOR EPOXIDE | HEPTA- CHLOR, | LINDANE | P,P' DDD, | P,P' DDE, | P,P' DDT, |
| | CHLOR- IDE | | | | | | | | | | | | |
| TOTAL | TOTAL | REC | TOTAL | TOTAL | TOTAL | REC | TOTAL | TOTAL | TOTAL | TOTAL | TOTAL | TOTAL | TOTAL |
| (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) |
| (34259) | (39380) | (34361) | (34356) | (34351) | (34366) | (39390) | (39420) | (39410) | (39340) | (39310) | (39320) | (39300) | |
| DEC | | | | | | | | | | | | | |
| 19... | <.09 | <.020 | <.1 | <.04 | <.6 | <.2 | <.060 | <.800 | <.030 | <.030 | <.1 | <.04 | <.1 |
| SEP | | | | | | | | | | | | | |
| 10... | <.09 | <.020 | <.1 | <.04 | <.6 | <.2 | <.060 | <.800 | <.030 | <.030 | <.1 | <.04 | <.1 |

DATE
TOX-
APHENE,
TOTAL
(UG/L)
(39400)

DEC 19... <2
SEP 10... <2

WATER-COLUMN BACTERIA ANALYSES

Samples collected throughout the year and synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-----------|------|---|--|---|-----------|------|---|--|---|
| | | | | | | | | | |
| DEC 19... | 0932 | 490 | -- | 2300 | JUN 04... | 1112 | 790 | -- | 60 |
| MAR 14... | 1122 | 110 | -- | 60 | MAY 05... | 1047 | 330 | 100 | 50 |
| MAY 23... | 1100 | 2400 | 1500 | 2000 | MAY 11... | 1050 | 140 | 100 | 10 |
| MAY 30... | 1107 | 170 | 300 | 150 | SEP 10... | 1202 | 50 | <100 | <10 |

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

393

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---------|------|------|----------|------|------|----------|------|------|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 10.6 | 9.4 | 9.9 | 14.1 | 11.3 | 12.8 | 14.9 | 13.1 | 13.8 | 14.0 | 13.9 | 14.0 |
| 2 | 10.5 | 9.3 | 9.8 | 14.4 | 11.9 | 13.1 | 14.9 | 12.5 | 13.6 | 14.4 | 13.9 | 14.1 |
| 3 | 10.9 | 9.0 | 9.9 | 14.6 | 12.1 | 13.3 | 15.3 | 13.0 | 14.0 | 14.4 | 14.2 | 14.2 |
| 4 | 10.8 | 9.1 | 9.8 | 14.5 | 12.1 | 13.2 | 15.6 | 13.2 | 14.3 | 14.2 | 14.1 | 14.2 |
| 5 | 9.5 | 8.8 | 9.1 | 13.6 | 11.6 | 12.6 | 15.8 | 13.3 | 14.5 | 14.3 | 13.9 | 14.1 |
| 6 | 10.2 | 8.6 | 9.3 | 14.1 | 11.6 | 12.8 | 16.0 | 13.4 | 14.7 | 14.0 | 13.7 | 13.8 |
| 7 | 10.5 | 8.9 | 9.7 | 14.6 | 12.1 | 13.3 | 16.1 | 13.6 | 14.9 | 13.9 | 13.6 | 13.7 |
| 8 | 10.6 | 9.3 | 10.0 | 14.5 | 12.3 | 13.4 | 15.7 | 13.7 | 14.7 | --- | --- | --- |
| 9 | 10.9 | 9.7 | 10.3 | 13.8 | 12.0 | 12.8 | 16.8 | 13.6 | 15.2 | 13.8 | 13.5 | 13.7 |
| 10 | 11.5 | 10.1 | 10.8 | 12.7 | 11.0 | 11.8 | 16.8 | 14.0 | 15.4 | 14.0 | 13.6 | 13.8 |
| 11 | 11.8 | 10.3 | 11.0 | 12.9 | 10.5 | 11.7 | 16.5 | 13.7 | 15.1 | 14.1 | 13.8 | 13.9 |
| 12 | 12.0 | 10.3 | 11.0 | 12.7 | 10.8 | 11.7 | 16.0 | 13.2 | 14.8 | 14.1 | 13.9 | 14.0 |
| 13 | --- | --- | --- | 12.1 | 11.0 | 11.4 | 16.9 | 13.4 | 15.2 | 14.1 | 13.9 | 14.0 |
| 14 | 11.9 | 10.6 | 11.1 | 11.2 | 10.8 | 11.0 | 16.6 | 13.9 | 15.2 | 14.1 | 13.9 | 14.0 |
| 15 | 11.9 | 10.4 | 11.0 | 12.9 | 10.6 | 11.8 | 15.9 | 13.5 | 14.6 | 13.9 | 13.6 | 13.8 |
| 16 | 11.0 | 10.0 | 10.5 | 13.3 | 11.6 | 12.4 | 14.2 | 13.1 | 13.7 | 13.8 | 13.4 | 13.6 |
| 17 | 10.7 | 9.5 | 10.1 | 13.3 | 11.7 | 12.5 | 13.1 | 10.9 | 12.0 | 13.8 | 13.6 | 13.7 |
| 18 | 10.7 | 9.7 | 10.2 | 14.0 | 12.1 | 12.9 | 12.7 | 11.2 | 11.9 | 13.8 | 13.6 | 13.7 |
| 19 | --- | --- | --- | 14.1 | 12.4 | 13.3 | 13.1 | 12.7 | 13.0 | 13.8 | 13.6 | 13.6 |
| 20 | --- | --- | --- | 15.0 | 13.1 | 14.0 | 13.3 | 12.9 | 13.1 | 13.7 | 13.6 | 13.7 |
| 21 | 11.5 | 10.3 | 10.9 | 15.4 | 13.4 | 14.3 | 13.6 | 13.2 | 13.5 | 14.3 | 13.4 | 13.9 |
| 22 | 11.8 | 10.3 | 11.0 | 15.9 | 14.0 | 14.9 | 13.7 | 13.6 | 13.6 | 14.8 | 14.2 | 14.6 |
| 23 | 12.1 | 10.2 | 11.2 | 16.5 | 14.4 | 15.4 | 14.1 | 13.6 | 13.9 | 15.0 | 14.7 | 14.8 |
| 24 | 12.1 | 10.7 | 11.4 | 16.9 | 14.8 | 15.8 | 14.1 | 13.8 | 14.0 | 15.0 | 14.8 | 14.9 |
| 25 | 12.4 | 10.4 | 11.4 | 17.0 | 15.0 | 16.0 | 14.3 | 13.8 | 14.1 | 14.8 | 14.6 | 14.7 |
| 26 | 12.0 | 10.2 | 11.1 | 15.8 | 13.8 | 14.7 | 14.3 | 14.2 | 14.2 | 15.0 | 14.6 | 14.8 |
| 27 | 12.3 | 10.0 | 11.1 | 14.5 | 13.1 | 13.8 | 14.2 | 12.6 | 14.0 | 14.8 | 14.4 | 14.6 |
| 28 | 12.4 | 9.8 | 11.1 | 15.6 | 13.3 | 14.1 | 14.0 | 13.8 | 14.0 | 14.9 | 14.4 | 14.6 |
| 29 | 12.9 | 10.1 | 11.6 | 15.7 | 13.3 | 14.4 | --- | --- | --- | 15.0 | 14.5 | 14.7 |
| 30 | 13.4 | 10.9 | 12.1 | 15.1 | 13.2 | 14.0 | 14.1 | 13.8 | 13.9 | 14.9 | 14.3 | 14.5 |
| 31 | 13.8 | 11.4 | 12.4 | --- | --- | --- | 14.0 | 13.5 | 13.8 | 14.3 | 14.1 | 14.2 |
| MONTH | 13.8 | 8.6 | 10.7 | 17.0 | 10.5 | 13.3 | 16.9 | 10.9 | 14.1 | 15.0 | 13.4 | 14.1 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|-------|------|------|-------|------|------|------|------|------|------|
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 14.5 | 13.9 | 14.2 | 15.0 | 13.0 | 14.0 | 12.9 | 12.1 | 12.6 | 14.1 | 10.0 | 12.1 |
| 2 | 14.4 | 14.1 | 14.2 | 15.1 | 13.2 | 14.0 | 12.9 | 12.1 | 12.6 | 13.9 | 9.6 | 11.6 |
| 3 | 15.0 | 14.1 | 14.6 | 15.3 | 13.3 | 14.1 | 13.1 | 12.0 | 12.8 | 12.8 | 8.9 | 10.9 |
| 4 | 15.5 | 14.8 | 15.1 | 14.2 | 13.2 | 13.6 | 13.1 | 12.6 | 12.8 | 12.0 | 7.8 | 10.2 |
| 5 | 15.1 | 14.7 | 14.9 | 14.5 | 13.0 | 13.6 | 12.8 | 12.4 | 12.6 | 10.7 | 7.2 | 9.0 |
| 6 | 15.8 | 14.9 | 15.4 | --- | --- | --- | 12.4 | 12.0 | 12.2 | 11.0 | 6.8 | 9.0 |
| 7 | 15.8 | 15.1 | 15.4 | 16.5 | 13.9 | 15.0 | 12.4 | 11.7 | 12.1 | 10.8 | 7.5 | 9.3 |
| 8 | 15.6 | 14.8 | 15.1 | 15.9 | 13.3 | 14.5 | 12.4 | 12.1 | 12.3 | 9.8 | 6.7 | 8.6 |
| 9 | 15.6 | 14.8 | 15.1 | 15.8 | 13.3 | 14.4 | 12.6 | 12.1 | 12.4 | 9.0 | 7.6 | 8.3 |
| 10 | 14.9 | 14.1 | 14.3 | 16.5 | 13.2 | 14.7 | 12.2 | 11.7 | 11.9 | 9.0 | 7.1 | 8.0 |
| 11 | 15.4 | 14.3 | 14.9 | 16.7 | 13.5 | 14.9 | 11.8 | 11.5 | 11.6 | 9.0 | 7.1 | 8.1 |
| 12 | 16.2 | 14.9 | 15.6 | 17.5 | 13.3 | 15.1 | 11.9 | 11.5 | 11.7 | 9.2 | 7.3 | 8.3 |
| 13 | 16.0 | 15.4 | 15.6 | 14.7 | 11.9 | 13.0 | 12.0 | 11.8 | 11.8 | 9.9 | 7.3 | 8.6 |
| 14 | 15.5 | 14.5 | 15.1 | 12.9 | 11.9 | 12.5 | 11.8 | 11.5 | 11.7 | 10.2 | 8.2 | 9.1 |
| 15 | 15.5 | 14.3 | 14.9 | 13.6 | 12.3 | 13.0 | 11.6 | 11.3 | 11.4 | 10.0 | 7.9 | 9.0 |
| 16 | 14.9 | 14.4 | 14.7 | 14.4 | 12.5 | 13.4 | 11.4 | 10.9 | 11.2 | 10.0 | 8.3 | 9.1 |
| 17 | 15.0 | 14.1 | 14.5 | 13.5 | 12.4 | 12.9 | 11.5 | 11.1 | 11.3 | 9.6 | 8.3 | 8.9 |
| 18 | 15.8 | 14.7 | 15.2 | 14.5 | 12.1 | 13.4 | 12.1 | 11.4 | 11.8 | 10.0 | 8.6 | 9.3 |
| 19 | 16.1 | 15.1 | 15.5 | 15.0 | 12.8 | 13.9 | 12.6 | 11.9 | 12.2 | 10.3 | 8.8 | 9.5 |
| 20 | 15.8 | 14.8 | 15.2 | 15.2 | 12.6 | 13.8 | 12.6 | 12.0 | 12.3 | 9.8 | 8.5 | 9.1 |
| 21 | 15.4 | 14.1 | 14.7 | 13.6 | 12.0 | 12.8 | 12.6 | 12.0 | 12.3 | 9.5 | 8.8 | 9.1 |
| 22 | 15.3 | 14.2 | 14.7 | 12.4 | 11.9 | 12.3 | 12.2 | 11.4 | 12.0 | 9.7 | 8.8 | 9.1 |
| 23 | 15.8 | 14.4 | 15.0 | 12.9 | 12.3 | 12.6 | 11.8 | 10.7 | 11.3 | 9.0 | 8.1 | 8.7 |
| 24 | 15.9 | 14.3 | 15.0 | 12.8 | 12.4 | 12.6 | 11.0 | 9.6 | 10.3 | 9.3 | 8.1 | 8.7 |
| 25 | 14.9 | 13.5 | 14.3 | 13.1 | 12.0 | 12.7 | 11.1 | 9.2 | 10.0 | 9.0 | 8.4 | 8.7 |
| 26 | 14.9 | 13.2 | 13.9 | 13.3 | 12.6 | 13.0 | 12.2 | 9.7 | 10.9 | 9.0 | 8.5 | 8.7 |
| 27 | 15.0 | 13.1 | 14.0 | 13.6 | 12.9 | 13.3 | 12.6 | 9.9 | 11.2 | 8.9 | 8.6 | 8.8 |
| 28 | 15.0 | 12.9 | 13.9 | 14.1 | 13.2 | 13.6 | 13.2 | 9.5 | 11.3 | 9.1 | 8.7 | 8.9 |
| 29 | --- | --- | --- | 13.7 | 12.6 | 13.3 | 13.8 | 9.9 | 11.8 | 8.9 | 8.3 | 8.7 |
| 30 | --- | --- | --- | 12.9 | 11.8 | 12.6 | 14.2 | 10.0 | 12.1 | 9.2 | 8.6 | 8.9 |
| 31 | --- | --- | --- | 12.9 | 12.2 | 12.5 | --- | --- | --- | 9.5 | 8.5 | 9.1 |
| MONTH | 16.2 | 12.9 | 14.8 | 17.5 | 11.8 | 13.5 | 14.2 | 9.2 | 11.8 | 14.1 | 6.7 | 9.1 |

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 9.6 | 8.3 | 9.1 | 10.4 | 6.8 | 8.5 | 10.6 | 7.7 | 9.1 | 10.8 | 7.9 | 9.2 |
| 2 | 9.3 | 8.9 | 9.1 | 8.6 | 6.8 | 7.9 | 10.7 | 7.7 | 9.1 | 11.2 | 8.2 | 9.6 |
| 3 | 9.4 | 8.9 | 9.2 | 9.6 | 7.9 | 8.7 | 10.5 | 7.4 | 8.8 | 11.2 | 8.7 | 9.9 |
| 4 | 9.6 | 9.0 | 9.3 | 9.7 | 8.0 | 8.7 | 9.4 | 7.2 | 8.0 | 11.1 | 8.6 | 9.7 |
| 5 | 9.5 | 9.0 | 9.2 | 9.6 | 8.0 | 8.8 | 8.8 | 7.0 | 7.7 | 11.8 | 8.1 | 9.7 |
| 6 | 9.5 | 8.8 | 9.1 | 10.6 | 8.0 | 9.2 | 8.7 | 6.8 | 7.7 | 11.8 | 8.3 | 10.0 |
| 7 | 9.8 | 8.8 | 9.2 | 10.9 | 8.4 | 9.6 | 9.6 | 6.9 | 8.1 | 11.7 | 8.3 | 9.9 |
| 8 | 10.1 | 8.5 | 9.2 | 9.6 | 8.1 | 8.9 | 9.8 | 6.8 | 8.1 | 11.6 | 8.4 | 9.9 |
| 9 | 10.2 | 8.6 | 9.4 | 11.1 | 8.2 | 9.6 | 9.8 | 6.7 | 8.1 | 11.2 | 7.7 | 9.5 |
| 10 | 10.5 | 8.3 | 9.4 | 10.2 | 7.9 | 9.1 | 9.1 | 6.5 | 7.4 | 10.7 | 7.7 | 9.2 |
| 11 | 10.6 | 8.6 | 9.5 | 10.4 | 7.7 | 9.1 | 7.2 | 6.1 | 6.6 | 10.9 | 7.2 | 8.9 |
| 12 | 10.9 | 8.4 | 9.6 | 11.3 | 7.9 | 9.5 | 7.2 | 6.4 | 6.9 | 11.4 | 7.8 | 9.4 |
| 13 | 10.7 | 8.1 | 9.3 | 11.6 | 8.3 | 9.9 | 7.3 | 7.1 | 7.2 | 11.2 | 7.8 | 9.3 |
| 14 | 10.5 | 7.6 | 9.0 | 11.5 | 8.3 | 9.9 | 8.2 | 7.2 | 7.6 | 9.0 | 7.0 | 7.9 |
| 15 | 10.2 | 7.9 | 9.1 | 11.2 | 8.4 | 9.8 | 8.4 | 7.3 | 7.8 | 11.1 | 7.3 | 9.1 |
| 16 | 9.0 | 7.6 | 8.3 | 10.9 | 8.1 | 9.5 | 9.1 | 7.3 | 8.1 | 11.4 | 7.9 | 9.5 |
| 17 | 7.8 | 7.1 | 7.4 | 11.1 | 8.1 | 9.6 | 9.1 | 7.3 | 8.1 | 11.4 | 7.8 | 9.4 |
| 18 | 8.0 | 7.5 | 7.7 | 10.4 | 7.4 | 8.9 | 9.7 | 7.4 | 8.5 | 11.4 | 8.0 | 9.5 |
| 19 | 7.9 | 7.3 | 7.5 | 10.9 | 7.6 | 9.3 | 9.4 | 7.6 | 8.4 | 11.2 | 7.8 | 9.3 |
| 20 | 8.5 | 7.5 | 7.9 | 11.3 | 7.0 | 9.7 | 10.0 | 7.5 | 8.6 | 9.6 | 7.8 | 8.6 |
| 21 | 8.3 | 7.3 | 7.8 | 11.6 | 8.3 | 10.0 | 10.2 | 7.6 | 8.9 | 10.1 | 7.5 | 8.5 |
| 22 | 8.9 | 7.5 | 8.2 | 12.1 | 8.0 | 10.0 | 10.3 | 7.6 | 9.0 | 9.2 | 7.9 | 8.4 |
| 23 | 8.2 | 7.7 | 7.9 | --- | --- | --- | 10.0 | 7.7 | 8.7 | 9.8 | 7.4 | 8.5 |
| 24 | 8.1 | 7.7 | 7.9 | 11.6 | 7.9 | 9.8 | --- | --- | --- | 9.4 | 7.6 | 8.4 |
| 25 | 8.5 | 7.9 | 8.2 | 10.9 | 7.6 | 9.2 | 10.8 | 8.0 | 9.3 | 9.4 | 7.8 | 8.5 |
| 26 | 8.7 | 7.8 | 8.3 | 8.7 | 6.5 | 7.4 | 11.0 | 8.1 | 9.5 | 8.7 | 8.1 | 8.4 |
| 27 | 9.2 | 7.8 | 8.4 | 9.1 | 6.7 | 7.9 | 10.4 | 8.0 | 9.3 | 9.4 | 8.3 | 8.8 |
| 28 | 9.7 | 7.6 | 8.5 | 9.8 | 7.5 | 8.6 | 11.0 | 8.1 | 9.4 | 9.8 | 8.9 | 9.3 |
| 29 | 9.5 | 7.3 | 8.4 | 9.4 | 7.5 | 8.4 | 10.9 | 8.0 | 9.5 | 10.4 | 9.2 | 9.7 |
| 30 | 10.2 | 6.8 | 8.6 | 9.7 | 7.6 | 8.7 | 10.8 | 8.1 | 9.4 | 10.6 | 9.5 | 10.0 |
| 31 | --- | --- | --- | 10.4 | 8.1 | 9.1 | 10.9 | 8.1 | 9.4 | --- | --- | --- |
| MONTH | 10.9 | 6.8 | 8.7 | 12.1 | 6.5 | 9.1 | 11.0 | 6.1 | 8.4 | 11.8 | 7.0 | 9.2 |
| YEAR | 17.5 | 6.1 | 11.4 | | | | | | | | | |

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN |
|-----|---------|-----|--------|----------|-----|--------|----------|-----|--------|---------|-----|--------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 8.3 | 7.6 | 7.9 | 8.7 | 8.1 | 8.5 | 8.4 | 7.5 | 8.0 | 7.1 | 7.1 | 7.1 |
| 2 | 8.3 | 7.7 | 7.9 | 8.8 | 8.2 | 8.5 | 8.4 | 7.5 | 8.0 | 7.2 | 7.1 | 7.1 |
| 3 | 8.4 | 7.7 | 8.0 | 8.8 | 8.3 | 8.6 | 8.4 | 7.6 | 8.1 | 7.2 | 7.1 | 7.1 |
| 4 | 8.5 | 7.8 | 8.0 | 8.8 | 8.3 | 8.6 | 8.4 | 7.5 | 8.1 | 7.2 | 7.1 | 7.1 |
| 5 | 8.1 | 7.7 | 7.9 | 8.7 | 8.2 | 8.5 | 8.4 | 7.5 | 8.1 | 7.2 | 7.1 | 7.1 |
| 6 | 8.2 | 7.6 | 7.8 | 8.7 | 8.1 | 8.5 | 8.4 | 7.6 | 8.2 | 7.2 | 7.1 | 7.2 |
| 7 | 8.3 | 7.7 | 8.0 | 8.7 | 8.2 | 8.5 | 8.4 | 7.7 | 8.2 | 7.2 | 7.1 | 7.2 |
| 8 | 8.2 | 7.8 | 8.0 | 8.7 | 8.3 | 8.6 | 8.3 | 7.7 | 8.1 | --- | --- | --- |
| 9 | 8.2 | 7.8 | 8.0 | 8.6 | 8.2 | 8.5 | 8.4 | 7.6 | 8.2 | 7.2 | 7.2 | 7.2 |
| 10 | 8.3 | 7.6 | 8.0 | 8.5 | 7.9 | 8.3 | 8.5 | 7.8 | 8.2 | 7.3 | 7.2 | 7.2 |
| 11 | 8.4 | 7.7 | 8.1 | 8.4 | 7.6 | 8.1 | 8.4 | 7.7 | 8.2 | 7.2 | 7.2 | 7.2 |
| 12 | 8.5 | 7.8 | 8.2 | 8.3 | 7.7 | 8.0 | 8.5 | 7.7 | 8.3 | 7.3 | 7.2 | 7.2 |
| 13 | --- | --- | --- | 8.0 | 7.5 | 7.7 | 8.5 | 7.8 | 8.3 | 7.3 | 7.2 | 7.2 |
| 14 | 8.7 | 8.1 | 8.4 | 7.5 | 7.2 | 7.4 | 8.5 | 7.7 | 8.2 | 7.3 | 7.2 | 7.2 |
| 15 | 8.7 | 8.2 | 8.4 | 8.1 | 7.1 | 7.7 | 8.3 | 7.5 | 7.9 | 7.3 | 7.2 | 7.3 |
| 16 | 8.4 | 8.1 | 8.3 | 8.2 | 7.4 | 7.8 | 7.8 | 7.3 | 7.5 | 7.3 | 7.2 | 7.3 |
| 17 | 8.1 | 7.8 | 7.9 | 8.2 | 7.5 | 7.8 | 7.3 | 6.8 | 7.2 | 7.4 | 7.3 | 7.3 |
| 18 | 8.0 | 7.7 | 7.8 | 8.3 | 7.5 | 7.9 | 7.1 | 6.5 | 6.9 | 7.4 | 7.3 | 7.3 |
| 19 | 8.6 | 7.7 | 8.2 | 8.2 | 7.5 | 7.9 | 6.5 | 6.3 | 6.4 | 7.4 | 7.3 | 7.3 |
| 20 | 8.3 | 7.7 | 8.1 | 8.4 | 7.6 | 8.1 | 6.6 | 6.5 | 6.6 | 7.3 | 7.2 | 7.2 |
| 21 | 7.7 | 7.4 | 7.5 | 8.5 | 7.7 | 8.2 | 6.6 | 6.6 | 6.6 | 7.4 | 7.2 | 7.3 |
| 22 | 7.9 | 7.3 | 7.5 | 8.5 | 7.8 | 8.2 | 6.7 | 6.6 | 6.7 | 7.4 | 7.3 | 7.4 |
| 23 | 7.9 | 7.3 | 7.5 | 8.5 | 7.8 | 8.2 | 6.8 | 6.7 | 6.7 | 7.4 | 7.3 | 7.4 |
| 24 | 8.0 | 7.4 | 7.7 | 8.5 | 7.8 | 8.2 | 6.8 | 6.8 | 6.8 | 7.5 | 7.3 | 7.4 |
| 25 | 8.2 | 7.4 | 7.8 | 8.4 | 7.8 | 8.2 | 6.9 | 6.8 | 6.8 | 7.5 | 7.4 | 7.4 |
| 26 | 8.2 | 7.4 | 7.8 | 8.2 | 7.7 | 8.0 | 6.9 | 6.9 | 6.9 | 7.5 | 7.4 | 7.5 |
| 27 | 8.2 | 7.4 | 7.8 | 8.1 | 7.3 | 7.7 | 7.0 | 6.9 | 6.9 | 7.6 | 7.4 | 7.5 |
| 28 | 8.5 | 7.5 | 8.1 | 8.4 | 7.6 | 8.0 | 7.0 | 6.9 | 7.0 | 7.6 | 7.4 | 7.5 |
| 29 | 8.6 | 7.7 | 8.2 | 8.4 | 7.7 | 8.1 | --- | --- | --- | 7.6 | 7.4 | 7.5 |
| 30 | 8.6 | 7.8 | 8.2 | 8.3 | 7.7 | 8.0 | 7.1 | 7.0 | 7.0 | 7.5 | 7.4 | 7.4 |
| 31 | 8.6 | 7.9 | 8.3 | --- | --- | --- | 7.1 | 7.0 | 7.1 | 7.4 | 7.3 | 7.3 |
| MAX | 8.7 | 8.2 | 8.4 | 8.8 | 8.3 | 8.6 | 8.5 | 7.8 | 8.3 | 7.6 | 7.4 | 7.5 |
| MIN | 7.7 | 7.3 | 7.5 | 7.5 | 7.1 | 7.4 | 6.5 | 6.3 | 6.4 | 7.1 | 7.1 | 7.1 |

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN |
|----------|--------|-------------|--------|-------------|-------------|--------|-------------|-------------|-----------|-------------|-----|--------|
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 7.5 | 7.3 | 7.4 | 8.2 | 7.4 | 7.9 | 6.8 | 6.6 | 6.7 | 9.2 | 8.6 | 8.9 |
| 2 | 7.5 | 7.4 | 7.4 | 8.2 | 7.6 | 8.0 | 6.8 | 6.6 | 6.7 | 9.1 | 8.7 | 8.9 |
| 3 | 7.5 | 7.3 | 7.4 | 8.3 | 7.6 | 8.0 | 7.1 | 6.7 | 7.0 | 9.1 | 8.5 | 8.8 |
| 4 | 7.6 | 7.4 | 7.4 | 8.0 | 7.5 | 7.8 | 7.2 | 7.0 | 7.1 | 8.9 | 8.4 | 8.7 |
| 5 | 7.4 | 7.2 | 7.3 | 7.8 | 7.3 | 7.5 | 7.3 | 7.1 | 7.2 | 8.7 | 8.0 | 8.4 |
| 6 | 7.5 | 7.2 | 7.3 | --- | --- | --- | 7.2 | 7.1 | 7.1 | 8.5 | 7.3 | 8.1 |
| 7 | 7.7 | 7.4 | 7.4 | 8.5 | 7.9 | 8.2 | 7.1 | 7.0 | 7.1 | 8.4 | 7.4 | 7.9 |
| 8 | 7.6 | 7.4 | 7.5 | 8.5 | 8.0 | 8.3 | 7.1 | 6.9 | 7.0 | 8.0 | 7.3 | 7.5 |
| 9 | 7.8 | 7.4 | 7.5 | 8.5 | 7.9 | 8.3 | 7.1 | 6.9 | 7.0 | 7.6 | 7.2 | 7.4 |
| 10 | 7.6 | 7.2 | 7.5 | 8.6 | 7.9 | 8.3 | 7.1 | 6.9 | 7.0 | 7.6 | 7.3 | 7.4 |
| 11 | 7.5 | 7.3 | 7.4 | 8.7 | 8.1 | 8.4 | 7.0 | 6.7 | 6.8 | 7.7 | 7.2 | 7.5 |
| 12 | 7.7 | 7.4 | 7.5 | 8.7 | 8.0 | 8.4 | 6.8 | 6.7 | 6.8 | 8.0 | 7.3 | 7.7 |
| 13 | 7.6 | 7.4 | 7.5 | 8.4 | 7.1 | 7.8 | 6.9 | 6.8 | 6.8 | 8.2 | 7.4 | 7.7 |
| 14 | 7.6 | 7.3 | 7.4 | 7.5 | 7.2 | 7.3 | 7.0 | 6.9 | 6.9 | 8.2 | 7.6 | 7.8 |
| 15 | 7.7 | 7.3 | 7.4 | 7.6 | 7.1 | 7.4 | 7.1 | 6.9 | 7.0 | 8.3 | 7.6 | 7.9 |
| 16 | 7.5 | 7.4 | 7.4 | 8.0 | 7.3 | 7.8 | 7.2 | 7.0 | 7.1 | 8.3 | 7.7 | 8.0 |
| 17 | 7.6 | 7.3 | 7.4 | 7.8 | 7.2 | 7.4 | 7.2 | 7.1 | 7.2 | 8.0 | 7.6 | 7.8 |
| 18 | 7.7 | 7.3 | 7.5 | 8.0 | 7.2 | 7.6 | 7.3 | 7.1 | 7.2 | 7.9 | 7.5 | 7.8 |
| 19 | 7.8 | 7.4 | 7.5 | 8.2 | 7.3 | 7.9 | 7.4 | 7.1 | 7.2 | 8.1 | 7.6 | 7.8 |
| 20 | 7.9 | 7.5 | 7.6 | 8.2 | 7.3 | 7.9 | 7.3 | 7.1 | 7.2 | 8.1 | 7.6 | 7.8 |
| 21 | 8.1 | 7.5 | 7.7 | 8.2 | 7.2 | 7.4 | 7.4 | 7.1 | 7.3 | 7.9 | 7.7 | 7.7 |
| 22 | 7.8 | 7.6 | 7.8 | 7.2 | 7.1 | 7.1 | 7.6 | 7.2 | 7.4 | 7.8 | 7.5 | 7.6 |
| 23 | 8.1 | 7.4 | 7.6 | 7.2 | 7.0 | 7.1 | 7.9 | 7.3 | 7.6 | 7.6 | 7.4 | 7.5 |
| 24 | 8.2 | 7.6 | 7.9 | 7.0 | 6.9 | 6.9 | 8.1 | 7.3 | 7.7 | 7.7 | 7.4 | 7.5 |
| 25 | 7.9 | 7.3 | 7.6 | 6.9 | 6.8 | 6.9 | 8.1 | 7.3 | 7.7 | 7.6 | 7.5 | 7.5 |
| 26 | 7.9 | 7.2 | 7.3 | 7.0 | 6.9 | 6.9 | 8.5 | 7.5 | 7.9 | 7.5 | 7.4 | 7.5 |
| 27 | 8.1 | 7.3 | 7.7 | 7.1 | 6.9 | 7.0 | 8.6 | 7.7 | 8.3 | 7.4 | 7.3 | 7.4 |
| 28 | 8.2 | 7.4 | 7.8 | 7.2 | 6.9 | 7.1 | 8.8 | 7.8 | 8.4 | 7.5 | 7.3 | 7.4 |
| 29 | --- | --- | --- | 7.2 | 6.9 | 7.0 | 8.9 | 8.2 | 8.6 | 7.5 | 7.3 | 7.4 |
| 30 | --- | --- | --- | 7.1 | 7.0 | 7.0 | 9.1 | 8.4 | 8.7 | 7.6 | 7.4 | 7.5 |
| 31 | --- | --- | --- | 7.0 | 6.8 | 7.0 | --- | --- | --- | 7.7 | 7.4 | 7.6 |
| MAX | 8.2 | 7.6 | 7.9 | 8.7 | 8.1 | 8.4 | 9.1 | 8.4 | 8.7 | 9.2 | 8.7 | 8.9 |
| MIN | 7.4 | 7.2 | 7.3 | 6.9 | 6.8 | 6.9 | 6.8 | 6.6 | 6.7 | 7.4 | 7.2 | 7.4 |
| DAY | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN |
| JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | | |
| 1 | 7.7 | 7.4 | 7.6 | 8.7 | 7.9 | 8.3 | 8.6 | 7.7 | 8.2 | 8.9 | 8.2 | 8.6 |
| 2 | 7.6 | 7.4 | 7.4 | 8.2 | 7.8 | 7.9 | 8.7 | 7.8 | 8.3 | 9.0 | 8.4 | 8.7 |
| 3 | 7.7 | 7.4 | 7.6 | 8.3 | 7.7 | 8.1 | 8.6 | 7.9 | 8.2 | 9.0 | 8.4 | 8.8 |
| 4 | 7.7 | 7.5 | 7.6 | 8.4 | 7.8 | 8.1 | 8.4 | 7.7 | 8.0 | 9.0 | 8.6 | 8.8 |
| 5 | 7.6 | 7.4 | 7.5 | 8.2 | 7.8 | 8.1 | 8.1 | 7.6 | 7.6 | 9.1 | 8.5 | 8.8 |
| 6 | 7.7 | 7.4 | 7.5 | 8.6 | 7.9 | 8.3 | 8.2 | 7.5 | 7.7 | 9.1 | 8.6 | 8.9 |
| 7 | 8.1 | 7.5 | 7.7 | 8.7 | 7.9 | 8.4 | 8.5 | 7.6 | 8.0 | 9.1 | 8.7 | 8.9 |
| 8 | 8.3 | 7.6 | 7.8 | 8.5 | 8.0 | 8.3 | 8.6 | 7.6 | 8.1 | 9.1 | 8.7 | 8.9 |
| 9 | 8.5 | 7.8 | 8.1 | 8.7 | 7.8 | 8.4 | 8.6 | 7.6 | 8.2 | 9.0 | 8.5 | 8.9 |
| 10 | 8.6 | 7.8 | 8.2 | 8.6 | 8.0 | 8.4 | 8.5 | 7.7 | 8.0 | 8.9 | 8.4 | 8.7 |
| 11 | 8.6 | 8.1 | 8.4 | 8.7 | 8.0 | 8.4 | 7.7 | 7.2 | 7.5 | 8.8 | 8.0 | 8.4 |
| 12 | 8.8 | 8.2 | 8.5 | 8.8 | 7.8 | 8.5 | 7.5 | 7.3 | 7.5 | 8.9 | 7.9 | 8.5 |
| 13 | 8.8 | 8.3 | 8.6 | 8.9 | 8.3 | 8.6 | 7.5 | 7.4 | 7.4 | 8.9 | 7.8 | 8.4 |
| 14 | 8.7 | 8.3 | 8.5 | 8.8 | 8.2 | 8.6 | 7.7 | 7.4 | 7.5 | 8.4 | 7.6 | 7.8 |
| 15 | 8.7 | 8.1 | 8.4 | 8.8 | 8.2 | 8.6 | 7.8 | 7.4 | 7.6 | 8.6 | 7.4 | 7.9 |
| 16 | 8.5 | 7.9 | 8.2 | 8.7 | 8.1 | 8.5 | 8.2 | 7.4 | 7.7 | 8.7 | 7.6 | 8.0 |
| 17 | 7.9 | 7.1 | 7.3 | 8.8 | 8.2 | 8.6 | 8.3 | 7.5 | 7.8 | 8.7 | 7.6 | 8.0 |
| 18 | 7.6 | 7.4 | 7.5 | 8.7 | 8.0 | 8.5 | 8.5 | 7.6 | 8.0 | 8.7 | 7.6 | 8.0 |
| 19 | 7.4 | 7.2 | 7.3 | 8.8 | 8.0 | 8.5 | 8.4 | 7.7 | 8.0 | 8.6 | 7.6 | 8.0 |
| 20 | 7.7 | 7.3 | 7.4 | 8.9 | 8.3 | 8.6 | 8.6 | 7.7 | 8.2 | 8.1 | 7.6 | 7.7 |
| 21 | 7.6 | 7.3 | 7.5 | 9.0 | 8.5 | 8.8 | 8.7 | 7.8 | 8.3 | 8.2 | 7.4 | 7.6 |
| 22 | 7.8 | 7.4 | 7.6 | 9.1 | 8.5 | 8.8 | 8.8 | 7.9 | 8.4 | 7.9 | 7.5 | 7.6 |
| 23 | 7.6 | 7.4 | 7.5 | --- | --- | --- | 8.6 | 8.0 | 8.3 | 8.0 | 7.3 | 7.5 |
| 24 | 7.4 | 7.3 | 7.4 | 9.0 | 8.6 | 8.9 | --- | --- | --- | 7.9 | 7.3 | 7.4 |
| 25 | 7.7 | 7.4 | 7.5 | 8.9 | 8.4 | 8.7 | 8.8 | 7.9 | 8.4 | 7.8 | 7.4 | 7.5 |
| 26 | 7.8 | 7.5 | 7.7 | 8.7 | 7.8 | 8.2 | 8.8 | 8.0 | 8.5 | 7.7 | 7.5 | 7.5 |
| 27 | 8.2 | 7.6 | 7.8 | 8.1 | 7.6 | 7.8 | 8.8 | 8.1 | 8.5 | 7.6 | 7.4 | 7.5 |
| 28 | 8.5 | 7.7 | 8.0 | 8.3 | 7.7 | 8.0 | 8.9 | 8.1 | 8.6 | 7.7 | 7.5 | 7.6 |
| 29 | 8.5 | 7.8 | 8.1 | 8.2 | 7.6 | 7.9 | 8.9 | 8.2 | 8.6 | 7.9 | 7.5 | 7.6 |
| 30 | 8.7 | 7.8 | 8.3 | 8.3 | 7.6 | 8.0 | 8.8 | 8.2 | 8.6 | 7.6 | 7.2 | 7.5 |
| 31 | --- | --- | --- | 8.6 | 7.7 | 8.1 | 8.9 | 8.3 | 8.7 | --- | --- | --- |
| MAX | 8.8 | 8.3 | 8.6 | 9.1 | 8.6 | 8.9 | 8.9 | 8.3 | 8.7 | 9.1 | 8.7 | 8.9 |
| MIN | 7.4 | 7.1 | 7.3 | 8.1 | 7.6 | 7.8 | 7.5 | 7.2 | 7.4 | 7.6 | 7.2 | 7.4 |
| YEAR | MAX | MAXIMUM 9.2 | | MINIMUM 6.5 | MAXIMUM 8.7 | | MINIMUM 6.3 | MAXIMUM 8.9 | | MINIMUM 6.4 | | |
| | MIN | | | | | | | | | | | |
| | MEDIAN | | | | | | | | | | | |

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---------|-----|-----|----------|-----|-----|----------|-----|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 220 | 214 | 217 | 225 | 220 | 222 | 192 | 189 | 190 | 191 | 163 | 177 |
| 2 | 220 | 214 | 217 | 227 | 223 | 225 | 194 | 188 | 191 | 193 | 183 | 189 |
| 3 | 221 | 217 | 219 | 226 | 223 | 224 | 195 | 188 | 191 | 194 | 180 | 189 |
| 4 | 224 | 221 | 223 | 231 | 225 | 228 | 198 | 190 | 195 | 190 | 184 | 186 |
| 5 | 230 | 223 | 228 | 233 | 228 | 230 | 200 | 197 | 198 | 200 | 181 | 193 |
| 6 | 239 | 228 | 232 | 234 | 227 | 230 | 211 | 199 | 204 | 200 | 194 | 197 |
| 7 | 243 | 238 | 241 | 233 | 229 | 231 | 218 | 209 | 215 | 199 | 192 | 195 |
| 8 | 242 | 231 | 238 | 234 | 227 | 231 | 223 | 218 | 221 | --- | --- | --- |
| 9 | 231 | 200 | 216 | 234 | 228 | 231 | 227 | 221 | 223 | 200 | 196 | 198 |
| 10 | 202 | 197 | 199 | 242 | 234 | 237 | 231 | 224 | 227 | 201 | 197 | 199 |
| 11 | 210 | 201 | 205 | 255 | 242 | 248 | 232 | 225 | 229 | 206 | 199 | 203 |
| 12 | 219 | 210 | 215 | 263 | 247 | 257 | 233 | 227 | 230 | 210 | 205 | 207 |
| 13 | --- | --- | --- | 247 | 204 | 231 | 234 | 229 | 232 | 212 | 207 | 209 |
| 14 | 237 | 228 | 232 | 204 | 177 | 184 | 235 | 226 | 231 | 215 | 210 | 213 |
| 15 | 240 | 236 | 238 | 183 | 178 | 180 | 267 | 225 | 234 | 213 | 210 | 212 |
| 16 | 242 | 239 | 240 | 201 | 182 | 191 | 294 | 259 | 271 | 214 | 211 | 212 |
| 17 | 242 | 239 | 240 | 204 | 199 | 202 | 305 | 142 | 249 | 217 | 214 | 215 |
| 18 | 241 | 238 | 239 | 199 | 186 | 190 | 206 | 107 | 155 | 232 | 216 | 224 |
| 19 | 243 | 240 | 241 | 190 | 184 | 186 | 107 | 93 | 99 | 230 | 219 | 225 |
| 20 | 257 | 239 | 247 | 193 | 189 | 190 | 111 | 99 | 106 | 229 | 219 | 223 |
| 21 | 240 | 162 | 195 | 195 | 190 | 192 | 123 | 111 | 118 | 259 | 224 | 240 |
| 22 | 162 | 158 | 160 | 200 | 195 | 198 | 129 | 120 | 124 | 267 | 259 | 263 |
| 23 | 182 | 161 | 172 | 205 | 200 | 202 | 137 | 124 | 132 | 272 | 260 | 268 |
| 24 | 183 | 176 | 179 | 208 | 204 | 206 | 140 | 137 | 139 | 269 | 260 | 266 |
| 25 | 179 | 172 | 175 | 211 | 207 | 209 | 153 | 139 | 148 | 273 | 267 | 270 |
| 26 | 190 | 179 | 184 | 212 | 205 | 208 | 157 | 149 | 153 | 272 | 262 | 269 |
| 27 | 204 | 190 | 197 | 226 | 210 | 217 | 163 | 153 | 159 | 262 | 256 | 260 |
| 28 | 209 | 203 | 206 | 248 | 226 | 239 | 169 | 151 | 159 | 256 | 250 | 252 |
| 29 | 213 | 208 | 211 | 233 | 204 | 215 | --- | --- | --- | 253 | 248 | 251 |
| 30 | 219 | 211 | 214 | 206 | 191 | 196 | 173 | 154 | 169 | 250 | 239 | 245 |
| 31 | 221 | 218 | 220 | --- | --- | --- | 174 | 163 | 172 | 249 | 235 | 240 |
| MONTH | 257 | 158 | 215 | 263 | 177 | 214 | 305 | 93 | 185 | 273 | 163 | 223 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|-----|-----|-------|-----|-----|-------|-----|-----|------|-----|-----|------|
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 273 | 249 | 259 | 229 | 219 | 223 | 147 | 124 | 132 | 197 | 189 | 193 |
| 2 | 272 | 249 | 258 | 222 | 218 | 220 | 132 | 124 | 128 | 199 | 196 | 198 |
| 3 | 249 | 232 | 239 | 227 | 219 | 222 | 139 | 132 | 135 | 201 | 197 | 199 |
| 4 | 232 | 222 | 226 | 224 | 221 | 223 | 140 | 136 | 138 | 207 | 201 | 203 |
| 5 | 224 | 218 | 220 | 229 | 221 | 224 | 142 | 140 | 141 | 209 | 205 | 207 |
| 6 | 234 | 223 | 228 | --- | --- | --- | 142 | 137 | 140 | 212 | 207 | 210 |
| 7 | 257 | 233 | 240 | 255 | 244 | 249 | 138 | 134 | 136 | 218 | 211 | 216 |
| 8 | 263 | 255 | 260 | 252 | 239 | 245 | 134 | 129 | 131 | 246 | 218 | 225 |
| 9 | 262 | 241 | 249 | 250 | 239 | 243 | 129 | 120 | 126 | 246 | 225 | 229 |
| 10 | 247 | 209 | 236 | 243 | 236 | 240 | 120 | 114 | 116 | 236 | 231 | 233 |
| 11 | 239 | 209 | 223 | 249 | 240 | 245 | 118 | 97 | 105 | 242 | 236 | 240 |
| 12 | 254 | 238 | 246 | 244 | 241 | 242 | 102 | 96 | 99 | 247 | 242 | 245 |
| 13 | 240 | 226 | 229 | 244 | 230 | 238 | 115 | 100 | 105 | 256 | 247 | 250 |
| 14 | 226 | 219 | 222 | 254 | 230 | 243 | 111 | 107 | 109 | 257 | 252 | 254 |
| 15 | 222 | 217 | 219 | 244 | 230 | 238 | 113 | 108 | 109 | 256 | 252 | 253 |
| 16 | 222 | 217 | 219 | 234 | 220 | 228 | 120 | 111 | 115 | 257 | 251 | 253 |
| 17 | 219 | 212 | 216 | 224 | 219 | 221 | 129 | 120 | 126 | 259 | 252 | 255 |
| 18 | 213 | 210 | 211 | 226 | 216 | 221 | 135 | 127 | 129 | 266 | 259 | 262 |
| 19 | 213 | 208 | 210 | 220 | 212 | 215 | 138 | 135 | 136 | 270 | 266 | 268 |
| 20 | 217 | 210 | 213 | 215 | 208 | 212 | 143 | 136 | 139 | 272 | 267 | 270 |
| 21 | 217 | 213 | 215 | 215 | 202 | 209 | 150 | 140 | 144 | 270 | 262 | 266 |
| 22 | 220 | 213 | 216 | 203 | 193 | 198 | 155 | 148 | 151 | 262 | 246 | 252 |
| 23 | 219 | 211 | 214 | 200 | 174 | 190 | 164 | 154 | 160 | 250 | 243 | 247 |
| 24 | 220 | 209 | 213 | 175 | 152 | 159 | 164 | 162 | 163 | 249 | 229 | 235 |
| 25 | 233 | 213 | 222 | 158 | 147 | 150 | 166 | 162 | 164 | 235 | 227 | 231 |
| 26 | 233 | 221 | 228 | 150 | 147 | 148 | 169 | 163 | 166 | 229 | 215 | 223 |
| 27 | 247 | 231 | 241 | 153 | 148 | 150 | 176 | 168 | 172 | 228 | 203 | 216 |
| 28 | 241 | 225 | 233 | 158 | 152 | 153 | 184 | 173 | 178 | 213 | 204 | 208 |
| 29 | --- | --- | --- | 166 | 157 | 161 | 182 | 177 | 179 | 213 | 197 | 204 |
| 30 | --- | --- | --- | 166 | 155 | 160 | 189 | 180 | 184 | 197 | 193 | 195 |
| 31 | --- | --- | --- | 175 | 147 | 166 | --- | --- | --- | 195 | 190 | 192 |
| MONTH | 273 | 208 | 229 | 255 | 147 | 208 | 189 | 96 | 139 | 272 | 189 | 230 |

DELAWARE RIVER BASIN

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01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 200 | 193 | 195 | 229 | 213 | 221 | 253 | 245 | 248 | 248 | 244 | 246 |
| 2 | 196 | 186 | 192 | 221 | 210 | 215 | 259 | 253 | 255 | 245 | 241 | 243 |
| 3 | 211 | 194 | 204 | 239 | 215 | 229 | 265 | 259 | 262 | 249 | 243 | 247 |
| 4 | 201 | 176 | 193 | 230 | 216 | 223 | 266 | 253 | 263 | 249 | 241 | 245 |
| 5 | 176 | 161 | 168 | 232 | 222 | 228 | 255 | 242 | 249 | 241 | 229 | 235 |
| 6 | 166 | 160 | 162 | 233 | 223 | 228 | 278 | 239 | 262 | 229 | 224 | 225 |
| 7 | 170 | 162 | 166 | 240 | 229 | 233 | 271 | 236 | 248 | 227 | 224 | 225 |
| 8 | 177 | 169 | 174 | 247 | 239 | 245 | 237 | 229 | 233 | 236 | 227 | 232 |
| 9 | 185 | 176 | 181 | 247 | 240 | 243 | 238 | 230 | 233 | 241 | 235 | 237 |
| 10 | 194 | 185 | 191 | 244 | 240 | 242 | 239 | 232 | 236 | 238 | 224 | 231 |
| 11 | 206 | 194 | 201 | 245 | 238 | 241 | 237 | 174 | 223 | 229 | 219 | 223 |
| 12 | 214 | 204 | 206 | 248 | 239 | 245 | 247 | 217 | 233 | 226 | 220 | 224 |
| 13 | 213 | 205 | 207 | 246 | 236 | 241 | 254 | 199 | 221 | 231 | 226 | 229 |
| 14 | 219 | 207 | 214 | 247 | 239 | 243 | 231 | 201 | 218 | 231 | 223 | 227 |
| 15 | 219 | 207 | 212 | 243 | 231 | 239 | 210 | 198 | 204 | 234 | 227 | 231 |
| 16 | 213 | 207 | 210 | 250 | 235 | 243 | 222 | 208 | 214 | 252 | 234 | 246 |
| 17 | 212 | 135 | 179 | 253 | 242 | 248 | 239 | 222 | 229 | 251 | 239 | 245 |
| 18 | 221 | 184 | 206 | 244 | 239 | 242 | 245 | 234 | 240 | 240 | 228 | 234 |
| 19 | 184 | 160 | 169 | 252 | 242 | 245 | 252 | 243 | 247 | 237 | 233 | 236 |
| 20 | 171 | 161 | 166 | 261 | 252 | 255 | 250 | 242 | 246 | 238 | 231 | 235 |
| 21 | 181 | 166 | 172 | 259 | 254 | 257 | 246 | 242 | 244 | 232 | 220 | 226 |
| 22 | 188 | 180 | 183 | 269 | 256 | 260 | 243 | 240 | 241 | 264 | 225 | 246 |
| 23 | 202 | 182 | 188 | --- | --- | --- | 249 | 242 | 246 | 238 | 198 | 212 |
| 24 | 187 | 177 | 181 | 258 | 254 | 256 | --- | --- | --- | 201 | 196 | 198 |
| 25 | 196 | 187 | 193 | 261 | 255 | 259 | 255 | 252 | 253 | 204 | 199 | 202 |
| 26 | 204 | 196 | 199 | 261 | 251 | 259 | 256 | 251 | 254 | 252 | 203 | 228 |
| 27 | 213 | 204 | 207 | 258 | 243 | 251 | 252 | 247 | 250 | 222 | 183 | 196 |
| 28 | 216 | 208 | 213 | 261 | 252 | 258 | 250 | 244 | 246 | 191 | 182 | 185 |
| 29 | 222 | 216 | 220 | 253 | 244 | 248 | 246 | 244 | 245 | 191 | 186 | 188 |
| 30 | 229 | 215 | 223 | 247 | 241 | 244 | 250 | 245 | 248 | 195 | 187 | 190 |
| 31 | --- | --- | --- | 246 | 241 | 244 | 251 | 246 | 248 | --- | --- | --- |
| MONTH | 229 | 135 | 192 | 269 | 210 | 243 | 278 | 174 | 241 | 264 | 182 | 226 |
| YEAR | 305 | 93 | 212 | | | | | | | | | |

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|------|------|----------|------|------|----------|-----|------|---------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 17.5 | 15.0 | 16.5 | 11.0 | 9.5 | 10.0 | 5.5 | 4.5 | 5.0 | .5 | .0 | .0 |
| 2 | 18.0 | 16.0 | 17.0 | 11.0 | 9.5 | 10.5 | 4.5 | 3.0 | 4.0 | .5 | .0 | .0 |
| 3 | 19.0 | 16.5 | 17.5 | 11.5 | 9.5 | 10.5 | 3.5 | 2.5 | 3.0 | .0 | .0 | .0 |
| 4 | 19.5 | 17.0 | 18.5 | 12.0 | 10.5 | 11.0 | 3.0 | 2.0 | 2.5 | .5 | .0 | .0 |
| 5 | 19.0 | 18.0 | 18.5 | 11.5 | 10.0 | 10.5 | 3.0 | 1.5 | 2.5 | .0 | .0 | .0 |
| 6 | 18.5 | 17.5 | 18.0 | 10.5 | 9.0 | 9.5 | 2.5 | 1.5 | 2.0 | 1.0 | .0 | .5 |
| 7 | 18.0 | 16.5 | 17.0 | 10.0 | 8.5 | 9.5 | 2.0 | 1.0 | 1.5 | 1.5 | .5 | 1.0 |
| 8 | 16.5 | 15.0 | 15.5 | 10.0 | 8.5 | 9.5 | 1.5 | 1.0 | 1.5 | --- | --- | --- |
| 9 | 15.0 | 13.0 | 14.0 | 10.5 | 9.5 | 10.0 | 2.0 | 1.0 | 1.5 | 2.0 | 1.0 | 1.5 |
| 10 | 13.0 | 12.0 | 12.5 | 12.0 | 10.5 | 11.5 | 2.0 | 1.0 | 1.5 | 1.0 | 1.0 | 1.0 |
| 11 | 13.5 | 11.5 | 12.5 | 12.0 | 10.5 | 11.0 | 3.0 | 2.0 | 2.5 | 1.5 | .5 | 1.0 |
| 12 | 14.5 | 12.5 | 13.5 | 11.0 | 10.0 | 10.5 | 4.0 | 3.0 | 3.5 | 1.5 | .5 | 1.0 |
| 13 | --- | --- | --- | 11.0 | 10.5 | 10.5 | 3.0 | 1.5 | 2.0 | 2.0 | .5 | 1.5 |
| 14 | 15.5 | 13.5 | 14.5 | 10.5 | 9.5 | 10.0 | 3.5 | 2.0 | 2.5 | 1.5 | 1.0 | 1.5 |
| 15 | 16.0 | 14.0 | 15.0 | 9.5 | 8.5 | 9.0 | 3.0 | 2.5 | 3.0 | 2.5 | 1.5 | 2.0 |
| 16 | 15.5 | 15.0 | 15.5 | 8.5 | 8.0 | 8.5 | 3.5 | 2.5 | 2.5 | 3.0 | 2.5 | 2.5 |
| 17 | 15.5 | 14.5 | 15.0 | 9.0 | 8.0 | 8.5 | 8.5 | 3.5 | 5.5 | 3.0 | 2.0 | 2.5 |
| 18 | 14.5 | 14.5 | 14.5 | 8.0 | 7.0 | 7.5 | 7.0 | 2.5 | 5.0 | 2.5 | 2.0 | 2.5 |
| 19 | 15.0 | 13.5 | 14.5 | 7.0 | 6.0 | 6.5 | 2.5 | 1.5 | 2.0 | 2.5 | 2.5 | 2.5 |
| 20 | 15.0 | 13.0 | 14.0 | 6.0 | 5.0 | 5.5 | 2.0 | 1.5 | 2.0 | 2.5 | 2.0 | 2.5 |
| 21 | 14.5 | 13.5 | 14.0 | 5.5 | 4.0 | 5.0 | 1.5 | 1.5 | 1.5 | 2.0 | 1.0 | 1.5 |
| 22 | 14.5 | 13.5 | 14.0 | 4.0 | 3.0 | 3.5 | 1.5 | .5 | 1.0 | 1.5 | .5 | 1.0 |
| 23 | 13.5 | 12.5 | 13.0 | 3.5 | 2.0 | 3.0 | .5 | .0 | .5 | 1.0 | .0 | .5 |
| 24 | 13.5 | 12.0 | 13.0 | 3.0 | 2.0 | 2.5 | .5 | .0 | .0 | 1.5 | .0 | 1.0 |
| 25 | 14.5 | 12.5 | 13.5 | 3.0 | 2.0 | 2.5 | .0 | .0 | .0 | 2.0 | .5 | 1.0 |
| 26 | 14.5 | 13.0 | 14.0 | 4.5 | 3.0 | 4.0 | .0 | .0 | .0 | 1.5 | .5 | 1.0 |
| 27 | 15.0 | 13.5 | 14.0 | 5.5 | 4.5 | 5.0 | .5 | .0 | .0 | 2.0 | 1.0 | 1.5 |
| 28 | 14.5 | 12.5 | 14.0 | 6.0 | 5.0 | 5.5 | .5 | .0 | .0 | 2.5 | 1.5 | 2.0 |
| 29 | 12.5 | 10.5 | 11.5 | 5.5 | 5.0 | 5.0 | --- | --- | --- | 2.5 | 1.5 | 2.0 |
| 30 | 11.0 | 9.5 | 10.0 | 5.5 | 5.0 | 5.5 | .0 | .0 | .0 | 3.0 | 2.0 | 2.5 |
| 31 | 10.5 | 9.0 | 10.0 | --- | --- | --- | .5 | .0 | .0 | 3.0 | 2.0 | 2.5 |
| MONTH | 19.5 | 9.0 | 14.5 | 12.0 | 2.0 | 7.7 | 8.5 | .0 | 2.0 | 3.0 | .0 | 1.3 |

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|------|
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 3.5 | 3.0 | 3.0 | 4.0 | 3.5 | 4.0 | 4.5 | 4.5 | 4.5 | 18.0 | 15.5 | 16.5 |
| 2 | 3.5 | 3.0 | 3.5 | 4.0 | 3.5 | 4.0 | 5.0 | 4.5 | 4.5 | 19.0 | 17.0 | 18.0 |
| 3 | 3.0 | 2.0 | 2.5 | 4.5 | 4.0 | 4.0 | 6.0 | 4.5 | 5.0 | 20.5 | 18.5 | 19.5 |
| 4 | 2.5 | 2.0 | 2.0 | 4.5 | 3.0 | 4.0 | 7.0 | 5.5 | 6.5 | 21.5 | 20.0 | 20.5 |
| 5 | 2.0 | .5 | 1.5 | 3.0 | 2.5 | 2.5 | 8.0 | 6.5 | 7.0 | 21.5 | 20.5 | 21.0 |
| 6 | 2.0 | .0 | 1.0 | --- | --- | --- | 8.0 | 7.5 | 7.5 | 20.5 | 19.5 | 20.0 |
| 7 | 3.0 | 1.5 | 2.0 | 4.0 | 2.5 | 3.5 | 7.5 | 7.0 | 7.5 | 20.0 | 18.5 | 19.0 |
| 8 | 3.0 | 2.5 | 2.5 | 4.5 | 3.5 | 4.0 | 7.0 | 7.0 | 7.0 | 20.0 | 17.5 | 19.0 |
| 9 | 3.5 | 2.5 | 3.0 | 5.0 | 4.0 | 4.5 | 8.0 | 6.5 | 7.0 | 20.5 | 18.0 | 19.0 |
| 10 | 4.5 | 3.5 | 4.0 | 5.5 | 4.0 | 4.5 | 9.0 | 8.0 | 8.5 | 21.5 | 18.5 | 20.0 |
| 11 | 3.5 | 2.5 | 3.0 | 5.5 | 4.5 | 5.0 | 9.0 | 8.5 | 8.5 | 22.5 | 19.0 | 21.0 |
| 12 | 2.5 | 2.0 | 2.5 | 6.0 | 4.5 | 5.5 | 8.5 | 8.0 | 8.0 | 23.5 | 20.5 | 22.0 |
| 13 | 3.5 | 2.0 | 3.0 | 6.0 | 5.5 | 5.5 | 8.5 | 7.5 | 8.0 | 21.5 | 20.0 | 20.5 |
| 14 | 3.0 | 3.0 | 3.0 | 6.0 | 5.0 | 5.5 | 10.0 | 8.5 | 9.0 | 20.5 | 18.0 | 19.5 |
| 15 | 3.5 | 3.0 | 3.5 | 5.5 | 5.0 | 5.0 | 10.5 | 9.5 | 10.0 | 20.5 | 17.5 | 19.0 |
| 16 | 3.5 | 3.5 | 3.5 | 6.0 | 5.0 | 5.5 | 10.5 | 10.0 | 10.0 | 20.0 | 18.0 | 19.0 |
| 17 | 3.5 | 3.0 | 3.5 | 6.0 | 5.5 | 6.0 | 10.5 | 9.5 | 10.0 | 19.0 | 17.5 | 18.0 |
| 18 | 3.0 | 2.0 | 2.0 | 6.5 | 5.5 | 6.0 | 10.0 | 9.0 | 9.5 | 17.5 | 17.0 | 17.0 |
| 19 | 2.5 | 1.5 | 2.0 | 6.5 | 5.0 | 6.0 | 10.0 | 8.5 | 9.0 | 20.5 | 16.5 | 18.5 |
| 20 | 3.0 | 2.0 | 2.5 | 7.0 | 5.5 | 6.5 | 10.0 | 9.0 | 9.5 | 20.0 | 18.5 | 19.0 |
| 21 | 4.0 | 3.0 | 3.5 | 7.0 | 6.0 | 6.5 | 10.5 | 9.0 | 10.0 | 18.5 | 17.0 | 17.5 |
| 22 | 3.0 | 1.5 | 2.0 | 6.0 | 5.5 | 6.0 | 13.0 | 10.0 | 11.5 | 17.0 | 16.5 | 17.0 |
| 23 | 2.5 | 1.0 | 1.5 | 6.0 | 5.0 | 5.5 | 15.0 | 12.5 | 14.0 | 17.0 | 17.0 | 17.0 |
| 24 | 2.5 | 1.5 | 2.0 | 5.5 | 5.0 | 5.0 | 17.0 | 15.0 | 16.0 | 19.5 | 17.0 | 18.0 |
| 25 | 3.0 | 2.0 | 2.5 | 5.5 | 4.5 | 5.0 | 17.0 | 15.0 | 15.5 | 19.0 | 18.0 | 18.5 |
| 26 | 3.5 | 2.5 | 3.0 | 5.0 | 4.5 | 4.5 | 16.0 | 14.5 | 15.0 | 18.0 | 17.0 | 17.5 |
| 27 | 4.0 | 3.0 | 3.5 | 5.0 | 4.0 | 4.5 | 16.0 | 14.5 | 15.0 | 17.0 | 17.0 | 17.0 |
| 28 | 5.0 | 4.0 | 4.5 | 5.0 | 3.5 | 4.5 | 16.0 | 15.0 | 15.5 | 18.0 | 16.5 | 17.0 |
| 29 | --- | --- | --- | 5.0 | 4.0 | 4.5 | 16.0 | 14.5 | 15.0 | 18.5 | 17.0 | 17.5 |
| 30 | --- | --- | --- | 5.0 | 4.5 | 5.0 | 16.5 | 14.5 | 15.5 | 18.5 | 17.5 | 18.0 |
| 31 | --- | --- | --- | 5.0 | 4.5 | 5.0 | --- | --- | --- | 18.5 | 17.0 | 17.5 |
| MONTH | 5.0 | .0 | 2.7 | 7.0 | 2.5 | 4.9 | 17.0 | 4.5 | 10.0 | 23.5 | 15.5 | 18.7 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | | |
| 1 | 18.0 | 17.0 | 17.5 | 28.5 | 27.0 | 27.5 | 28.0 | 24.5 | 26.0 | 26.5 | 25.0 | 26.0 |
| 2 | 17.5 | 16.5 | 17.0 | 27.0 | 24.5 | 25.5 | 28.5 | 25.5 | 27.0 | 25.5 | 23.5 | 24.5 |
| 3 | 18.0 | 17.0 | 17.5 | 25.0 | 23.0 | 24.0 | 28.0 | 26.0 | 27.0 | 25.0 | 22.5 | 24.0 |
| 4 | 18.5 | 16.5 | 17.5 | 25.0 | 23.5 | 24.0 | 27.5 | 26.0 | 26.5 | 24.5 | 23.0 | 24.0 |
| 5 | 19.5 | 17.5 | 18.5 | 25.0 | 23.5 | 24.5 | 27.5 | 25.0 | 26.5 | 25.0 | 23.0 | 24.0 |
| 6 | 19.5 | 18.5 | 19.0 | 25.0 | 23.0 | 24.0 | 29.0 | 26.0 | 27.5 | 24.5 | 22.0 | 23.5 |
| 7 | 21.0 | 19.0 | 20.0 | 25.5 | 22.5 | 24.0 | 30.5 | 27.5 | 29.0 | 25.0 | 22.5 | 23.5 |
| 8 | 21.5 | 20.0 | 21.0 | 25.0 | 23.5 | 24.0 | 31.5 | 28.5 | 30.0 | 25.0 | 23.0 | 24.0 |
| 9 | 22.0 | 20.5 | 21.0 | 26.5 | 23.0 | 24.5 | 32.0 | 28.5 | 30.5 | 25.5 | 23.5 | 24.5 |
| 10 | 22.5 | 21.0 | 21.5 | 27.5 | 25.0 | 26.0 | 31.0 | 29.5 | 30.5 | 25.5 | 24.0 | 25.0 |
| 11 | 23.0 | 21.5 | 22.0 | 27.0 | 25.0 | 26.0 | 30.0 | 26.5 | 28.0 | 25.5 | 23.5 | 24.5 |
| 12 | 24.5 | 22.0 | 23.0 | 26.0 | 24.0 | 25.0 | 27.0 | 26.0 | 26.5 | 25.0 | 22.5 | 23.5 |
| 13 | 26.0 | 23.0 | 24.5 | 26.0 | 23.5 | 25.0 | 26.5 | 25.0 | 25.5 | 25.0 | 22.5 | 23.5 |
| 14 | 25.5 | 24.5 | 25.0 | 25.5 | 23.0 | 24.5 | 27.0 | 25.0 | 26.0 | 24.5 | 21.0 | 22.0 |
| 15 | 26.0 | 24.0 | 25.0 | 26.0 | 23.0 | 24.5 | 27.5 | 25.0 | 26.5 | 21.5 | 19.5 | 20.5 |
| 16 | 26.0 | 25.0 | 25.0 | 26.5 | 23.5 | 25.0 | 28.0 | 25.0 | 26.5 | 22.0 | 19.0 | 20.5 |
| 17 | 25.0 | 22.5 | 23.5 | 27.5 | 24.5 | 26.0 | 27.5 | 25.5 | 26.5 | 22.0 | 19.5 | 21.0 |
| 18 | 25.0 | 23.5 | 24.0 | 26.5 | 25.0 | 26.0 | 27.5 | 25.5 | 26.5 | 22.0 | 20.0 | 21.0 |
| 19 | 25.0 | 23.0 | 24.0 | 27.0 | 24.5 | 25.5 | 27.0 | 25.5 | 26.0 | 22.0 | 20.0 | 21.0 |
| 20 | 26.0 | 24.0 | 25.0 | 27.5 | 24.5 | 26.0 | 28.0 | 25.5 | 26.5 | 21.5 | 20.5 | 21.0 |
| 21 | 25.5 | 24.5 | 25.0 | 28.0 | 24.5 | 26.0 | 27.5 | 25.5 | 26.5 | 22.5 | 20.5 | 21.5 |
| 22 | 25.0 | 24.0 | 24.5 | 28.5 | 25.0 | 26.5 | 27.5 | 25.5 | 26.5 | 22.5 | 21.5 | 22.0 |
| 23 | 24.5 | 22.5 | 24.0 | --- | --- | --- | 27.0 | 25.5 | 26.0 | 23.5 | 22.0 | 22.5 |
| 24 | 23.0 | 22.0 | 22.5 | 30.0 | 27.0 | 28.5 | --- | --- | --- | 23.0 | 22.0 | 22.5 |
| 25 | 24.5 | 22.0 | 23.0 | 30.5 | 28.0 | 29.5 | 27.0 | 25.0 | 26.0 | 22.5 | 21.0 | 22.0 |
| 26 | 25.0 | 23.0 | 24.0 | 29.5 | 26.5 | 28.0 | 27.0 | 24.0 | 25.5 | 21.0 | 19.0 | 20.0 |
| 27 | 26.5 | 24.5 | 25.5 | 27.0 | 25.0 | 26.0 | 27.0 | 25.0 | 26.0 | 19.0 | 17.5 | 18.5 |
| 28 | 27.5 | 25.5 | 26.5 | 26.5 | 24.5 | 25.5 | 27.5 | 25.5 | 26.5 | 17.5 | 16.5 | 17.0 |
| 29 | 28.5 | 26.0 | 27.0 | 25.0 | 24.0 | 24.5 | 27.0 | 25.0 | 26.5 | 17.0 | 16.0 | 16.5 |
| 30 | 29.0 | 26.5 | 28.0 | 25.0 | 23.5 | 24.5 | 26.5 | 25.0 | 25.5 | 16.0 | 15.0 | 15.0 |
| 31 | --- | --- | --- | 27.0 | 23.5 | 25.0 | 27.0 | 24.5 | 25.5 | --- | --- | --- |
| MONTH | 29.0 | 16.5 | 22.7 | 30.5 | 22.5 | 25.5 | 32.0 | 24.0 | 26.9 | 26.5 | 15.0 | 22.0 |
| YEAR | 32.0 | .0 | 13.3 | | | | | | | | | |

DELAWARE RIVER BASIN

399

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 20

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|----------|------|------|----------|------|------|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 2.4 | <2.0 | <2.0 | 5.5 | <2.0 | <2.0 | 2.9 | <2.0 | 2.0 | 3.6 | 2.1 | 2.5 |
| 2 | 10 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | <2.0 | <2.0 | 3.7 | <2.0 | 2.1 |
| 3 | 5.4 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| 4 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.4 | <2.0 | <2.0 |
| 5 | 2.3 | <2.0 | <2.0 | 2.1 | <2.0 | <2.0 | 2.6 | <2.0 | <2.0 | 5.9 | <2.0 | 2.3 |
| 6 | 2.2 | <2.0 | <2.0 | 2.8 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.6 | <2.0 | <2.0 |
| 7 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.2 | <2.0 | <2.0 | 8.0 | <2.0 | <2.0 |
| 8 | 2.1 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | <2.0 | <2.0 | --- | --- | --- |
| 9 | 2.5 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.9 | <2.0 | <2.0 |
| 10 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| 11 | <2.0 | <2.0 | <2.0 | 2.2 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| 12 | <2.0 | <2.0 | <2.0 | 2.5 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 4.1 | <2.0 | <2.0 |
| 13 | --- | --- | --- | 7.0 | 2.1 | 4.1 | 2.7 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| 14 | 3.5 | <2.0 | <2.0 | 4.1 | 2.3 | 3.0 | 3.8 | <2.0 | <2.0 | 2.0 | <2.0 | <2.0 |
| 15 | 3.3 | <2.0 | <2.0 | 3.4 | <2.0 | 2.4 | 4.2 | 2.5 | 3.1 | <2.0 | <2.0 | <2.0 |
| 16 | 3.2 | <2.0 | <2.0 | 2.6 | <2.0 | <2.0 | 4.4 | 2.0 | 2.9 | <2.0 | <2.0 | <2.0 |
| 17 | <2.0 | <2.0 | <2.0 | 3.3 | <2.0 | 2.0 | 460 | <2.0 | 120 | <2.0 | <2.0 | <2.0 |
| 18 | 2.0 | <2.0 | <2.0 | 2.6 | <2.0 | <2.0 | 320 | 61 | 170 | 2.1 | <2.0 | <2.0 |
| 19 | 2.2 | <2.0 | <2.0 | 2.1 | <2.0 | <2.0 | 230 | 76 | 100 | 15 | <2.0 | 2.3 |
| 20 | 4.2 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 120 | 37 | 79 | 19 | 10 | 15 |
| 21 | 4.8 | 2.3 | 3.3 | <2.0 | <2.0 | <2.0 | 47 | 22 | 29 | 10 | 6.4 | 7.6 |
| 22 | 2.6 | <2.0 | 2.0 | 2.1 | <2.0 | <2.0 | 23 | 18 | 20 | 7.0 | 3.3 | 4.9 |
| 23 | 3.3 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 27 | 16 | 19 | 4.0 | 2.6 | 3.0 |
| 24 | 2.5 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 22 | 14 | 15 | 3.6 | <2.0 | 2.4 |
| 25 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 19 | 12 | 14 | 2.3 | <2.0 | <2.0 |
| 26 | <2.0 | <2.0 | <2.0 | 6.0 | <2.0 | <2.0 | 14 | 11 | 12 | <2.0 | <2.0 | <2.0 |
| 27 | 4.3 | <2.0 | 2.3 | 10 | 3.7 | 6.8 | 12 | 10 | 11 | <2.0 | <2.0 | <2.0 |
| 28 | 4.8 | <2.0 | 2.3 | 5.8 | 2.0 | 2.8 | 12 | 10 | 11 | <2.0 | <2.0 | <2.0 |
| 29 | <2.0 | <2.0 | <2.0 | 3.6 | <2.0 | 2.3 | --- | --- | --- | 2.4 | <2.0 | <2.0 |
| 30 | <2.0 | <2.0 | <2.0 | 3.2 | <2.0 | 2.4 | 4.2 | 2.1 | 2.8 | 27 | <2.0 | 5.0 |
| 31 | <2.0 | <2.0 | <2.0 | --- | --- | --- | 28 | 2.1 | 3.7 | 60 | 9.4 | 26 |
| MONTH | 10 | <2.0 | <2.0 | 10 | <2.0 | <2.0 | 460 | <2.0 | 21 | 60 | <2.0 | 3.2 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 10 | 6.6 | 8.4 | 3.0 | <2.0 | 2.2 | 20 | 4.2 | 7.4 | 12 | <2.0 | <2.0 |
| 2 | 7.0 | 4.4 | 6.1 | 2.2 | <2.0 | <2.0 | 14 | 9.5 | 12 | 4.9 | <2.0 | <2.0 |
| 3 | 4.8 | 3.1 | 3.8 | 2.1 | <2.0 | <2.0 | 14 | 4.9 | 8.6 | 2.0 | <2.0 | <2.0 |
| 4 | 3.6 | 2.2 | 2.9 | 2.7 | <2.0 | <2.0 | 5.5 | 3.0 | 4.1 | 2.4 | <2.0 | <2.0 |
| 5 | 6.6 | <2.0 | 2.9 | 2.5 | <2.0 | <2.0 | 6.5 | 2.9 | 4.0 | 3.6 | <2.0 | 2.0 |
| 6 | 5.6 | 2.3 | 3.1 | --- | --- | --- | 5.2 | 2.0 | 3.0 | --- | --- | --- |
| 7 | 3.1 | 2.0 | 2.4 | <2.0 | <2.0 | <2.0 | 7.3 | 2.3 | 4.0 | --- | --- | --- |
| 8 | 3.0 | <2.0 | 2.2 | 2.0 | <2.0 | <2.0 | 7.3 | 2.5 | 4.2 | --- | --- | --- |
| 9 | 3.0 | <2.0 | 2.0 | 2.6 | <2.0 | <2.0 | 8.1 | 2.9 | 4.4 | --- | --- | --- |
| 10 | 51 | <2.0 | 16 | 3.2 | <2.0 | 2.4 | 49 | 3.9 | 9.9 | --- | --- | --- |
| 11 | 40 | 5.7 | 15 | 2.8 | <2.0 | 2.4 | 1300 | 14 | 110 | --- | --- | --- |
| 12 | 6.1 | 3.1 | 5.1 | 2.7 | <2.0 | 2.1 | 31 | 18 | 23 | --- | --- | --- |
| 13 | 3.8 | 2.3 | 2.9 | 33 | <2.0 | 14 | 26 | 14 | 19 | --- | --- | --- |
| 14 | 2.6 | <2.0 | 2.1 | 24 | 11 | 15 | 19 | 7.6 | 11 | --- | --- | --- |
| 15 | 3.5 | <2.0 | 2.3 | 13 | 4.1 | 8.6 | 14 | 8.1 | 11 | --- | --- | --- |
| 16 | 3.5 | 2.1 | 2.6 | 6.1 | 2.6 | 3.9 | 11 | 4.7 | 6.6 | --- | --- | --- |
| 17 | 6.3 | 2.4 | 4.1 | 5.0 | 3.1 | 3.8 | 8.0 | 4.2 | 6.1 | --- | --- | --- |
| 18 | 5.4 | 3.4 | 4.3 | 7.4 | 3.8 | 4.8 | 7.9 | 2.5 | 3.6 | --- | --- | --- |
| 19 | 3.7 | 2.6 | 3.2 | 8.6 | 5.5 | 6.7 | 9.5 | <2.0 | 4.2 | 4.9 | <2.0 | 2.2 |
| 20 | 3.4 | 2.1 | 2.5 | 8.7 | 4.5 | 5.7 | 7.3 | <2.0 | 3.0 | 3.4 | <2.0 | <2.0 |
| 21 | 3.1 | <2.0 | 2.1 | 8.8 | 5.6 | 7.5 | 5.1 | <2.0 | 2.8 | 2.2 | <2.0 | <2.0 |
| 22 | 2.1 | <2.0 | <2.0 | 24 | 7.9 | 16 | 3.8 | <2.0 | 2.5 | 6.2 | <2.0 | 2.4 |
| 23 | 2.8 | <2.0 | <2.0 | 9.6 | 4.9 | 6.8 | 4.7 | <2.0 | 2.4 | 5.7 | 3.8 | 4.7 |
| 24 | <2.0 | <2.0 | <2.0 | 19 | 4.0 | 6.9 | 3.8 | <2.0 | <2.0 | 5.7 | <2.0 | 3.9 |
| 25 | <2.0 | <2.0 | <2.0 | 23 | 5.9 | 9.5 | 2.3 | <2.0 | <2.0 | 5.3 | <2.0 | 3.5 |
| 26 | 4.8 | <2.0 | 3.0 | 12 | 5.1 | 8.6 | 2.1 | <2.0 | <2.0 | 4.4 | <2.0 | <2.0 |
| 27 | 4.6 | 3.0 | 3.7 | 10 | 7.2 | 8.5 | 4.3 | <2.0 | 2.7 | 21 | 2.4 | 8.9 |
| 28 | 3.6 | 2.5 | 3.1 | 8.2 | 2.9 | 5.1 | 5.9 | 2.0 | 2.9 | 34 | 11 | 20 |
| 29 | --- | --- | --- | 11 | 3.1 | 4.6 | 3.9 | <2.0 | 2.8 | 25 | 5.9 | 11 |
| 30 | --- | --- | --- | 28 | 3.6 | 7.0 | 53 | <2.0 | 5.5 | 28 | 6.0 | 13 |
| 31 | --- | --- | --- | 9.7 | 5.1 | 7.0 | --- | --- | --- | 10 | 2.2 | 5.4 |
| MONTH | 51 | <2.0 | 4.0 | 33 | <2.0 | 5.7 | 1300 | <2.0 | 9.5 | 34 | <2.0 | 4.9 |

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

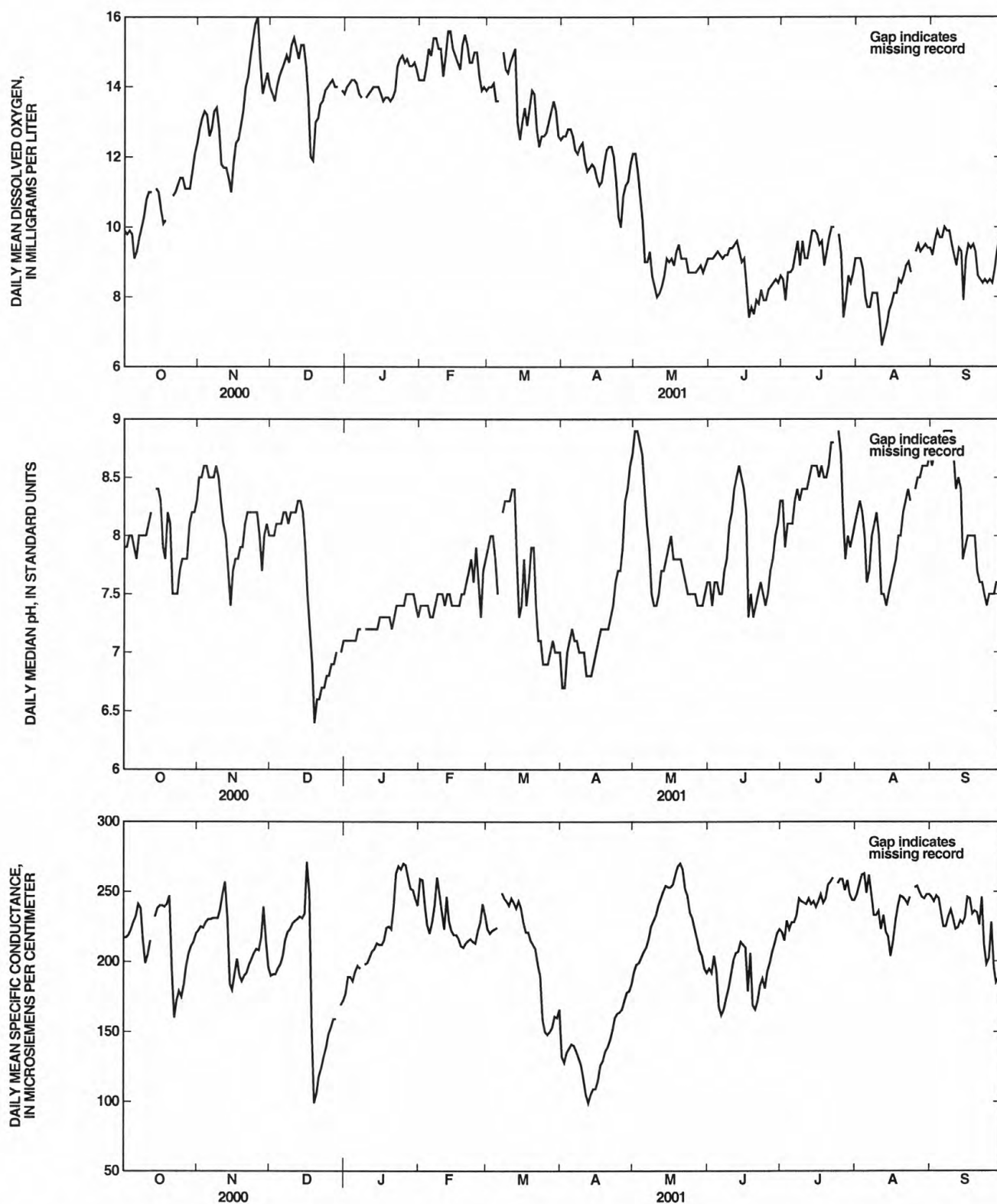


Figure 51. Physical characteristics and concentrations of constituents measured at 01463500 Delaware River at Trenton, water year 2001.

DELAWARE RIVER BASIN
01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

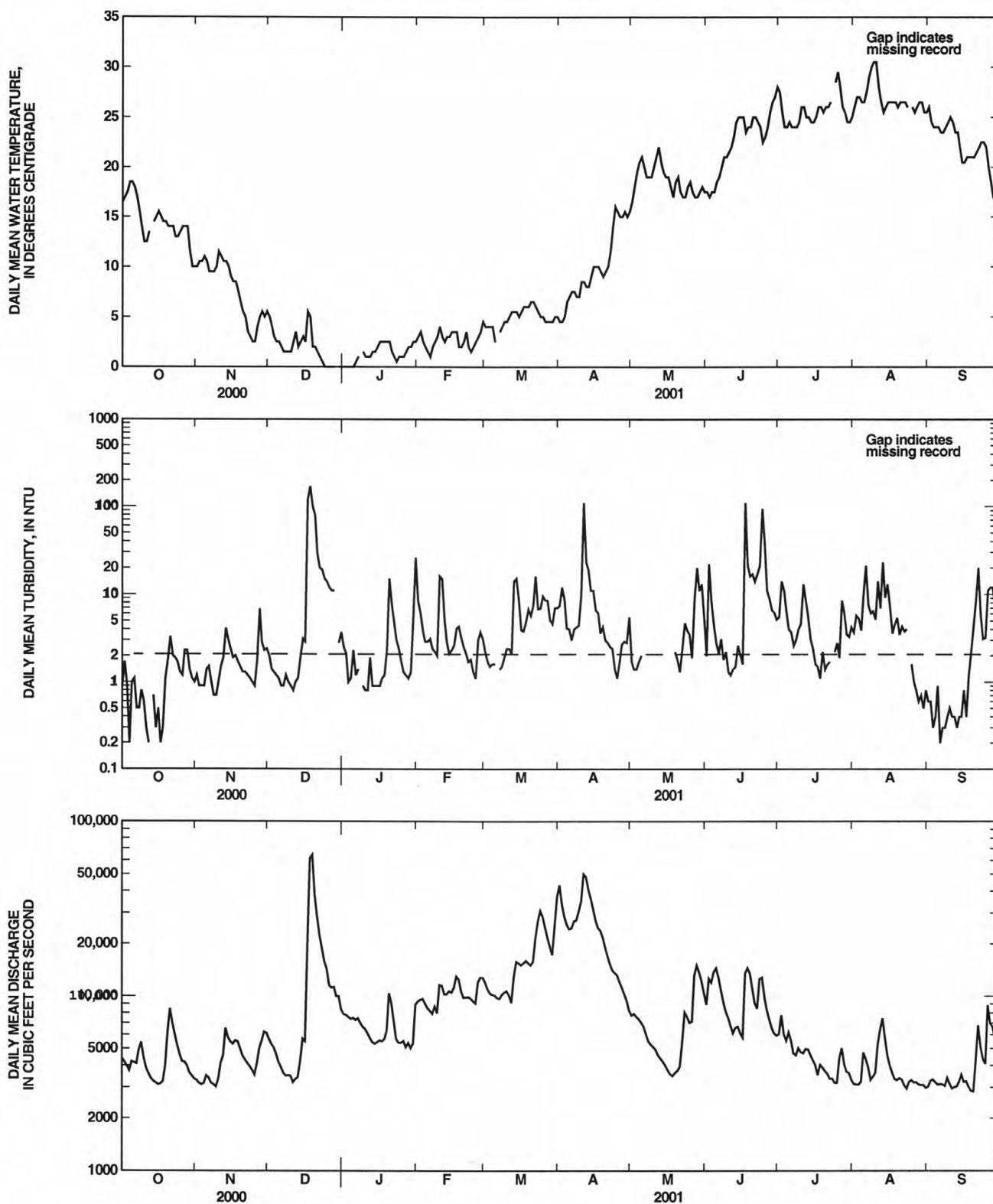


Figure 51. Physical characteristics and concentrations of constituents measured at 01463500 Delaware River at Trenton--continued. [--- instrument detection level; turbidity values less than 2.0 NTU are approximate]

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

Cross section of specific conductance, pH, water temperature, turbidity, and dissolved oxygen concentration measurements from the Calhoun Street Bridge (distance from left bank looking downstream); and recorded hourly specific conductance, pH, water temperature, turbidity, and dissolved oxygen concentration measurements from the water-quality monitor at the Morrisville Water Filtration Plant, Morrisville, PA.

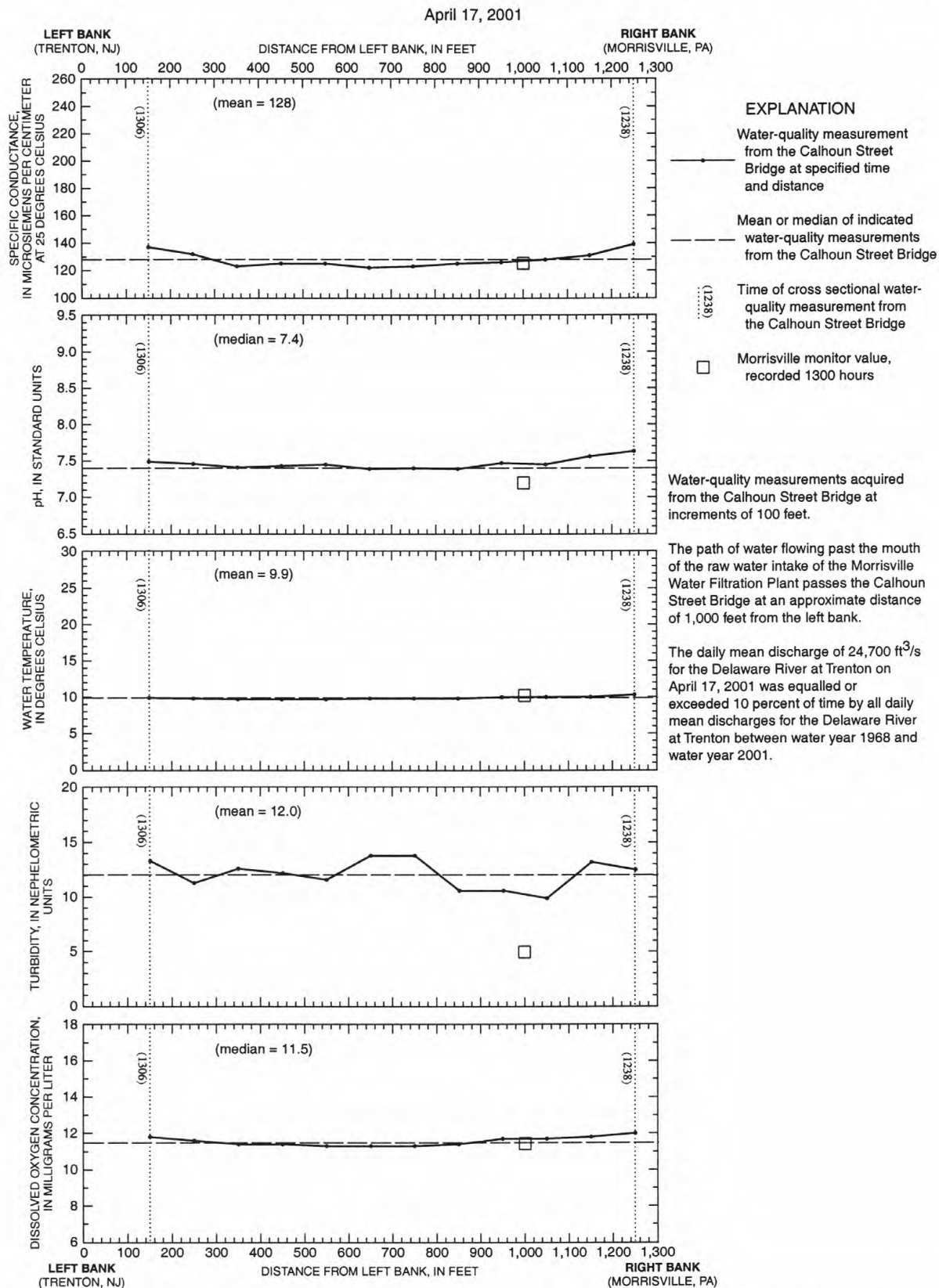


Figure 52. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, April 17, 2001.

DELAWARE RIVER BASIN

01463500 DELAWARE RIVER AT TRENTON, NJ--Continued

Cross section of specific conductance, pH, water temperature, turbidity, and dissolved oxygen concentration measurements from the Calhoun Street Bridge (distance from left bank looking downstream); and recorded hourly specific conductance, pH, water temperature, turbidity, and dissolved oxygen concentration measurements from the water-quality monitor at the Morrisville Water Filtration Plant, Morrisville, PA.

September 13, 2001

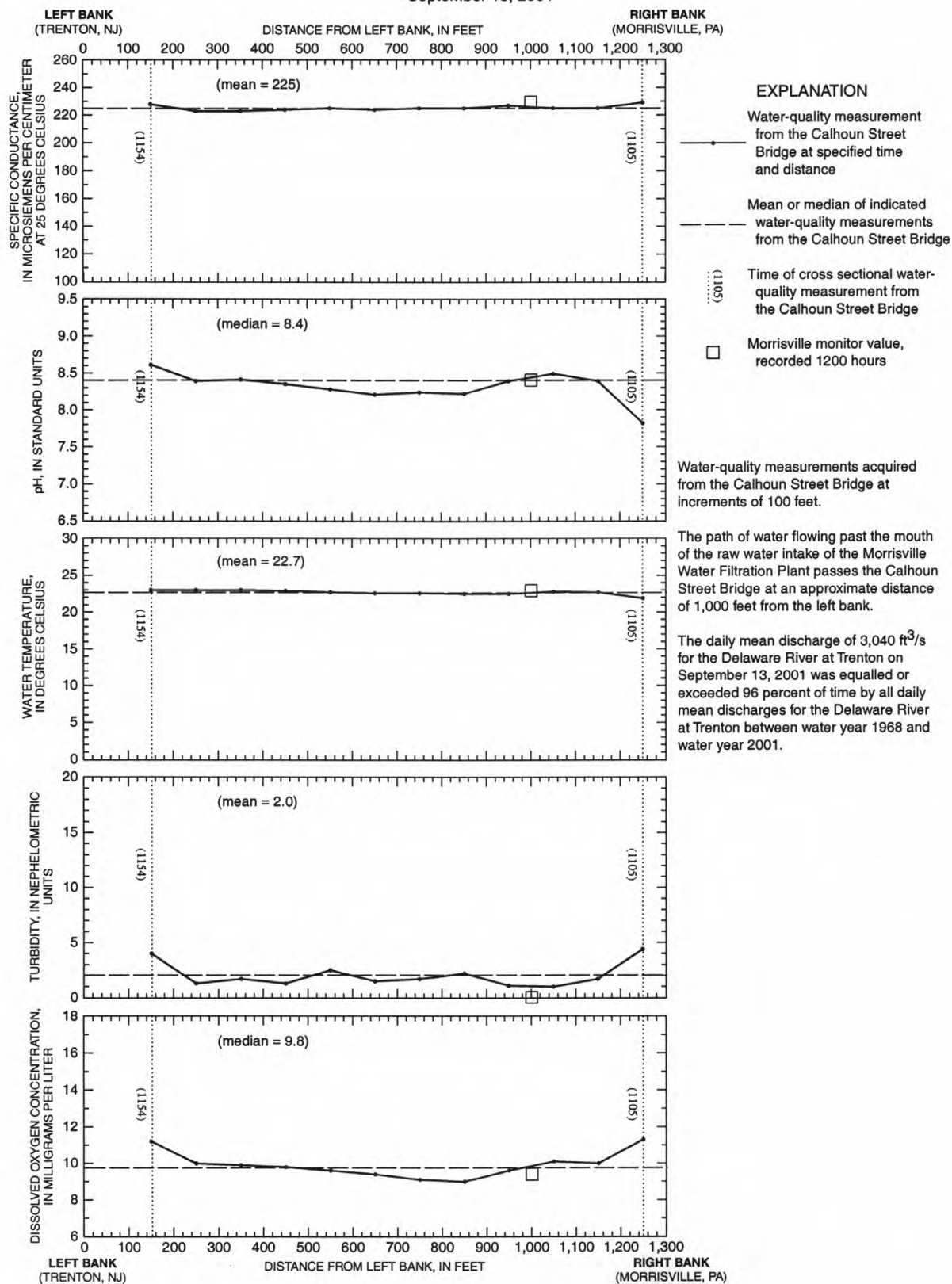


Figure 53. Cross sectional water-quality measurements with recorded monitor values, at Delaware River at Trenton, September 13, 2001.

01463850 MIRY RUN AT ROUTE 533, AT MERCERVILLE, NJ

LOCATION.--Lat 40°14'50", long 74°41'14", Mercer County, Hydrologic Unit 02040105, at bridge on County Route 533 (Quaker Bridge Road), 0.7 mi north of Mercerville, 2.1 mi upstream of Assunpink Creek, and 3.8 mi northwest of Robbinsville.

DRAINAGE AREA.--10.7 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTDR (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|--|--|---|---|---|---|--|--|--|---|---|---|--|
| NOV 13... | 0810 | 2.3 | -- | .154 | .120 | 760 | 59 | 6.6 | 6.7 | 179 | 8.5 | 10.5 | 45 | |
| FEB 15... | 0840 | 7.7 | -- | .146 | .114 | 757 | 89 | 11.1 | 6.8 | 269 | 7.5 | 5.5 | 47 | |
| MAY 16... | 1130 | .78 | 6.1 | -- | -- | 762 | 53 | 5.5 | 6.2 | 194 | 20.0 | 14.0 | 43 | |
| AUG 13... | 1410 | 2.9 | 7.8 | .256 | .197 | 760 | 60 | 5.0 | 6.5 | 152 | 27.0 | 24.5 | 31 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTDR TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| NOV 13... | 10.5 | 4.58 | 4.04 | 12.4 | 23 | 21.3 | .2 | 2.8 | 18.3 | 101 | 92 | .040 | .38 | |
| FEB 15... | 11.9 | 4.22 | 2.51 | 29.0 | 18 | 50.5 | <.2 | 6.1 | 18.4 | 151 | 139 | .060 | .30 | |
| MAY 16... | 10.3 | 4.29 | 2.85 | 13.8 | 17 | 26.9 | <.2 | 7.2 | 15.1 | 130 | 102 | .110 | .28 | |
| AUG 13... | 6.53 | 3.53 | 3.06 | 13.0 | 15 | 24.0 | E.1 | 2.6 | 11.4 | 90 | 75 | .160 | .69 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 13... | .08 | .52 | 1.02 | .010 | 1.4 | 1.5 | .084 | .009 | .035 | .5 | <.1 | 4.6 | .5 | |
| FEB 15... | .07 | .38 | 1.34 | .003 | 1.6 | 1.7 | .112 | .010 | .038 | .8 | <.1 | 3.9 | .8 | |
| MAY 16... | .10 | .40 | 2.49 | .026 | 2.8 | 2.9 | .144 | .004 | .032 | .8 | <.1 | 2.2 | .8 | |
| AUG 13... | .20 | .75 | .514 | .013 | 1.2 | 1.3 | .117 | .021 | .081 | .8 | <.1 | 6.1 | .8 | |
| | | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | | | | | | | | | | | | |
| | | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | | | | | | | | | | | | |
| | | BORON, DIS-SOLVED (UG/L AS B) (01020) | | | | | | | | | | | | |
| | | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | | | | | | | | |
| NOV 13... | | 2.6 | | | | | | | | | | | | |
| FEB 15... | | E1.4 | | | | | | | | | | | | |
| MAY 16... | | <1.0 | | | | | | | | | | | | |
| AUG 13... | | E1.6 | | | | | | | | | | | | |
| | | 13.9 | | | | | | | | | | | | |
| | | 29 | | | | | | | | | | | | |
| | | 1 | | | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01463850 MIRY RUN AT ROUTE 533, AT MERCERVILLE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 1019 | 1300 | 700 | 2100 | 05... | 1002 | 170 | 200 | 650 |
| 30... | 1025 | 490 | 500 | 550 | 11... | 0934 | 1100 | 900 | 410 |

01463850 MIRY RUN AT ROUTE 533, AT MERCERVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

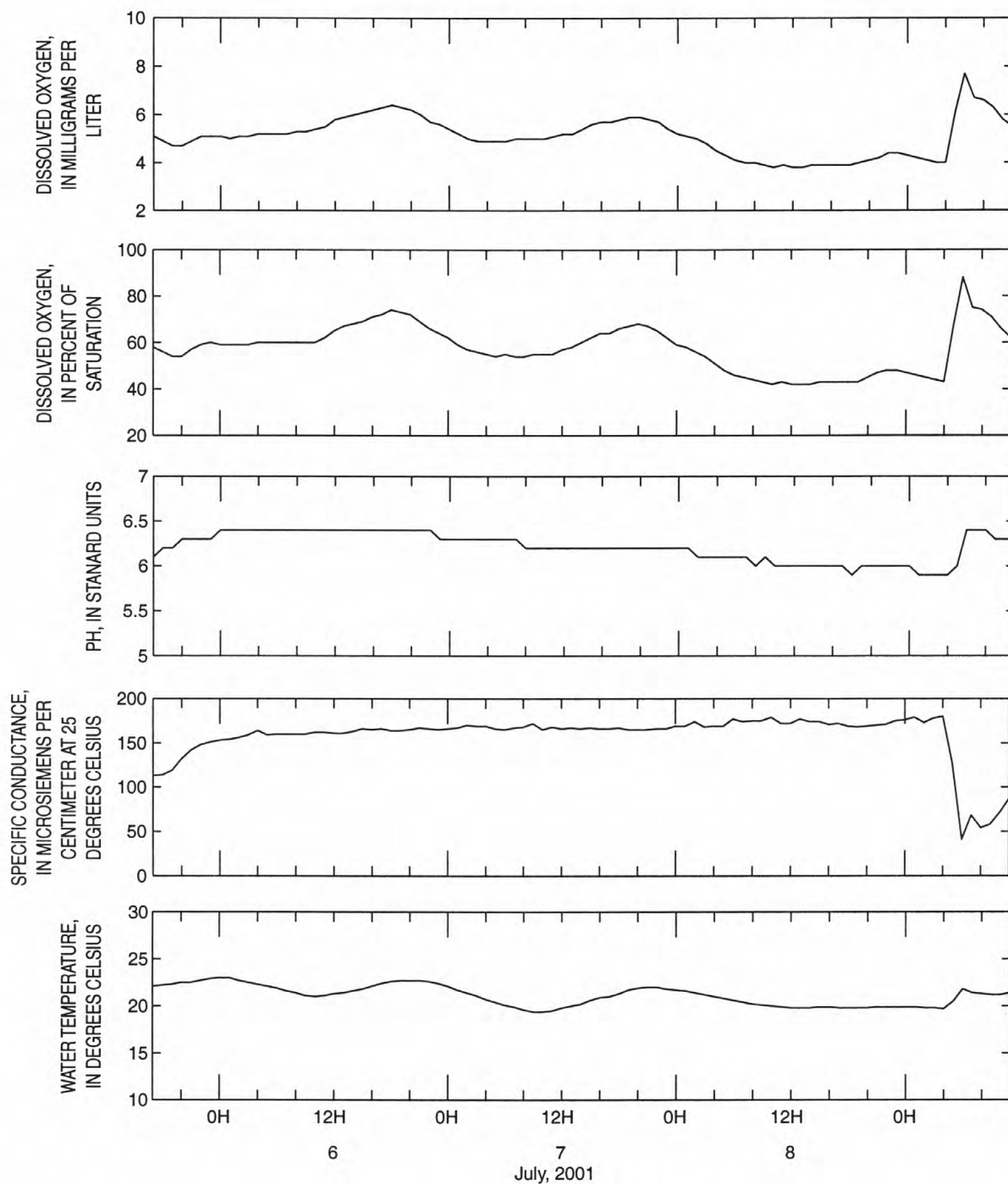


Figure 54. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01463850 Miry Run at Route 533 at Mercerville, water year 2001.

DELAWARE RIVER BASIN

01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, NJ

LOCATION.--Lat 40°13'02", long 74°46'08", Mercer County, Hydrologic Unit 02040105, at bridge on Peace Street in Trenton, 0.3 mi northwest of Trent House, and 0.7 mi southeast of Trenton Filtration Plant.

DRAINAGE AREA.--91.4 mi².

PERIOD OF RECORD.--Water years 1963, 1976-78, 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) |
|-----------|------|---|---|---|---|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 13... | 1140 | 74 | -- | .125 | .096 | 761 | 89 | 9.6 | 7.4 | 306 | -- | 12.0 | 91 |
| FEB 15... | 1150 | 228 | -- | .113 | .087 | 761 | 95 | 11.8 | 7.5 | 330 | 9.0 | 6.0 | 74 |
| MAY 21... | 0830 | 40 | 15 | .171 | .127 | 766 | 74 | 7.3 | 7.3 | 411 | 13.0 | 16.0 | 110 |
| AUG 06... | 1120 | 39 | 33 | .132 | .099 | 766 | 83 | 7.0 | 7.0 | 412 | 30.5 | 24.0 | 100 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C TENTS, DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|--|---|---|--|
| NOV 13... | 19.3 | 10.5 | 3.90 | 20.1 | 56 | 32.6 | .2 | 5.5 | 25.1 | 175 | 166 | .110 | .61 |
| FEB 15... | 18.2 | 6.89 | 2.98 | 29.6 | 34 | 55.1 | E.1 | 9.1 | 24.7 | 188 | 179 | .170 | .48 |
| MAY 21... | 26.5 | 9.94 | 5.05 | 32.0 | 53 | 50.8 | .3 | 8.4 | 33.7 | 238 | 223 | .180 | .88 |
| AUG 06... | 25.4 | 9.38 | 4.89 | 36.2 | 56 | 56.1 | .3 | 8.2 | 32.5 | 222 | 227 | .220 | .76 |

| DATE | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|---|---|---|--|--------------------------------------|--|--|---------------------------------------|---|---|--|--|
| NOV 13... | .10 | .82 | 3.29 | .010 | 3.9 | 4.1 | .148 | .421 | .532 | 1.0 | <.1 | 4.5 | 1.0 |
| FEB 15... | .14 | .58 | 2.61 | .009 | 3.1 | 3.2 | .178 | .139 | .221 | 1.2 | <.1 | 3.4 | 1.2 |
| MAY 21... | .22 | 1.1 | 5.60 | .068 | 6.5 | 6.7 | .228 | .747 | .814 | 1.9 | <.1 | 6.2 | 1.9 |
| AUG 06... | .21 | .88 | 4.64 | .039 | 5.4 | 5.5 | .144 | .855 | .892 | 1.1 | <.1 | 4.2 | 1.0 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|----|
| NOV 13... | 2.7 | -- | 77 | 3 |
| FEB 15... | 2.1 | -- | 36 | 13 |
| MAY 21... | 3.4 | 2.90 | 104 | 5 |
| AUG 06... | E1.8 | 6.80 | 100 | 15 |

E Estimated value.

< Actual value is known to be less than the value shown.

01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|
|------|------|--|--|--|--|--|---|--|--|--|--|--|--|

| | | | | | | | | | | | | | | |
|-----|-------|------|----|-----|------|-----|-----|----|------|-----|---|----|------|---|
| AUG | 10... | 0920 | 19 | <.7 | <.06 | 135 | .12 | <1 | 11.2 | <10 | 1 | <3 | <.01 | 3 |
|-----|-------|------|----|-----|------|-----|-----|----|------|-----|---|----|------|---|

| DATE | SELE- NIUM, TOTAL (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|--------------|---|--|--|
| AUG 10... | <.4 | .16 | 18 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|
|------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|

| | | | | | | | | | | | | | | |
|-----|-------|------|------|------|------|-----|------|------|------|------|------|------|------|------|
| FEB | 15... | 1150 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
|-----|-------|------|------|------|------|-----|------|------|------|------|------|------|------|------|

| DATE | TIME | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER REC (UG/L) (78032) |
|------|------|--|---|---|---|---|---|---|--|---|---|---|---|---|
|------|------|--|---|---|---|---|---|---|--|---|---|---|---|---|

| | | | | | | | | | | | | | | |
|-----|-------|------|-----|------|------|-----|-----|-----|-----|------|-----|------|------|----|
| FEB | 15... | <.10 | <.2 | 1.02 | <.10 | .39 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | .5 |
|-----|-------|------|-----|------|------|-----|-----|-----|-----|------|-----|------|------|----|

| DATE | TIME | METHYL ENE CHLOR- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLOR- RIDE TOTAL (UG/L) (39175) |
|------|-------|---|--|--|---------------------------------------|--|---------------------------------------|--|---|---|
| FEB | 15... | <.2 | <.20 | <.10 | <.10 | .3 | <.10 | <.10 | <.20 | <.2 |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| | | 2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660) | ACETO-CHLOR- WATER FLTRD REC (UG/L) (49260) | ALA-CHLOR- WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA-ZINE, WATER, DISS, REC (UG/L) (39632) | BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR-PYRIFOS DIS- SOLVED (UG/L) (38933) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DI-AZINON, DIS- SOLVED (UG/L) (39572) | DI-ELDRIN DIS- SOLVED (UG/L) (39381) |
|-----------|------|---|---|---|---|--|--|---|---|---|--|--|---|
| DATE | TIME | | | | | | | | | | | | |
| MAY 21... | 0830 | <.002 | <.004 | <.002 | <.005 | .068 | <.010 | E.019 | <.020 | <.005 | <.003 | <.005 | <.005 |

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01464020 ASSUNPINK CREEK AT PEACE STREET, AT TRENTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663) | ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667) | METO- LACHLOR WATER FLTRD 0.7 U DISSOLV (UG/L) (39415) | METRI- BUZIN WATER FLTRD 0.7 U DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) |
|--------------|--|---|---|---|--|---|---|---|--|---|--|--|---|
| MAY 21... | <.021 | <.002 | <.009 | <.005 | <.004 | <.035 | <.027 | <.050 | <.006 | .046 | <.006 | <.002 | <.007 |
| DATE | P, P' DDE DISSOLV (UG/L) (34653) | PARA- THION, DIS- SOLVED (UG/L) (39542) | PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687) | PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664) | PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676) | PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679) | PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) |
| MAY 21... | <.003 | <.007 | <.002 | <.010 | <.006 | <.011 | <.004 | <.011 | <.023 | <.016 | <.034 | <.017 | <.005 |
| DATE | | | | | | TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | |
| MAY 21... | | | | | | <.002 | <.009 | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| MAY 23... | 1143 | >24000 | 8200 | 2300 | JUN 05... | 1115 | 16 | 4200 | 4000 |
| 30... | 0950 | >24000 | 17000 | 3500 | 11... | 1113 | 16000 | 17000 | 5600 |

E Estimated value.

< Actual value is known to be less than the value shown.

> Actual value is known to be greater than the value shown.

DELAWARE RIVER BASIN

411

01464380 NORTH RUN AT COOKSTOWN, NJ

LOCATION.--Lat 40°02'58", long 74°33'47", Burlington County, Hydrologic Unit 02040201, at bridge on Main Street (County Route 528) in New Egypt, 0.1 mi south of intersection of Main Street, Cookstown-New Egypt Road, and Meany Road, and 1.0 mi upstream from Oakford Lake.

DRAINAGE AREA.--7.28 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

REMARKS.--For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | TUR- BID- ITY | UV ABSORB- ANCE | UV ABSORB- ANCE | BARO- METRIC PRES- SURE | OXYGEN, DIS- SOLVED | OXYGEN, DIS- SOLVED (MG/L) | PH | SPE- CIFIC CON- DUCT- ANCE (US/CM) | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | | |
|--------------|--|---|---|--|--|--|--|--|--|--|---|--|--|------|
| | | | FIELD WATER | 254 NM, WTR FLT | 280 NM, WTR FLT | SURE (MM OF HG) | (PER- CENT SATUR- ATION) | | FIELD (STAND- ARD UNITS) | | | | | |
| | | | UNFLTRD (NTU) (61028) | (UNITS (50624) | (UNITS (61726) | | | | | | | | | |
| NOV 30... | 1030 | ENVIRONMENTAL | -- | .106 | .084 | 759 | 97 | 11.7 | 7.1 | 199 | 5.0 | 7.0 | | |
| FEB 22... | 0930 | ENVIRONMENTAL | -- | .075 | .063 | 775 | 86 | 12.1 | 7.2 | 247 | -1.0 | 2.0 | | |
| MAY 22... | 0930 | ENVIRONMENTAL | 48 | .208 | .166 | 757 | 76 | 7.7 | 7.1 | 233 | 16.8 | 14.5 | | |
| AUG 28... | 0900 | ENVIRONMENTAL | 13 | .125 | .102 | 759 | 67 | 6.1 | 7.1 | 255 | 24.0 | 20.0 | | |
| DATE | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | |
| | NOV 30... | 61 | 17.8 | 3.88 | 3.61 | 9.7 | 26 | 17.6 | E.1 | 10.3 | 30.1 | 111 | 111 | .100 |
| | FEB 22... | 74 | 22.1 | 4.66 | 3.08 | 11.7 | 28 | 23.5 | E.1 | 11.7 | 40.6 | 148 | 136 | .100 |
| MAY 22... | 69 | 20.8 | 4.20 | 3.90 | 13.3 | 36 | 24.1 | .2 | 9.9 | 27.9 | 146 | 127 | .210 | |
| AUG 28... | 83 | 26.1 | 4.31 | 4.82 | 12.9 | 48 | 25.0 | .3 | 13.3 | 32.1 | 163 | 148 | <.030 | |
| DATE | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, PAR- TICULATE WAT FLT (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | | |
| | NOV 30... | .33 | .11 | .34 | .364 | .006 | .69 | .70 | .072 | .006 | .056 | 1.0 | <.1 | 2.9 |
| | FEB 22... | .19 | .10 | .26 | .437 | <.003 | .63 | .69 | .030 | .005 | .037 | .6 | <.1 | 1.6 |
| MAY 22... | .54 | .22 | .98 | .319 | .027 | .85 | 1.3 | .426 | .007 | .241 | 4.2 | <.1 | 4.8 | |
| AUG 28... | .23 | .03 | .24 | E.195 | .003 | -- | -- | .052 | .012 | .057 | .5 | <.1 | 2.8 | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01464380 NORTH RUN AT COOKSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | | | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|-------|--|--|--|---|---|---|--|
| NOV | | | | | | | |
| 30... | | | 1.0 | E2.1 | -- | 24 | 4 |
| FEB | | | | | | | |
| 22... | | | .6 | 2.0 | -- | 31 | 8 |
| MAY | | | | | | | |
| 22... | | | 4.1 | 3.0 | 33.1 | 35 | 43 |
| AUG | | | | | | | |
| 28... | | | .5 | <1.0 | .800 | 44 | 27 |

| DATE | TIME | SAMPLE TYPE | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) |
|-------|------|----------------|---|---|--|---|---|--|--|--|--|--|
| AUG | | | | | | | | | | | | |
| 28... | 0815 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | 0900 | ENVIRONMENTAL | -- | -- | -- | -- | -- | -- | <2 | 46.1 | .11 | 42 |
| 28... | 0900 | BED MATERIAL | 6.90 | 60 | .6 | 460 | 1.3 | <.2 | -- | -- | -- | -- |

| DATE | TIME | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY DIS- SOLVED (UG/L AS HG) (71890) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL (UG/L AS SE) (01147) |
|-------|------|--|---|---|--|--|---|--|--|---|--|---|--|---|
| AUG | | | | | | | | | | | | | | |
| 28... | -- | -- | -- | <.2 | -- | -- | <.08 | -- | -- | <.01 | -- | <.06 | -- | -- |
| 28... | .05 | <1 | -- | E.5 | 1760 | -- | <1 | 41 | -- | <.01 | -- | 3 | <.4 | -- |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | TIME | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) | COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, FM BOT- TOM MA- TERIAL (UG/G AS FE) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (01053) | MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) |
|-------|------|--|---|--|--|---|--|---|---|--|---|---|---|---|
| AUG | | | | | | | | | | | | | | |
| 28... | -- | <1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | <.05 | -- | 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | -- | -- | -- | <1 | .2 | 30 | .8 | <3 | 12000 | 4.2 | 9.5 | <.01 | 3.2 | -- |

| DATE | TIME | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AG) (01148) | ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG AS ZN) (49411) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG AS ZN) (49398) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG AS ZN) (49399) | ACENAPH- THENE SED, BM WS, <2MM DW, REC (UG/KG AS ZN) (49429) | ACENAPH- THYLENE SED, BM WS, <2MM DW, REC (UG/KG AS ZN) (49428) | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG AS ZN) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG AS ZN) (49434) | BENZ (A) CENE SED, BM WS, <2MM DW, REC (UG/KG AS ZN) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG AS ZN) (49389) | BENZO FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG AS ZN) (49458) | BENZO (G HI) PERY LENE SED, BM WS, <2MM DW, REC (UG/KG AS ZN) (49408) |
|-------|------|---|---|---|---|---|--|--|---|--|---|---|---|---|
| AUG | | | | | | | | | | | | | | |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | <1 | 30 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | M | <50 | M | <50 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

413

01464380 NORTH RUN AT COOKSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS, <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403) | NAPTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) |
|-------|--|---|---|---|--|--|---|---|--|---|--|---|--|
| AUG | | | | | | | | | | | | | |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | M | M | <50 | M | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | E4 |
| | | | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | | BED MAT. FALL DIAM. % FINER THAN .004 MM (80157) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) | | | |
| AUG | | | | | | | | | | | | | |
| 28... | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 28... | | | <50 | <50 | <50 | <50 | <50 | M | <1 | <1 | | | |
| | | | | | | | | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | | | | | | |
| FEB | | | | | | | | | | | | | |
| 22... | 0930 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | .23 | <.20 | <.20 |
| | | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
| DATE | | | | | | | | | | | | | |
| FEB | | | | | | | | | | | | | |
| 22... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | 1.1 |
| | | | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34010) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | | |
| FEB | | | | | | | | | | | | | |
| 22... | | | <.2 | <.20 | <.10 | <.10 | <.1 | .43 | <.10 | <.20 | <.2 | | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

01464380 NORTH RUN AT COOKSTOWN, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|--------------|-------|---|---|--|---|---|---|--|--|--|---|--|---|---|
| | | | | | | | | | | | | | | |
| MAY 22... | 0930 | <.004 | <.002 | <.005 | .033 | <.010 | E.033 | <.020 | <.005 | <.018 | E.002 | <.006 | <.005 | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | | | | | | | | | | | | | |
| MAY 22... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .041 | <.006 | <.002 | .013 | <.003 | <.010 | E.005 | |
| DATE | TIME | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| | | | | | | | | | | | | | | |
| MAY 22... | | <.011 | <.016 | E.039 | <.005 | <.009 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| MAY 23... | 1015 | 700 | 440 | 100 | JUN 06... | 1050 | 110 | 400 | 110 |
| 30... | 1115 | 110 | 200 | 150 | 13... | 1105 | 460 | <100 | 410 |
| | | | | | 19... | 1110 | 630 | 900 | 330 |

E Estimated value.

< Actual value is known to be less than the value shown.

01464504 CROSSWICKS CREEK AT GROVEVILLE ROAD, AT GROVEVILLE, NJ

LOCATION.--Lat 40°10'02", long 74°40'40", Mercer County, Hydrologic Unit 02040201, at bridge on Groveville Road (Main Street) in Groveville, 1.2 mi upstream of Doctors Creek, and 2.2 mi northeast of Bordentown.

DRAINAGE AREA.--98.0 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Site is at head of tide, infrequently affected, but sampled at low tide.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator and Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|---------------------------------------|--|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| NOV 28... | 1120 | 245 | -- | .281 | .226 | 760 | 80 | 9.6 | 6.7 | 132 | 12.0 | 7.5 | 39 |
| MAR 08... | 1220 | 194 | -- | .133 | .104 | 761 | 89 | 11.5 | 7.1 | 240 | 9.0 | 4.5 | 49 |
| MAY 21... | 1130 | 52 | 9.5 | .200 | .161 | 766 | 85 | 8.6 | 7.3 | 209 | 13.0 | 15.0 | 66 |
| AUG 30... | 1030 | 51 | 17 | .218 | .175 | 764 | 86 | 7.6 | 7.2 | 174 | 26.0 | 21.5 | 53 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|---|
| NOV 28... | 11.6 | 2.45 | 3.92 | 5.6 | 14 | 12.3 | E.1 | 8.6 | 18.4 | 90 | -- | -- | .28 |
| MAR 08... | 14.2 | 3.36 | 2.45 | 21.0 | 16 | 38.6 | E.1 | 8.3 | 24.6 | 136 | 126 | .050 | .22 |
| MAY 21... | 19.8 | 3.93 | 3.10 | 10.2 | 31 | 20.7 | .2 | 9.7 | 25.8 | 141 | 117 | .060 | .32 |
| AUG 30... | 15.8 | 3.27 | 3.73 | 8.5 | 26 | 18.2 | .2 | 9.9 | 20.9 | 104 | 96 | .080 | E.31 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|--|---|---|--|-------------------------------------|---|--|---------------------------------------|---|---|--|--|
| NOV 28... | .04 | .50 | .481 | <.003 | .76 | .98 | .199 | .029 | .193 | 2.5 | <.1 | 6.6 | 2.5 |
| MAR 08... | .07 | .26 | .801 | <.003 | 1.0 | 1.1 | .154 | .013 | .084 | 1.2 | <.1 | 3.4 | 1.2 |
| MAY 21... | .08 | .47 | .960 | .022 | 1.3 | 1.4 | .066 | .024 | .105 | .6 | <.1 | 3.7 | .6 |
| AUG 30... | .06 | .33 | E.612 | .016 | -- | -- | .071 | .039 | .133 | .7 | <.1 | 3.9 | .7 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|--|--|---------------------------------------|--|
| NOV 28... | 3.7 | -- | 22 | 15 |
| MAR 08... | 2.3 | -- | 26 | 5 |
| MAY 21... | E1.8 | 2.10 | 29 | 3 |
| AUG 30... | E1.8 | 2.30 | 25 | 6 |

E Estimated value.

< Actual value is known to be less than the value shown.

01464504 CROSSWICKS CREEK AT GROVEVILLE ROAD, AT GROVEVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHROMIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | |
|--------------|------|---|---|---|---|---|--|---|---|--|--|--|---|---|
| | | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECov. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHROMIUM, RECov. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029) |
| AUG 30... | 1030 | -- | -- | -- | -- | -- | -- | E1 | 27.4 | <.06 | 30 | E.03 | <1 | |
| 30... | 1030 | 7.00 | 330 | .8 | 820 | 1.6 | 1.4 | -- | -- | -- | -- | -- | -- | |
| DATE | | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECov. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHROMIUM, RECov. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029) | COBALT, RECov. FM BOT- TOM MA- TERIAL (UG/G AS CR) (01038) |
| AUG 30... | 1.6 | 2030 | <1 | 41 | <.01 | 2 | <.4 | <.05 | 14 | -- | -- | -- | -- | |
| 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | .2 | 36 | 6.0 | |
| DATE | | COPPER, RECov. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170) | LEAD, RECov. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECov. FM BOT- TOM MA- TERIAL (UG/G AS MN) (01053) | MERCURY RECov. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECov. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G AS SE) (01148) | ZINC, RECov. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLUO- ORENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLUO- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) |
| AUG 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 30... | 6 | 33000 | 20 | 220 | .02 | 10 | <1 | 80 | E40 | M | E30 | E20 | E30 | |
| DATE | | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49450) | FLUOR- ANTHENE BED MAT WS <2MM REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPHTHAL ENE, 12 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49403) | |
| AUG 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 30... | E20 | 90 | 230 | 220 | 280 | 140 | 240 | 310 | E50 | 670 | 170 | <50 | <50 | |
| DATE | | NAPHTHAL ENE, 16 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPHTHAL ENE, 26 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPHTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | P- CRESEL, SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. FALL DIAM. % FINER THAN .004 MM (80157) |
| AUG 30... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 30... | M | <50 | E20 | M | M | E11 | 50 | E20 | 360 | <50 | E20 | 490 | 10 | |
| DATE | | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) | | | | | | | | | | | | |
| AUG 30... | -- | | | | | | | | | | | | | |
| 30... | 18 | | | | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

417

01464504 CROSSWICKS CREEK AT GROVEVILLE ROAD, AT GROVEVILLE, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1-TRI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHYL-ENE | 1,2-DI-CHLORO-ETHANE | 1,2-DI-CHLORO-PROPANE | TRANS-1,2-DI-CHLORO-ETHENE | BENZENE 1,3-DI-CHLORO-WATER | BENZENE 1,4-DI-CHLORO-WATER | BENZENE O-DI-CHLORO-WATER | BENZENE TOTAL (UG/L) (34030) | BROMO-FORM TOTAL (UG/L) (32104) | CARBON TETRA-CHLO-RIDE TOTAL (UG/L) (32102) | |
|-----------|------|-------------------------|----------------------|----------------------------|----------------------------|-----------------------------|---|-----------------------------------|--|--|------------------------------------|--|--|----------------|
| | | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (32103) | TOTAL (UG/L) (34541) | TOTAL (UG/L) (34546) | UNFLTRD REC (UG/L) (34566) | UNFLTRD REC (UG/L) (34571) | UNFLTRD REC (UG/L) (34536) | | | | |
| MAR 08... | 1220 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |
| DATE | TIME | CHLORO-DI-BROMO-METHANE | CHLORO-FORM | CIS-1,2-DI-CHLORO-ETHENE | BROMO-DI-CHLORO-METHANE | DI-CHLORO-DI-FLUORO-METHANE | DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER | ETHER ETHYL WATER UNFLTRD RECOVER | ETHER TERT-BUTYL ETHYL UNFLTRD RECOVER | ETHER TERT-PENTYL METHYL UNFLTRD RECOVER | ETHYL-BENZENE TOTAL (UG/L) (34371) | FREON-113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032) | |
| | | TOTAL (UG/L) (34301) | TOTAL (UG/L) (32105) | TOTAL (UG/L) (32106) | TOTAL (UG/L) (77093) | TOTAL (UG/L) (32101) | TOTAL (UG/L) (34668) | (UG/L) (81577) | (UG/L) (81576) | (UG/L) (50004) | (UG/L) (50005) | (UG/L) (34371) | (UG/L) (77652) | (UG/L) (78032) |
| MAR 08... | | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
| DATE | TIME | | METHYL ENE CHLO-RIDE | META/PARA-XYLENE WATER | O-XYLENE WATER | STYRENE | TETRA-CHLORO-ETHYL-ENE | TOLUENE | TRI-CHLORO-ETHYL-ENE | TRI-CHLORO-FLUORO-METHANE | VINYL CHLO-RIDE | | | |
| | | | TOTAL (UG/L) (34423) | UNFLTRD REC (UG/L) (85795) | WHOLE TOTAL (UG/L) (77135) | TOTAL (UG/L) (77128) | TOTAL (UG/L) (34475) | TOTAL (UG/L) (34010) | TOTAL (UG/L) (39180) | TOTAL (UG/L) (34488) | TOTAL (UG/L) (39175) | | | |
| MAR 08... | | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|------|------|--|---|---|---|---|---|---|--|--|---|--|---|---|
| | | MAY 21... | 1130 | <.004 | <.002 | <.005 | .012 | <.010 | E.080 | <.020 | <.005 | <.018 | <.003 | E.007 |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER FLTRD 0.7 U DISSOLV (UG/L) (39415) | METRI- BUZIN WATER FLTRD 0.7 U DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | MAY 21... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .314 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DATE | TIME | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | |
| | | | | | MAY 21... | .026 | <.016 | <.034 | <.005 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01464504 CROSSWICKS CREEK AT GROVEVILLE ROAD, AT GROVEVILLE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| MAY | | | | | JUN | | | | |
| 23... | 0945 | 490 | 1300 | 600 | 05... | 0928 | 330 | 100 | 190 |
| 30... | 1150 | 230 | 200 | 240 | 11... | 0841 | 490 | 200 | 130 |

01464515 DOCTORS CREEK AT ALLENTOWN, NJ

LOCATION.--Lat 40°10'37", long 74°35'57", Monmouth County, Hydrologic Unit 02040201, at bridge on Breza Road in Allentown, and 0.8 mi downstream from Conines Millpond dam.

DRAINAGE AREA.--17.4 mi².

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLT RD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) |
|------|------|---|--|---|---|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
|------|------|---|--|---|---|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|

| | | | | | | | | | | | | | |
|-----------|------|-----|-----|------|------|-----|----|------|-----|-----|------|------|----|
| NOV 21... | 1400 | 11 | -- | .096 | .075 | 758 | 93 | 11.6 | 7.3 | 191 | 4.5 | 5.6 | 56 |
| FEB 15... | 1200 | 27 | -- | .056 | .044 | 760 | 94 | 12.1 | 6.8 | 201 | 10.0 | 4.5 | 47 |
| MAY 14... | 1110 | 7.3 | 6.4 | .103 | .080 | 765 | 78 | 7.5 | 7.3 | 219 | 27.5 | 17.5 | 61 |
| AUG 13... | 1200 | 15 | 10 | .198 | .158 | 760 | 65 | 5.4 | 6.7 | 162 | 28.0 | 24.5 | 46 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|------|---|---|--|---|---|--|---|---|--|---|---|---|--|
|------|---|---|--|---|---|--|---|---|--|---|---|---|--|

| | | | | | | | | | | | | | |
|-----------|------|------|------|------|----|------|-----|-----|------|-----|-----|------|-----|
| NOV 21... | 14.0 | 5.03 | 4.41 | 9.4 | 24 | 22.6 | .2 | 9.6 | 20.1 | 110 | 103 | .660 | .83 |
| FEB 15... | 11.6 | 4.42 | 2.80 | 12.2 | 13 | 27.2 | E.1 | 8.7 | 22.9 | 116 | 105 | .530 | .64 |
| MAY 14... | 15.0 | 5.84 | 3.28 | 12.5 | 25 | 26.4 | .2 | 7.0 | 21.2 | 128 | 112 | .890 | 1.5 |
| AUG 13... | 11.4 | 4.22 | 4.02 | 7.7 | 21 | 18.1 | .2 | 7.6 | 18.4 | 98 | 87 | .380 | .70 |

| DATE | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|------|---|---|---|---|---|--------------------------------------|--|--|---------------------------------------|---|---|--|--|
|------|---|---|---|---|---|--------------------------------------|--|--|---------------------------------------|---|---|--|--|

| | | | | | | | | | | | | | |
|-----------|------|-----|------|-------|-----|-----|------|------|------|-----|-----|-----|-----|
| NOV 21... | .66 | 1.0 | .411 | <.003 | 1.2 | 1.4 | .105 | .005 | .046 | .9 | <.1 | 2.9 | .9 |
| FEB 15... | .49 | .62 | 1.57 | .020 | 2.2 | 2.2 | .155 | .004 | .045 | .8 | <.1 | 1.9 | .8 |
| MAY 14... | 1.05 | 1.5 | .834 | .048 | 2.3 | 2.3 | .144 | .020 | .084 | 1.0 | <.1 | 3.4 | 1.0 |
| AUG 13... | .36 | .85 | .486 | .023 | 1.2 | 1.3 | .102 | .015 | .069 | .8 | <.1 | 4.5 | .8 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED SUS-PENDED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|--|--|
|------|--|--|--|--|

| | | | | |
|-----------|------|------|----|----|
| NOV 21... | E1.8 | -- | 34 | 5 |
| FEB 15... | E1.2 | -- | 14 | 7 |
| MAY 14... | E1.1 | 2.80 | 33 | <1 |
| AUG 13... | <1.0 | 23.1 | 29 | 3 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01464515 DOCTORS CREEK AT ALLENTOWN, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| AUG | | | | | AUG | | | | |
| 02... | 1101 | 9200 | 4200 | 990 | 23... | 0930 | 50 | 200 | 190 |
| 09... | 1000 | 80 | 200 | 220 | 30... | 1010 | 790 | <100 | 220 |

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

421

01464527 BLACKS CREEK AT CHESTERFIELD, NJ

LOCATION.--Lat 40°06'34", long 74°38'31", Burlington County, Hydrologic Unit 02040201, at bridge on Chesterfield-Georgetown Road in Chesterfield, 346 ft north of intersection of Stelle Road and Chesterfield-Georgetown Road, and 2.4 mi upstream of Bacons Run.

DRAINAGE AREA.--8.91 mi².

PERIOD OF RECORD.--December 2000 to August 2001.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|--|--|--|--|---|---|--|--|--|---|---|---|--|
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| DEC 21... | 0940 | 12 | -- | .245 | .200 | 768 | 92 | 13.2 | 7.5 | 162 | 1.0 | 1.0 | 49 | |
| FEB 22... | 1030 | 9.7 | -- | .130 | .107 | 769 | 96 | 13.4 | 6.6 | 180 | -1.5 | 2.0 | 53 | |
| MAY 14... | 0900 | 5.0 | 19 | .221 | .179 | 764 | 70 | 6.9 | 7.1 | 204 | 16.5 | 16.0 | 71 | |
| AUG 16... | 1120 | 4.9 | 28 | .263 | .211 | 763 | 78 | 6.7 | 6.8 | 157 | 29.0 | 23.0 | 52 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| DEC 21... | 13.2 | 3.99 | 5.01 | 5.3 | 24 | 14.2 | .3 | 10.4 | 16.2 | 101 | 90 | .200 | .47 | |
| FEB 22... | 14.1 | 4.29 | 3.60 | 7.6 | 21 | 19.3 | .2 | 10.6 | 19.9 | 109 | 100 | .140 | .29 | |
| MAY 14... | 19.8 | 5.27 | 4.10 | 7.7 | 43 | 19.4 | .3 | 10.1 | 18.1 | 129 | 112 | .130 | .53 | |
| AUG 16... | 14.7 | 3.62 | 4.88 | 6.1 | 36 | 15.0 | .3 | 9.3 | 11.2 | 100 | 88 | .050 | .47 | |
| DATE | | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE SUSP WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| DEC 21... | .18 | .81 | 1.54 | .014 | 2.0 | 2.4 | .372 | .011 | .322 | 3.1 | <.1 | 4.1 | 3.1 | |
| FEB 22... | .15 | .49 | 1.59 | .012 | 1.9 | 2.1 | .140 | .010 | .100 | 1.1 | <.1 | 2.3 | 1.1 | |
| MAY 14... | .12 | .64 | .351 | .024 | .89 | .99 | .152 | .025 | .137 | 1.1 | <.1 | 4.6 | 1.1 | |
| AUG 16... | .000 | .69 | .323 | .018 | .79 | 1.0 | .224 | .028 | .182 | 1.6 | <.1 | 5.7 | 1.6 | |

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01464527 BLACKS CREEK AT CHESTERFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|--------------|---|--|---|--|
| DEC 21... | 2.4 | -- | 23 | 45 |
| FEB 22... | 2.0 | -- | 24 | 14 |
| MAY 14... | <1.2 | 21.1 | 35 | 7 |
| AUG 16... | E1.0 | 38.9 | 33 | 9 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 0955 | 16000 | 4800 | 9400 | JUL 09... | 0925 | 130 | <100 | 280 |
| | | | | | JUL 30... | 0938 | 330 | 100 | 670 |

E Estimated value.

< Actual value is known to be less than the value shown.

01464527 BLACKS CREEK AT CHESTERFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

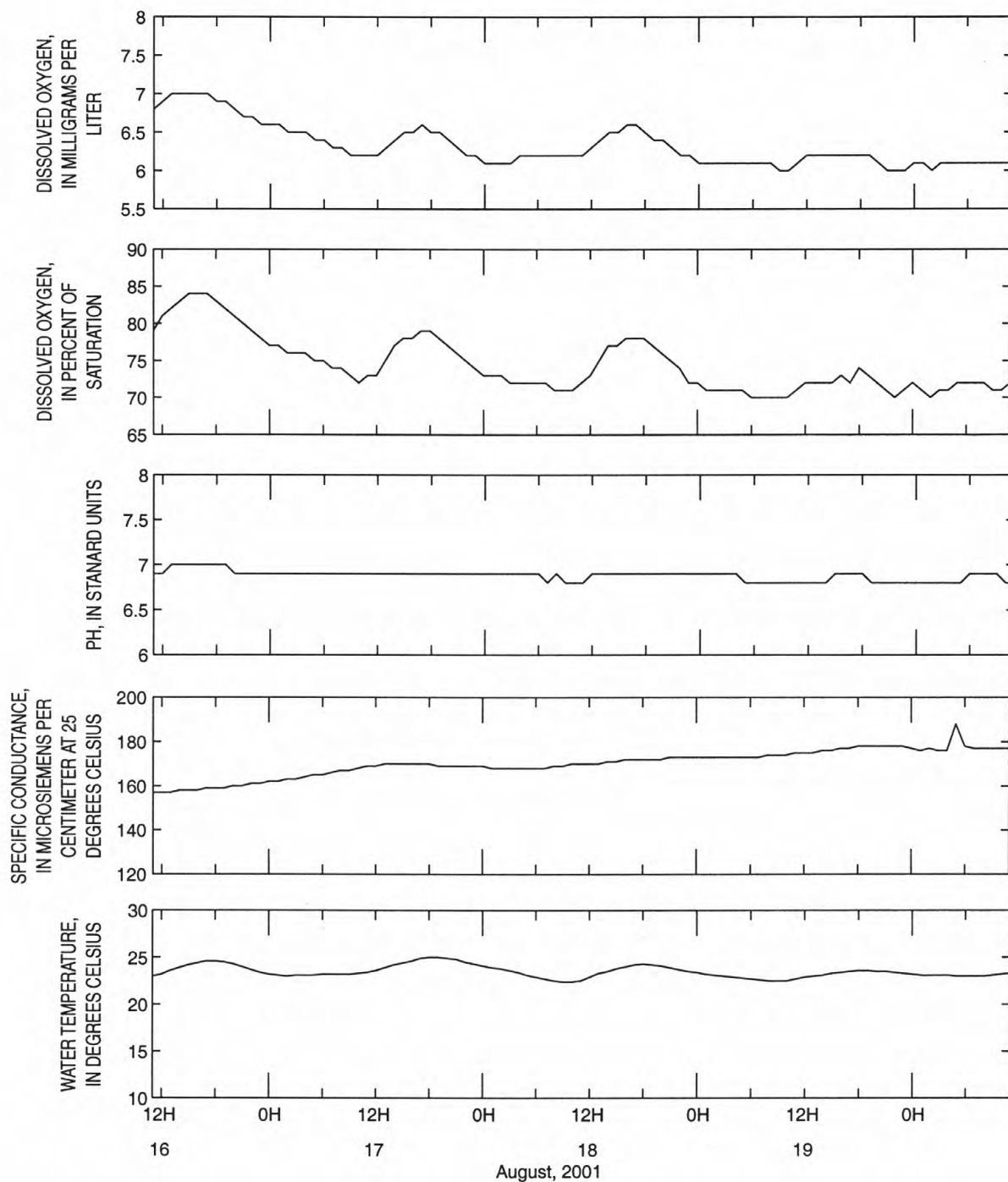


Figure 55. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01464527 Blacks Creek at Chesterfield, water year 2001.

DELAWARE RIVER BASIN

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD, NEAR NESHAMINY, PA

LOCATION.--Lat 40°13'45", long 75°07'12", Bucks County, Hydrologic Unit 02040201, at bridge on Valley Road, 1.1 mi east of Neshaminy, PA, 2.0 mi downstream from Park Creek, 3.0 mi downstream from Bradford Dam, and 6.8 mi upstream from confluence with Neshaminy Creek.

DRAINAGE AREA.--26.8 mi².

PERIOD OF RECORD.--November 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: February 1999 to June 1999, November 2000 to September 2001.

INSTRUMENTATION.--Water-temperature data logger (in-situ system; measurements recorded every 15 or 30 minutes) located at gage.

REMARKS.--These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (DELN NAWQA). For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Fish community data for this and other sites are presented in "Water-Quality at Miscellaneous Surface-Water Sites."

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: maximum, 29.0 °C, Jun. 2, 1999, but may have been higher during period of missing record; minimum, -0.5 °C, Mar. 8, 1999.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | OXYGEN, DIS-SOLVED (MG/L) | PH WATER WHOLE FIELD (STAND-ARD UNITS) | SPE-CIFIC CON-DUCT-ANCE (US/CM) | TEMPER-ATURE AIR (DEG C) | TEMPER-ATURE WATER (DEG C) | HARD-NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | | |
|-----------|-------|-------------------------------------|---|----------------------------------|--|--|---|------------------------------------|-----------------------------------|-----------------------------------|----------------------------------|--|---|--|
| | | | (00061) | (00025) | (00301) | (00300) | (00400) | (00095) | (00020) | (00010) | (00900) | (00915) | | |
| OCT 12... | 1240 | ENVIRONMENTAL | 10 | 767 | 132 | 14.3 | 8.2 | 487 | 18.5 | 11.9 | 160 | 41.0 | | |
| NOV 02... | 1009 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | E.01 | | |
| 02... | 1010 | ENVIRONMENTAL | 14 | 759 | 104 | 12.4 | 8.0 | 571 | 11.5 | 7.7 | 190 | 48.8 | | |
| DEC 26... | 1520 | ENVIRONMENTAL | 18 | 766 | 111 | 16.3 | 7.9 | 569 | -1.5 | .1 | 170 | 43.6 | | |
| JAN 30... | 1730 | ENVIRONMENTAL | 1030 | 747 | 97 | 13.3 | 7.2 | 450 | 7.0 | 1.6 | 84 | 21.3 | | |
| MAR 15... | 1330 | ENVIRONMENTAL | 43 | 754 | 125 | 15.1 | 8.3 | 591 | 12.5 | 6.6 | 140 | 35.0 | | |
| APR 02... | 1320 | ENVIRONMENTAL | 51 | 755 | 140 | 16.3 | 8.3 | 419 | 11.0 | 8.3 | 120 | 30.7 | | |
| 30... | 1250 | ENVIRONMENTAL | 15 | 759 | 139 | 13.5 | 8.2 | 522 | 22.5 | 16.6 | 160 | 41.7 | | |
| JUN 06... | 0750 | ENVIRONMENTAL | 25 | 756 | 98 | 9.2 | 7.7 | 445 | 22.0 | 18.0 | 140 | 37.1 | | |
| 28... | 0930 | ENVIRONMENTAL | 18 | 760 | 119 | 10.1 | 7.9 | 441 | 30.0 | 23.0 | 140 | 35.8 | | |
| AUG 07... | 0940 | ENVIRONMENTAL | 4.6 | 761 | 73 | 6.0 | 7.6 | 431 | 30.5 | 25.4 | 130 | 33.3 | | |
| SEP 11... | 1310 | ENVIRONMENTAL | 1.8 | 759 | 109 | 9.3 | 8.3 | 769 | 25.5 | 22.9 | 180 | 46.0 | | |
| DATE | | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | SODIUM, DIS-SOLVED (MG/L AS NA) | ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) | BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) | CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SULFATE DIS-SOLVED (MG/L AS SO4) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) |
| | | (00925) | (00935) | (00930) | (39086) | (00453) | (00452) | (00940) | (00950) | (00955) | (00945) | (00623) | (00625) | (00608) |
| OCT 12... | 13.9 | 3.68 | 32.8 | 105 | 128 | -- | 50.3 | E.1 | 9.0 | 44.7 | .25 | .46 | <.041 | |
| NOV 02... | <.008 | <.09 | <.1 | -- | -- | -- | <.1 | <.2 | <.1 | <.1 | <.10 | <.08 | <.041 | |
| 02... | 16.4 | 4.35 | 41.2 | 134 | 163 | -- | 59.5 | E.1 | 9.7 | 55.8 | .33 | .42 | <.041 | |
| DEC 26... | 15.4 | 3.25 | 42.9 | 93 | 114 | -- | 81.1 | E.1 | 11.9 | 48.1 | .32 | .36 | <.041 | |
| JAN 30... | 7.36 | 2.74 | 47.5 | 39 | 47 | -- | 95.4 | E.1 | 3.7 | 17.2 | .53 | 1.1 | .117 | |
| MAR 15... | 12.1 | 2.63 | 53.6 | 71 | 86 | -- | 110 | E.1 | 6.6 | 32.2 | .33 | .49 | <.041 | |
| APR 02... | 10.5 | 2.14 | 31.0 | 74 | 88 | 2 | 57.5 | E.1 | 7.2 | 31.9 | .22 | .42 | <.041 | |
| 30... | 14.1 | 2.99 | 38.7 | 105 | 119 | 4 | 69.6 | <.2 | 4.1 | 40.9 | .39 | .50 | <.041 | |
| JUN 06... | 12.3 | 3.08 | 30.1 | 100 | 122 | -- | 45.7 | E.1 | 9.4 | 37.4 | .36 | .45 | <.040 | |
| 28... | 12.8 | 3.37 | 30.1 | 96 | 117 | -- | 47.8 | E.1 | 9.4 | 37.6 | .41 | .40 | <.040 | |
| AUG 07... | 11.5 | 3.72 | 31.2 | 85 | 104 | -- | 42.1 | E.1 | 3.9 | 48.2 | .34 | .43 | E.038 | |
| SEP 11... | 16.7 | 6.80 | 75.2 | 131 | 152 | 4 | 103 | E.1 | 2.5 | 72.0 | .98 | 1.1 | E.031 | |

E Estimated value.

< Actual value is known to be less than the value shown.

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD, NEAR NESHAMINY, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605) | NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|--|--|--|---|--|--|--|---|--|---|---|--|
| OCT 12... | 2.1 | 1.9 | 1.61 | .006 | -- | -- | .056 | .048 | .097 | -- | -- | 3.8 | .4 |
| NOV 02... | -- | -- | <.047 | <.006 | -- | -- | <.006 | <.018 | <.004 | -- | -- | -- | -- |
| NOV 02... | 1.6 | 1.6 | 1.22 | .008 | -- | -- | .063 | .046 | .087 | -- | -- | 3.8 | .4 |
| DEC 26... | 1.1 | 1.1 | .782 | E.005 | -- | -- | .043 | .033 | .067 | -- | -- | 3.1 | .3 |
| JAN 30... | 1.8 | 1.3 | .751 | .010 | .97 | .866 | .063 | .054 | .347 | 8.6 | -- | 6.4 | -- |
| MAR 15... | 1.8 | 1.6 | 1.28 | .015 | -- | .102 | .028 | .021 | .072 | .7 | <.1 | 3.7 | .7 |
| APR 02... | 1.7 | 1.5 | 1.29 | .010 | -- | .172 | .036 | .025 | .070 | .7 | <.1 | 3.1 | .7 |
| APR 30... | 1.3 | 1.2 | .841 | .028 | -- | .060 | .052 | .019 | .076 | .6 | <.1 | 3.6 | .6 |
| JUN 06... | 1.4 | 1.3 | .949 | -- | -- | .101 | .073 | <.020 | .099 | .7 | <.1 | 3.8 | .7 |
| JUN 28... | 1.8 | 1.8 | 1.40 | .040 | -- | .163 | .050 | .023 | .085 | .7 | <.1 | 3.5 | .7 |
| AUG 07... | 1.3 | 1.2 | .885 | .017 | -- | .032 | .091 | .071 | .100 | .3 | <.1 | 3.7 | .3 |
| SEP 11... | 3.1 | 3.0 | 2.00 | .028 | -- | .105 | .151 | .112 | .163 | .4 | <.1 | 5.0 | .4 |

| DATE | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY) (80155) | SEDI- MENT, SUS- PENDEED (MG/L) (80154) |
|-----------|---|---|--|---|---|---|--|--|
| OCT 12... | 280 | 266 | 7.7 | 75 | 20 | 14.2 | .12 | 4 |
| NOV 02... | <10 | -- | -- | <13 | <10 | <3.2 | -- | 7 |
| NOV 02... | 337 | 322 | 26 | 120 | 20 | 11.8 | .47 | 12 |
| DEC 26... | 333 | 306 | 9.8 | 61 | 20 | 63.1 | .22 | 5 |
| JAN 30... | 240 | 222 | 280 | 15 | 70 | 85.1 | 1010 | 364 |
| MAR 15... | 331 | 301 | 20 | 34 | 60 | 79.2 | 1.2 | 11 |
| APR 02... | 238 | 222 | 6.5 | 39 | 50 | 67.4 | 1.0 | 8 |
| APR 30... | 313 | 279 | 5.0 | 62 | 70 | 32.0 | .15 | 4 |
| JUN 06... | 255 | | 10 | 44 | 70 | 42.5 | .49 | 7 |
| JUN 28... | 248 | 241 | 7.5 | 49 | 20 | 23.4 | .38 | 8 |
| AUG 07... | 239 | 229 | 5.0 | 75 | 10 | 44.1 | .04 | 3 |
| SEP 11... | 435 | 410 | <2.0 | 205 | M | 24.4 | .01 | 1 |

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020/2021 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | ACETONE WATER WHOLE TOTAL (UG/L) (81552) | 1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613) | BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551) | BENZENE 124-TRI METHYL UNFLTRD RECOVER (UG/L) (77222) | BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) |
|-----------|------|---|--|---|---|--|---|---|--|---|---|--|---|
| OCT 12... | 1240 | E.02 | <.04 | E.01 | 698 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD, NEAR NESHAMINY, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | CARBON DI- SULFIDE | | CHLORO- DI- BROMO- DI- METHANE | | CIS-1,2 -DI- CHLORO- ETHENE | | BROMO- DI- CHLORO- METHANE | | DI- CHLORO- DI- FLUORO- METHANE | | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER | | FREON- 113 WATER UNFLTRD REC | |
|--------------|--|--|--|--|--|---|---|---|--|--|--|---|--|--|--|
| DATE | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | WATER WHOLE TOTAL (UG/L) (77041) | CHLORO- BENZENE TOTAL (UG/L) (34301) | METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | WATER TOTAL (UG/L) (77093) | METHANE TOTAL (UG/L) (32101) | CHLORO- METHANE TOTAL (UG/L) (34668) | WATER UNFLTRD RECOVER (UG/L) (81576) | METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | WATER UNFLTRD REC (UG/L) (77652) | | |
| OCT 12... | <.04 | <.06 | <.07 | <.03 | <.2 | E.02 | .12 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 | | |
| DATE | FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL- CHLO- RIDE TOTAL (UG/L) (34418) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- CHLORO- TOLUENE WATER TOTAL (UG/L) (77275) | O- XYLENE WATER TOTAL (UG/L) (77135) | P-ISO- PROPYL- TOLUENE WATER REC (UG/L) (77356) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | | | |
| OCT 12... | <2 | .2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | M | E.03 | .21 | <.09 | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| | | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|--------------|------|--|---|---|---|---|---|--|--|--|---|---|---|-------|
| DATE | TIME | | | | | | | | | | | | | |
| OCT 12... | 1240 | <.004 | <.002 | <.005 | .020 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.026 | .007 | |
| JAN 30... | 1730 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 | |
| APR 02... | 1320 | <.004 | <.002 | <.005 | .010 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.010 | .008 | |
| APR 30... | 1250 | <.004 | <.002 | <.005 | .017 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.020 | <.005 | |
| JUN 06... | 0750 | <.004 | <.002 | <.005 | .181 | <.010 | E.005 | <.020 | <.005 | <.018 | <.003 | E.029 | .042 | |
| JUN 28... | 0930 | .014 | <.002 | <.005 | .193 | <.010 | E.002 | <.020 | E.004 | <.018 | <.003 | E.011 | .032 | |
| AUG 07... | 0940 | <.004 | <.002 | <.005 | .033 | <.010 | E.011 | <.020 | <.005 | <.018 | <.003 | E.013 | .087 | |
| SEP 11... | 1310 | <.004 | <.002 | <.005 | .026 | <.010 | E.012 | <.020 | <.005 | <.018 | <.003 | E.021 | .006 | |
| | | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | |
| OCT 12... | | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.009 | <.006 | <.002 | <.007 | <.003 | <.010 | .082 |
| JAN 30... | | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.011 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| APR 02... | | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.005 | <.006 | <.002 | <.007 | <.003 | .010 | .015 |
| APR 30... | | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.009 | <.006 | <.002 | <.007 | <.003 | <.010 | .017 |
| JUN 06... | | <.005 | <.002 | E.001 | <.035 | <.027 | <.050 | .099 | <.006 | <.002 | <.007 | <.003 | E.006 | .057 |
| JUN 28... | | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .086 | <.006 | <.002 | <.007 | <.003 | <.010 | <.030 |
| AUG 07... | | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.008 | <.006 | <.002 | <.007 | <.003 | <.010 | .029 |
| SEP 11... | | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.009 | <.006 | <.002 | <.007 | <.003 | <.010 | .017 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

427

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD, NEAR NESHAMINY, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|--------------|---|---|--|--|---|---|
| OCT 12... | E.008 | <.016 | <.034 | E.022 | <.005 | <.009 |
| JAN 30... | <.011 | <.080 | <.034 | -- | <.005 | <.009 |
| APR 02... | .034 | <.016 | <.034 | -- | <.005 | <.009 |
| 30... | <.011 | <.016 | <.034 | -- | <.005 | <.009 |
| JUN 06... | .091 | <.016 | <.034 | -- | <.005 | E.003 |
| 28... | .016 | <.016 | <.034 | E.009 | <.005 | <.009 |
| AUG 07... | E.002 | <.016 | <.034 | -- | <.005 | <.009 |
| SEP 11... | <.011 | <.016 | <.034 | -- | <.005 | <.009 |

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|-----|------|----------|------|------|----------|-----|------|---------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | --- | --- | --- | --- | --- | --- | 6.0 | 4.0 | 5.0 | .5 | .0 | .5 |
| 2 | --- | --- | --- | --- | --- | --- | 4.5 | 1.5 | 3.0 | .5 | .0 | .0 |
| 3 | --- | --- | --- | 11.0 | 7.0 | 9.0 | 3.0 | .5 | 1.5 | .0 | .0 | .0 |
| 4 | --- | --- | --- | 11.5 | 8.5 | 10.5 | 3.0 | .0 | 1.0 | .0 | .0 | .0 |
| 5 | --- | --- | --- | 10.5 | 8.0 | 9.0 | 3.5 | .0 | 2.0 | .0 | .0 | .0 |
| 6 | --- | --- | --- | 9.0 | 6.0 | 8.0 | 2.5 | .0 | 1.5 | .0 | .0 | .0 |
| 7 | --- | --- | --- | 9.0 | 6.0 | 8.0 | 2.5 | .5 | 1.5 | .0 | .0 | .0 |
| 8 | --- | --- | --- | 10.0 | 6.5 | 8.5 | 3.0 | .5 | 1.5 | .0 | .0 | .0 |
| 9 | --- | --- | --- | 11.5 | 9.0 | 10.0 | 3.0 | .0 | 1.5 | .5 | .0 | .5 |
| 10 | --- | --- | --- | 12.5 | 11.0 | 12.0 | 3.0 | .5 | 1.5 | .5 | .0 | .5 |
| 11 | --- | --- | --- | 12.0 | 10.5 | 11.5 | 4.0 | 2.5 | 3.0 | .5 | .0 | .5 |
| 12 | --- | --- | --- | 11.5 | 9.5 | 10.5 | 5.0 | 2.0 | 4.0 | 1.0 | .0 | .5 |
| 13 | --- | --- | --- | 11.0 | 9.5 | 10.5 | 2.5 | .5 | 1.5 | 1.0 | .5 | .5 |
| 14 | --- | --- | --- | 10.5 | 9.0 | 10.0 | 2.5 | 1.5 | 1.5 | 1.0 | .0 | .5 |
| 15 | --- | --- | --- | 9.0 | 7.0 | 8.0 | 3.0 | 2.0 | 2.5 | 1.5 | 1.0 | 1.0 |
| 16 | --- | --- | --- | 8.0 | 6.5 | 7.5 | 4.5 | 2.0 | 3.0 | 2.0 | 1.5 | 1.5 |
| 17 | --- | --- | --- | 8.5 | 6.5 | 7.5 | 11.0 | 4.0 | 8.5 | 1.5 | 1.0 | 1.5 |
| 18 | --- | --- | --- | 7.5 | 5.5 | 6.0 | 9.0 | 4.5 | 6.5 | 1.5 | 1.0 | 1.0 |
| 19 | --- | --- | --- | 6.0 | 4.5 | 5.0 | 4.5 | 3.5 | 4.0 | 1.5 | 1.0 | 1.5 |
| 20 | --- | --- | --- | 5.5 | 2.5 | 4.0 | 4.0 | 2.0 | 3.0 | 1.5 | 1.0 | 1.5 |
| 21 | --- | --- | --- | 4.5 | 2.0 | 3.5 | 2.0 | 1.0 | 1.5 | 1.5 | .5 | 1.0 |
| 22 | --- | --- | --- | 3.0 | 1.5 | 2.0 | 2.5 | 1.0 | 2.0 | 1.0 | .0 | .5 |
| 23 | --- | --- | --- | 2.0 | .5 | 1.5 | 1.0 | .0 | .5 | 1.0 | .0 | .5 |
| 24 | --- | --- | --- | 2.5 | .5 | 1.5 | .5 | .0 | .5 | 1.5 | .0 | .5 |
| 25 | --- | --- | --- | 3.0 | .5 | 2.0 | .5 | .5 | .5 | 1.5 | .5 | 1.0 |
| 26 | --- | --- | --- | 7.0 | 3.0 | 5.0 | .5 | .5 | .5 | 1.5 | .5 | 1.0 |
| 27 | --- | --- | --- | 7.5 | 6.5 | 7.0 | .5 | .5 | .5 | 2.0 | 1.0 | 1.5 |
| 28 | --- | --- | --- | 8.5 | 6.5 | 7.5 | .5 | .5 | .5 | 2.0 | 1.0 | 1.5 |
| 29 | --- | --- | --- | 7.5 | 5.5 | 6.5 | .5 | .5 | .5 | 2.0 | 1.0 | 1.5 |
| 30 | --- | --- | --- | 7.0 | 6.0 | 6.5 | .5 | .0 | .5 | 2.0 | 1.5 | 2.0 |
| 31 | --- | --- | --- | --- | --- | --- | .5 | .0 | .0 | 2.5 | 1.5 | 2.0 |
| MONTH | --- | --- | --- | 12.5 | .5 | 7.1 | 11.0 | .0 | 2.1 | 2.5 | .0 | .8 |

E Estimated value.

< Actual value is known to be less than the value shown.

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD, NEAR NESHAMINY, PA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 3.5 | 2.5 | 3.0 | 5.5 | 4.5 | 5.0 | 8.0 | 7.0 | 7.5 | 22.5 | 15.5 | 17.5 |
| 2 | 4.0 | 3.0 | 3.5 | 5.5 | 5.0 | 5.0 | 9.0 | 7.5 | 8.0 | 23.0 | 17.5 | 19.5 |
| 3 | 3.5 | 2.5 | 2.5 | 6.0 | 5.5 | 5.5 | 10.5 | 7.0 | 8.5 | 23.5 | 19.0 | 20.5 |
| 4 | 2.5 | 1.5 | 2.0 | 6.0 | 5.0 | 6.0 | 11.5 | 8.5 | 10.0 | 23.5 | 20.0 | 21.0 |
| 5 | 2.5 | .5 | 1.5 | 5.0 | 4.0 | 4.5 | 12.0 | 9.0 | 10.5 | 23.5 | 19.5 | 22.0 |
| 6 | 2.5 | 1.0 | 1.5 | 4.0 | 3.5 | 4.0 | 12.0 | 10.5 | 11.0 | 21.5 | 17.0 | 18.5 |
| 7 | 3.5 | 2.5 | 3.0 | 5.5 | 4.0 | 4.5 | 11.0 | 10.0 | 10.5 | 20.5 | 14.5 | 17.0 |
| 8 | 3.0 | 2.5 | 3.0 | 5.5 | 5.0 | 5.0 | 10.0 | 9.5 | 10.0 | 19.5 | 15.0 | 16.5 |
| 9 | 4.0 | 2.5 | 3.5 | 6.0 | 5.5 | 5.5 | 14.5 | 9.5 | 11.5 | 20.5 | 16.0 | 18.5 |
| 10 | 4.5 | 4.0 | 4.5 | 6.0 | 5.0 | 5.5 | 14.5 | 13.5 | 14.0 | 21.0 | 16.5 | 18.0 |
| 11 | 4.0 | 2.5 | 3.0 | 6.5 | 5.5 | 6.0 | 13.5 | 12.0 | 12.5 | 21.5 | 17.5 | 19.0 |
| 12 | 3.0 | 2.0 | 2.5 | 7.0 | 5.5 | 6.0 | 12.0 | 11.5 | 12.0 | 22.5 | 18.5 | 20.0 |
| 13 | 4.5 | 3.0 | 3.5 | 7.0 | 5.5 | 6.0 | 14.0 | 12.0 | 13.0 | 21.5 | 17.0 | 19.0 |
| 14 | 5.0 | 4.0 | 4.5 | 7.0 | 6.5 | 7.0 | 15.0 | 12.5 | 14.0 | 19.5 | 15.5 | 17.0 |
| 15 | 5.5 | 5.0 | 5.0 | 7.0 | 6.5 | 7.0 | 15.0 | 13.0 | 14.0 | 20.0 | 15.0 | 17.0 |
| 16 | 5.5 | 5.0 | 5.0 | 8.0 | 7.0 | 7.5 | 14.5 | 13.5 | 14.0 | 20.0 | 15.0 | 17.0 |
| 17 | 5.5 | 4.0 | 5.0 | 8.0 | 7.5 | 7.5 | 13.5 | 12.5 | 13.0 | 18.5 | 16.0 | 16.5 |
| 18 | 4.0 | 2.5 | 3.0 | 8.0 | 7.0 | 7.5 | 13.0 | 11.0 | 12.0 | 16.0 | 15.5 | 16.0 |
| 19 | 4.0 | 2.0 | 3.0 | 8.0 | 6.5 | 7.5 | 13.0 | 10.5 | 12.0 | 19.5 | 16.0 | 17.0 |
| 20 | 5.0 | 3.5 | 4.0 | 8.5 | 7.0 | 7.5 | 12.5 | 11.0 | 12.0 | 19.5 | 17.0 | 18.0 |
| 21 | 6.0 | 4.5 | 5.0 | 8.5 | 6.5 | 7.5 | 14.0 | 12.5 | 13.0 | 17.5 | 15.0 | 16.0 |
| 22 | 5.0 | 2.5 | 3.5 | 7.5 | 6.5 | 7.0 | 17.0 | 13.5 | 15.0 | 17.0 | 15.5 | 16.0 |
| 23 | 3.5 | 2.0 | 2.5 | 8.5 | 6.5 | 7.5 | 19.5 | 16.5 | 17.5 | 18.0 | 16.0 | 17.0 |
| 24 | 3.5 | 2.5 | 3.0 | 8.5 | 7.5 | 8.0 | 20.0 | 18.0 | 19.0 | 21.0 | 17.0 | 18.5 |
| 25 | 4.0 | 3.5 | 4.0 | 7.5 | 6.0 | 7.0 | 19.0 | 16.0 | 17.5 | 19.0 | 17.0 | 18.0 |
| 26 | 5.0 | 4.0 | 4.5 | 7.5 | 6.5 | 7.0 | 16.5 | 14.0 | 15.5 | 17.0 | 16.0 | 16.5 |
| 27 | 6.0 | 4.5 | 5.0 | 7.0 | 6.0 | 6.5 | 16.5 | 14.5 | 15.5 | 17.5 | 16.0 | 16.5 |
| 28 | 6.0 | 5.5 | 5.5 | 7.5 | 6.0 | 6.5 | 17.0 | 15.5 | 16.0 | 19.5 | 17.0 | 18.0 |
| 29 | --- | --- | --- | 7.5 | 6.5 | 7.0 | 16.5 | 14.5 | 15.5 | 20.0 | 16.5 | 18.0 |
| 30 | --- | --- | --- | 7.0 | 5.5 | 6.0 | 19.5 | 14.5 | 16.5 | 20.5 | 17.0 | 18.0 |
| 31 | --- | --- | --- | 7.5 | 6.0 | 6.5 | --- | --- | --- | 21.0 | 15.0 | 17.5 |
| MONTH | 6.0 | .5 | 3.6 | 8.5 | 3.5 | 6.3 | 20.0 | 7.0 | 13.0 | 23.5 | 14.5 | 17.9 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 17.0 | 15.0 | 16.0 | 26.0 | 24.0 | 25.0 | 23.0 | 20.5 | 22.0 | 26.0 | 24.5 | 25.0 |
| 2 | 17.0 | 15.0 | 16.0 | 25.5 | 21.0 | 23.5 | 24.5 | 22.0 | 23.0 | 24.5 | 21.5 | 22.5 |
| 3 | 19.5 | 17.0 | 17.5 | 23.0 | 19.5 | 21.0 | 25.0 | 23.0 | 24.0 | 23.0 | 20.5 | 21.5 |
| 4 | 20.0 | 16.0 | 18.0 | 23.0 | 21.0 | 22.0 | 24.5 | 23.0 | 24.0 | 23.5 | 21.5 | 22.5 |
| 5 | 21.5 | 17.0 | 19.0 | 23.0 | 21.5 | 22.0 | 24.5 | 22.5 | 23.5 | 23.0 | 22.0 | 22.5 |
| 6 | 21.0 | 18.0 | 19.0 | 22.5 | 20.5 | 21.5 | 26.5 | 23.5 | 24.5 | 22.5 | 20.5 | 21.5 |
| 7 | 23.5 | 18.0 | 20.0 | 22.5 | 19.5 | 21.0 | 28.0 | 25.0 | 26.0 | 22.5 | 20.5 | 21.5 |
| 8 | 24.5 | 18.0 | 20.5 | 22.0 | 21.5 | 21.5 | 28.5 | 26.0 | 27.0 | 23.5 | 21.5 | 22.5 |
| 9 | 23.5 | 17.5 | 20.0 | 24.0 | 21.0 | 22.0 | 29.0 | 25.5 | 27.0 | 24.5 | 23.0 | 23.5 |
| 10 | 23.5 | 17.5 | 20.0 | 24.5 | 22.5 | 23.5 | 29.0 | 26.5 | 28.0 | 24.5 | 23.5 | 24.0 |
| 11 | 25.0 | 18.5 | 21.0 | 25.0 | 22.5 | 23.5 | 27.0 | 24.5 | 26.0 | 24.5 | 22.5 | 23.5 |
| 12 | 26.5 | 20.0 | 23.0 | 23.5 | 21.0 | 22.0 | 25.0 | 24.0 | 24.5 | 23.0 | 21.0 | 22.0 |
| 13 | 27.0 | 21.5 | 24.0 | 22.5 | 20.0 | 21.5 | 26.0 | 23.5 | 24.5 | 22.0 | 20.5 | 21.0 |
| 14 | 26.0 | 22.5 | 23.5 | 22.5 | 20.0 | 21.0 | 26.0 | 23.0 | 24.0 | 22.5 | 18.5 | 20.5 |
| 15 | 25.5 | 22.5 | 23.5 | 22.0 | 20.0 | 21.0 | 25.5 | 23.0 | 24.0 | 19.5 | 17.0 | 18.0 |
| 16 | 24.0 | 22.5 | 23.5 | 22.5 | 21.0 | 22.0 | 25.5 | 22.5 | 23.5 | 19.0 | 16.5 | 17.5 |
| 17 | 23.0 | 22.0 | 22.5 | 24.0 | 22.5 | 23.0 | 25.5 | 23.5 | 24.5 | 18.5 | 16.5 | 17.5 |
| 18 | 22.5 | 21.5 | 22.0 | 25.0 | 22.5 | 23.5 | 25.0 | 23.0 | 23.5 | 18.5 | 17.0 | 18.0 |
| 19 | 24.0 | 22.0 | 23.0 | 24.0 | 22.5 | 23.0 | 25.0 | 23.5 | 23.5 | 19.0 | 17.5 | 18.0 |
| 20 | 26.0 | 22.5 | 24.0 | 23.5 | 21.5 | 22.5 | 25.5 | 23.5 | 24.5 | 19.5 | 19.0 | 19.0 |
| 21 | 24.0 | 22.0 | 23.0 | 23.5 | 20.5 | 22.0 | 25.5 | 23.0 | 24.0 | 21.5 | 19.5 | 20.5 |
| 22 | 25.5 | 22.0 | 23.0 | 24.0 | 21.5 | 23.0 | 24.5 | 22.5 | 23.5 | 22.0 | 20.0 | 20.5 |
| 23 | 24.5 | 22.0 | 23.5 | 24.5 | 22.5 | 23.5 | 24.5 | 22.5 | 23.0 | 21.0 | 20.0 | 20.5 |
| 24 | 24.5 | 22.5 | 23.5 | 27.0 | 24.5 | 25.5 | 24.5 | 22.5 | 23.0 | 21.0 | 20.5 | 20.5 |
| 25 | 26.0 | 21.0 | 23.0 | 27.5 | 26.0 | 26.5 | 24.5 | 22.5 | 23.5 | 21.5 | 18.5 | 20.5 |
| 26 | 26.5 | 21.0 | 23.0 | 26.5 | 23.5 | 25.5 | 24.0 | 21.5 | 22.5 | 18.5 | 16.0 | 17.0 |
| 27 | 27.5 | 21.5 | 23.5 | 25.0 | 21.5 | 23.0 | 25.5 | 23.5 | 24.0 | 16.0 | 14.5 | 15.5 |
| 28 | 26.5 | 22.5 | 24.0 | 22.5 | 21.0 | 21.5 | 26.0 | 24.0 | 25.0 | 15.5 | 13.5 | 14.5 |
| 29 | 25.5 | 23.0 | 24.0 | 22.5 | 21.0 | 21.5 | 26.0 | 23.5 | 24.5 | 14.5 | 13.5 | 14.0 |
| 30 | 26.5 | 23.5 | 24.5 | 23.0 | 21.0 | 21.5 | 25.0 | 23.0 | 24.0 | 14.0 | 12.5 | 13.0 |
| 31 | --- | --- | --- | 22.0 | 19.5 | 21.0 | 26.0 | 24.0 | 24.5 | --- | --- | --- |
| MONTH | 27.5 | 15.0 | 21.7 | 27.5 | 19.5 | 22.6 | 29.0 | 20.5 | 24.3 | 26.0 | 12.5 | 20.0 |
| YEAR | 29.0 | .0 | 12.8 | | | | | | | | | |

01465893 LITTLE CREEK AT CHAIRVILLE, NJ

LOCATION.--Lat 39°53'53", long 74°47'19", Burlington County, Hydrologic Unit 02040202, at bridge on State Route 70 in Chairville, 250 feet east of Skeet Road, 1.9 mi east of Medford, 4.6 mi south of Lumberton, and 4.7 mi upstream of South Branch Rancocas Creek.

DRAINAGE AREA.--6.32 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNPLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|---|--|--|--|---|--|--|--|--|---|---|--|--|
| | | | | | | | | | | | | | | |
| NOV 20... | 1040 | 4.7 | -- | .644 | .497 | 759 | 83 | 11.0 | 3.8 | 69 | 6.5 | 3.5 | 8 | |
| FEB 07... | 1215 | 28 | -- | .645 | .493 | 766 | 86 | 11.7 | 4.1 | 74 | 6.0 | 3.0 | 7 | |
| MAY 15... | 0930 | 2.8 | 2.6 | .712 | .571 | 759 | 85 | 8.5 | 5.2 | 100 | 20.0 | 15.0 | 9 | |
| AUG 15... | 1220 | 1.4 | 4.3 | .275 | .220 | 761 | 84 | 7.1 | 6.6 | 95 | 27.0 | 23.5 | 10 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA, DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| | | | | | | | | | | | | | | |
| NOV 20... | 1.57 | .893 | .80 | 6.6 | -- | 10.4 | <.2 | 7.4 | 5.8 | 57 | -- | <.030 | .37 | |
| FEB 07... | 1.43 | .723 | .62 | 4.0 | -- | 6.6 | <.2 | 5.1 | 7.9 | 54 | -- | <.030 | .29 | |
| MAY 15... | 1.73 | 1.11 | 1.17 | 11.5 | 3 | 18.2 | <.2 | 2.9 | 5.1 | 78 | 44 | .070 | .56 | |
| AUG 15... | 1.82 | 1.28 | 1.31 | 13.4 | 4 | 20.5 | <.2 | 2.8 | 6.2 | 56 | 50 | <.030 | .28 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| | | | | | | | | | | | | | | |
| NOV 20... | .03 | .88 | .093 | <.003 | .46 | .97 | <.022 | .008 | .013 | .3 | <.1 | 13 | .3 | |
| FEB 07... | <.03 | .41 | .047 | <.003 | .33 | .46 | .039 | .009 | .012 | .6 | <.1 | 13 | .6 | |
| MAY 15... | .13 | .62 | .065 | <.003 | .63 | .68 | .144 | .018 | .041 | 1.4 | <.1 | 12 | 1.4 | |
| AUG 15... | <.03 | .40 | .090 | <.003 | .37 | .49 | .080 | .011 | .041 | .9 | <.1 | 5.2 | .9 | |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|------|--|--|---------------------------------------|--|
|------|--|--|---------------------------------------|--|

| | | | | |
|-----------|------|------|-----|----|
| NOV 20... | <1.0 | -- | E12 | <1 |
| FEB 07... | 2.2 | -- | 19 | 2 |
| MAY 15... | E2.0 | 1.40 | 20 | 5 |
| AUG 15... | <1.0 | 7.40 | 25 | 5 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01465893 LITTLE CREEK AT CHAIRVILLE, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | JUL | | | | |
| 02... | 1040 | 700 | 400 | 2600 | 09... | 1244 | 20 | <100 | 540 |
| | | | | | 30... | 1035 | <20 | 100 | 390 |

< Actual value is known to be less than the value shown.

01466100 MOUNT MISERY BROOK AT UPTON, NJ

LOCATION.--Lat 39°55'44", long 74°31'53", Burlington County, Hydrologic Unit 02040202, at bridge on State Route 70, 0.5 mi southwest of Upton, 1.1 mi downstream of confluence of North Branch, Middle Branch, and South Branch Mount Misery Brook, and 4.0 mi northeast of Four Mile Circle.

DRAINAGE AREA.--28.4 mi².

PERIOD OF RECORD.--December 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO- METRIC PRES- SURE (MM HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) |
|--------------|------|--|--|--|---|---|--|--|--|---|---|--|---|
| DEC 12... | 1000 | -- | .135 | .104 | 755 | 87 | 11.0 | 4.7 | 40 | 4.5 | 5.0 | 3 | .60 |
| FEB 27... | 1000 | -- | .308 | .234 | 766 | 85 | 10.8 | 4.2 | 47 | 6.0 | 5.5 | 3 | .55 |
| MAY 17... | 1045 | 1.4 | .325 | .255 | 760 | 84 | 8.7 | 4.4 | 37 | 14.1 | 13.5 | 3 | .49 |
| AUG 16... | 1100 | 1.4 | .277 | .219 | 763 | 78 | 7.2 | 4.4 | 43 | 27.0 | 19.5 | 4 | .69 |

| DATE | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) |
|--------------|---|--|---|--|--|---|--|--|---|--|--|---|---|
| DEC 12... | .450 | .45 | 1.9 | <1 | 3.4 | <.2 | 5.0 | 5.8 | 20 | .120 | E.08 | .04 | .13 |
| FEB 27... | .409 | .41 | 1.8 | -- | 3.0 | <.2 | 4.3 | 6.2 | 24 | <.030 | .14 | .03 | .19 |
| MAY 17... | .378 | .37 | 1.9 | -- | 3.4 | <.2 | 4.4 | 4.5 | 22 | <.030 | .16 | <.03 | .19 |
| AUG 16... | .548 | .50 | 2.0 | -- | 3.1 | <.2 | 6.4 | 6.2 | 27 | <.030 | .17 | <.03 | .26 |

| DATE | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) |
|--------------|--|--|--|--|---|--|---|--|---|---|--|---|---|
| DEC 12... | E.028 | <.003 | -- | -- | .025 | E.003 | .004 | .5 | <.1 | 3.3 | .5 | <1.0 | -- |
| FEB 27... | .048 | <.003 | .18 | .24 | .022 | E.002 | .004 | .4 | <.1 | 6.8 | .4 | E1.6 | -- |
| MAY 17... | <.037 | <.003 | -- | -- | .053 | .005 | .011 | .8 | <.1 | 5.4 | .8 | E1.9 | 1.30 |
| AUG 16... | .043 | .014 | .21 | .30 | .117 | E.002 | .011 | 1.6 | <.1 | 5.2 | 1.6 | <1.0 | 1.60 |

| DATE | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) |
|--------------|---|---|
| DEC 12... | E10 | <1 |
| FEB 27... | E11 | 2 |
| MAY 17... | E10 | 3 |
| AUG 16... | E11 | 4 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01466100 MOUNT MISERY BROOK AT UPTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | |
|--------------|------|--|---|--|---|---|--|---|---|---|--|--|--|--|
| AUG 16... | 1100 | -- | -- | -- | -- | -- | -- | <2 | 21.9 | .06 | 10 | .06 | <1 | |
| 16... | 1100 | 4.20 | 50 | <.2 | 80 | 2.8 | <.2 | -- | -- | -- | -- | -- | -- | |
| DATE | | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029) | COBAL/T, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) |
| AUG 16... | E.4 | 780 | 1 | 18 | <.01 | <1 | <.4 | <.05 | 9 | -- | -- | -- | -- | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | <1 | <.03 | .9 | .1 | |
| DATE | | COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS MN) (01053) | MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G AS SE) (01148) | ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH- THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH- THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) |
| AUG 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 16... | 3 | 1500 | 3.3 | 3.5 | <.01 | .7 | <1 | <3 | <50 | <50 | <50 | <50 | <50 | |
| DATE | | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS, <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPHTHAL ENE, 12 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49403) |
| AUG 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 16... | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | |
| DATE | | NAPHTHAL ENE, 16 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPHTHAL ENE, 26 DIMETHL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPHTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) |
| AUG 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 16... | <50 | <50 | <50 | <50 | <50 | <5 | <50 | <50 | <50 | <50 | <50 | <50 | <1 | |
| DATE | | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | |
| FEB 27... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

433

01466100 MOUNT MISERY BROOK AT UPTON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER TERT- BUTYL ETHER, WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- PENTYL ETHER, WATER UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL WATER UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|--------------|--|---|---|---|--|---|---|---|--|--|--|---|--|
| FEB 27... | <.10 | <.2 | .11 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
| DATE | CHLORO- BENZENE TOTAL (UG/L) (34423) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | METHYL ENE CHLO- RIDE UNFLTRD REC (UG/L) (85795) | META/ PARA- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34010) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | |
| FEB 27... | | | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD | ALA- CHLOR, WATER, DISS, | ALPHA BHC DIS- | ATRA- ZINE, WATER, DISS, | BEN- FLUR- ALIN WAT FLT | CAR- BARYL WATER FLTRD | CARBO- FURAN WATER FLTRD | CHLOR- PYRIFOS DIS- | CYANA- ZINE, WATER, DISS, | DCPA WATER FLTRD | DEETHYL ATRA- ZINE, WATER, DISS, | DI- AZINON, DIS- | | |
|--------------|------|--|---|--|---|---|---|--|---|---|---|--|---|---|--|
| | | REC (UG/L) (49260) | REC, (UG/L) (46342) | SOLVED (UG/L) (34253) | REC (UG/L) (39632) | GF, REC (UG/L) (82673) | GF, REC (UG/L) (82680) | GF, REC (UG/L) (82674) | SOLVED (UG/L) (38933) | REC (UG/L) (04041) | GF, REC (UG/L) (82682) | REC (UG/L) (04040) | SOLVED (UG/L) (39572) | | |
| | | | | | | | | | | | | | | | |
| MAY 17... | 1045 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 | | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, WATER, DISS, SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| MAY 17... | | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | |
| DATE | TIME | | | | | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| MAY 17... | | | | | | <.011 | <.016 | <.034 | <.005 | <.009 | | | | | |

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01466100 MOUNT MISERY BROOK AT UPTON, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | JUL | | | | |
| 02... | 1015 | 1700 | 1700 | 290 | 09... | 1150 | 20 | <100 | 20 |
| | | | | | 30... | 1010 | <20 | <100 | 40 |

< Actual value is known to be less than the value shown.

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ

LOCATION.--Lat 39°53'05", long 74°30'20", Burlington County, Hydrologic Unit 02040202, 25 ft upstream from Butterworth Road Bridge in Lebanon State Forest, 3.4 mi upstream from confluence with Cooper Branch, and 7.0 mi southeast of Browns Mills.

DRAINAGE AREA.--2.35 mi².

PERIOD OF RECORD.--Water years 1963-96, 1998 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1968 to September 1992.

pH: October 1984 to September 1992.

WATER TEMPERATURE: October 1960 to September 1992.

DISSOLVED OXYGEN: October 1984 to September 1992.

REMARKS.--Chemical analyses are from samples collected as water flows over the weir at the gaging station. All discharge record represents flow at a point 785 ft downstream of the gaging station. Discharges at the weir may be about 1 ft³/s less than published in Water-Data Report NJ-01-1. For definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Background, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) |
|-----------|------|---------------|---|---|--|--|--|---|-----------------------------------|--|---|----------------------------------|
| | | | | | | | | | | | | |
| NOV 30... | 1045 | ENVIRONMENTAL | 1.3 | -- | .167 | .124 | 758 | 38 | 4.5 | 4.2 | 52 | 8.0 |
| MAR 01... | 1045 | ENVIRONMENTAL | 2.2 | -- | .402 | .298 | 758 | 61 | 8.0 | 4.1 | 63 | 2.0 |
| MAY 24... | 1045 | ENVIRONMENTAL | 1.9 | .3 | .390 | .296 | 758 | 30 | 3.1 | 4.1 | 49 | 22.0 |
| AUG 07... | 0945 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07... | 1045 | ENVIRONMENTAL | .92 | .3 | .126 | .099 | 757 | 29 | 2.8 | 4.5 | 30 | 32.0 |

| DATE | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB AS (CAC03) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) |
|-----------|------------------------------------|-----------------------------------|---|---|--|---|--|--|---|---|--|---|---|
| | | | | | | | | | | | | | |
| NOV 30... | 8.0 | 4 | .55 | .603 | .25 | 2.1 | -- | 3.4 | <.2 | 4.6 | 6.5 | 15 | <.030 |
| MAR 01... | 3.5 | 3 | .59 | .472 | .22 | 1.8 | -- | 3.1 | <.2 | 3.6 | 7.2 | 25 | <.030 |
| MAY 24... | 13.0 | 3 | .45 | .381 | .11 | 1.8 | -- | 3.3 | <.2 | 3.8 | 3.9 | 36 | <.030 |
| AUG 07... | -- | -- | <.01 | <.008 | -- | <.1 | -- | -- | -- | <.1 | -- | -- | -- |
| 07... | 15.5 | 2 | .28 | .302 | .23 | 1.8 | <1 | 3.4 | <.2 | 4.8 | 3.2 | 11 | .030 |

| DATE | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AMMONIA (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHURUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHURUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) |
|-----------|--|--|---|---|---|--|--|---------------------------------------|---|---|--|--|--|
| | | | | | | | | | | | | | |
| NOV 30... | .11 | <.03 | .14 | <.037 | <.003 | <.022 | <.004 | <.004 | .2 | <.1 | 4.7 | .2 | <1.0 |
| MAR 01... | .15 | <.03 | .17 | <.037 | <.003 | <.022 | <.004 | E.002 | .2 | <.1 | 9.4 | .2 | <1.0 |
| MAY 24... | .18 | <.03 | .14 | E.019 | <.003 | .025 | <.004 | <.004 | .2 | <.1 | 8.7 | .2 | <1.0 |
| AUG 07... | <.10 | -- | <.08 | <.037 | -- | -- | <.004 | <.004 | -- | -- | -- | -- | -- |
| 07... | E.06 | .06 | .09 | <.037 | <.003 | <.022 | E.002 | <.004 | .2 | <.1 | 2.5 | .2 | E1.6 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | CHLORO- PHYLL A FLUORO- METRIC METHOD DATE | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530) | | | | | | | | |
|------|-------|----------------|--|---|---|--|---|---|--|--|---|--|---|---|---|
| NOV | 30... | | -- | E13 | -- | -- | <1 | | | | | | | | |
| MAR | 01... | | -- | <13 | -- | -- | 8 | | | | | | | | |
| MAY | 24... | | .300 | E10 | -- | -- | 1 | | | | | | | | |
| AUG | 07... | | -- | <7 | <10 | <.1 | -- | | | | | | | | |
| | 07... | | .100 | <13 | -- | -- | 1 | | | | | | | | |
| | | | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOT IN BOT MAT (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS AL) (00686) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106) | ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095) | ARSENIC DIS- SOLVED (UG/L AS AS) (01000) | ARSENIC TOTAL (UG/L AS AS) (01002) | | | |
| DATE | TIME | SAMPLE TYPE | | | | | | | | | | | | | |
| AUG | 07... | 0945 | FIELD BLANK | -- | -- | -- | -- | -- | <1 | <.05 | <.2 | -- | | | |
| | 07... | 1045 | ENVIRONMENTAL | -- | -- | -- | -- | -- | -- | -- | -- | <2 | | | |
| | 07... | 1045 | BED MATERIAL | 5.48 | 140 | .6 | 60 | 5.5 | <.2 | -- | -- | -- | | | |
| | | | BARIUM, DIS- SOLVED (UG/L AS BA) (01005) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM DIS- SOLVED (UG/L AS CD) (01025) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COBALT, DIS- SOLVED (UG/L AS CO) (01035) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, DIS- SOLVED (UG/L AS FE) (01046) |
| DATE | | | | | | | | | | | | | | | |
| AUG | 07... | <1.0 | -- | <.06 | -- | -- | <.04 | -- | <.8 | -- | <.02 | <.2 | -- | -- | <10 |
| | 07... | -- | 7.6 | -- | <.06 | 8 | -- | E.03 | -- | <1 | -- | -- | -- | <.6 | -- |
| | 07... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | LITHIUM DIS- SOLVED (UG/L AS LI) (01130) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY DIS- SOLVED (UG/L AS HG) (71890) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) |
| DATE | | | | | | | | | | | | | | | |
| AUG | 07... | -- | <.08 | -- | <.3 | <.1 | -- | <.01 | -- | <.2 | <.06 | -- | <.3 | -- | -- |
| | 07... | 120 | -- | <1 | -- | -- | 5 | -- | <.01 | -- | -- | <1 | -- | -- | <.4 |
| | 07... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | | | SILVER, DIS- SOLVED (UG/L AS AG) (01075) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080) | THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057) | VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) | COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/L AS FE) (01170) |
| DATE | | | | | | | | | | | | | | | |
| AUG | 07... | <1.0 | -- | <.08 | <.04 | <.2 | <1 | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07... | -- | <.05 | -- | -- | -- | -- | 4 | -- | -- | -- | -- | -- | -- | -- |
| | 07... | -- | -- | -- | -- | -- | -- | -- | <1 | <.03 | 2.3 | .1 | <.334 | 580 | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | LEAD, REC. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, REC. FM BOT- TOM MA- TERIAL (UG/G) (01053) | MERCURY FM BOT- TOM MA- TERIAL (UG/G) AS HG (71921) | NICKEL, REC. FM BOT- TOM MA- TERIAL (UG/G) AS NI (01068) | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G) AS ZN (01148) | ZINC, REC. FM BOT- TOM MA- TERIAL (UG/G) AS ZN (01093) | 4HCYPEN PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) |
|-------|---|---|---|--|---|---|--|--|--|--|---|---|---|
| AUG | | | | | | | | | | | | | |
| 07... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07... | 3.1 | 6.3 | .08 | .5 | <1 | <3 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| DATE | BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS, <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPHTHAL ENE, 12 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49403) | NAPHTHAL ENE, 16 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPHTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) |
| AUG | | | | | | | | | | | | | |
| 07... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07... | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| DATE | NAPHTHAL ENE, 26 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPHTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | URANIUM NATURAL DIS- SOLVED AS U (22703) | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) | |
| AUG | | | | | | | | | | | | | |
| 07... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <.02 | -- | -- |
| 07... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07... | <50 | <50 | <50 | <5 | <50 | <50 | E30 | <50 | <50 | <50 | -- | 52 | -- |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLOR- IDE TOTAL (UG/L) (32102) |
| MAR | | | | | | | | | | | | | |
| 01... | 1045 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
| DATE | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER UNFLTRD RECOVER (UG/L) (81577) | ETHER TERT- BUTYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL WATER UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL WATER UNFLTRD RECOVER (UG/L) (50005) | BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
| MAR | | | | | | | | | | | | | |
| 01... | <.10 | <.2 | .20 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |
| DATE | | METHYL ENE CHLOR- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | |
| MAR | | | | | | | | | | | | | |
| 01... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01466500 MCDONALDS BRANCH IN LEBANON STATE FOREST, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|------|------|---|---|--|---|---|---|---|--|--|---|--|---|---|
| | | MAY 24... | 1045 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER FLTRD 0.7 U DISSOLV (UG/L) (39415) | METRI- BUZIN WATER FLTRD 0.7 U DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | MAY 24... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.001 | <.006 | .006 | <.007 | <.003 | <.010 |
| DATE | TIME | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| | | MAY 24... | <.011 | <.016 | <.034 | E.002 | <.009 | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 1000 | 140 | 100 | 20 | JUL 09... | 1132 | <20 | <100 | 10 |
| | | | | | JUL 30... | 0955 | <20 | <100 | <10 |

E Estimated value.

< Actual value is known to be less than the value shown.

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ

LOCATION.--Lat 39°57'22", long 74°37'41", Burlington County, Hydrologic Unit 02040202, at bridge on Four Mile Road (County Route 646) 0.1 mi south of New Lisbon, 0.5 mi upstream from mouth, and 3.1 mi east of Pemberton.

DRAINAGE AREA.--77.9 mi².

PERIOD OF RECORD.--December 2000 to August 2000.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Undeveloped Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| DEC 14... | 0800 | 68 | -- | .226 | .176 | 760 | 80 | 10.4 | 4.6 | 48 | 4.5 | 4.0 | 5 |
| MAR 07... | 0800 | 121 | -- | .361 | .278 | 750 | 78 | 10.4 | 4.2 | 58 | 3.5 | 3.0 | 4 |
| MAY 31... | 0800 | 73 | 4.1 | .517 | .412 | 759 | 75 | 7.5 | 4.4 | 45 | 12.0 | 15.1 | 4 |
| AUG 15... | 0800 | 75 | 7.8 | .376 | .299 | 759 | 82 | 7.1 | 4.7 | 55 | 19.0 | 22.0 | 6 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS K) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
|-----------|---|--|--|---|---|--|---|---|--|---|---|--|--|
| DEC 14... | 1.02 | .590 | .84 | 3.4 | <1 | 5.3 | <.2 | 5.5 | 7.3 | 31 | .050 | .15 | .04 |
| MAR 07... | .93 | .520 | .58 | 3.4 | -- | 5.1 | <.2 | 3.7 | 6.8 | 27 | <.030 | .17 | .05 |
| MAY 31... | .93 | .521 | .77 | 3.9 | -- | 6.2 | <.2 | 4.5 | 5.1 | 37 | .030 | .18 | .03 |
| AUG 15... | 1.17 | .638 | .79 | 4.3 | -- | 6.5 | <.2 | 5.1 | 8.6 | 31 | <.030 | .17 | .09 |

| DATE | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) |
|-----------|---|---|---|---|--------------------------------------|--|--|---------------------------------------|---|---|--|--|--|
| DEC 14... | .17 | .076 | <.003 | .22 | .25 | .054 | .007 | .015 | .5 | <.1 | 4.5 | .5 | E2.0 |
| MAR 07... | .22 | .048 | <.003 | .22 | .27 | <.022 | .011 | .023 | .5 | <.1 | 7.5 | .5 | E2.2 |
| MAY 31... | .38 | .049 | <.003 | .23 | .43 | .125 | .011 | .051 | 2.6 | <.1 | 7.2 | 2.6 | E1.6 |
| AUG 15... | .42 | .050 | <.003 | .22 | .47 | .224 | .004 | .071 | 4.5 | <.1 | 5.3 | 4.5 | E1.4 |

| DATE | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|--|---------------------------------------|--|
| DEC 14... | -- | E12 | 2 |
| MAR 07... | -- | <13 | <1 |
| MAY 31... | 1.60 | E7 | 2 |
| AUG 15... | 11.0 | E12 | 11 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01466900 GREENWOOD BRANCH AT NEW LISBON, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 0925 | 2400 | 1300 | 250 | JUL 09... | 1210 | 20 | <100 | <10 |
| | | | | | JUL 30... | 0930 | <20 | <100 | 10 |

< Actual value is known to be less than the value shown.

01467005 NORTH BRANCH RANOCAS CREEK AT IRON WORKS PARK, AT MOUNT HOLLY, NJ

LOCATION.--Lat 39°59'31", long 74°46'58", Burlington County, Hydrologic Unit 02040202, at Iron Works Park footbridge, 0.3 mi north of Saint Andrews Cemetery in Mount Holly, and 0.1 mi downstream from Mill Dam.

DRAINAGE AREA.--140 mi².

PERIOD OF RECORD.--Water years 1998 to current year. Published as "at Pine Street" (station 01467006) 1998-99.

REMARKS.--Site is at head of tide; all samples collected at low tide.

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLT/RTD (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) |
|-----------|------|---|---|--|--|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|
| DEC 11... | 1230 | 121 | -- | -- | -- | 764 | 95 | 12.6 | 6.6 | 153 | 6.5 | 3.5 | 32 |
| MAR 08... | 1200 | 280 | -- | .284 | .220 | 762 | 99 | 12.8 | 6.2 | 110 | 8.0 | 4.5 | 21 |
| MAY 22... | 1240 | 153 | 20 | .393 | .314 | 755 | 89 | 8.7 | 6.6 | 145 | 21.0 | 16.0 | 29 |
| AUG 15... | 0950 | 124 | 13 | .299 | .238 | 761 | 91 | 7.7 | 6.8 | 102 | 27.0 | 23.5 | 22 |

| DATE | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|-----------|---|---|--|---|---|--|---|---|--|---|---|---|---|
| DEC 11... | 10.1 | 1.59 | 2.48 | 11.0 | 6 | 13.6 | <.2 | 8.0 | 29.9 | 92 | 82 | .430 | .67 |
| MAR 08... | 6.06 | 1.45 | 1.32 | 9.6 | 5 | 14.1 | <.2 | 5.3 | 16.3 | 72 | 59 | .210 | .36 |
| MAY 22... | 8.96 | 1.55 | 1.80 | 12.2 | 6 | 14.3 | E.1 | 5.4 | 28.2 | 102 | 78 | .420 | .68 |
| AUG 15... | 6.64 | 1.35 | 1.91 | 8.3 | 7 | 12.4 | <.2 | 5.4 | 15.1 | 66 | 56 | .130 | .45 |

| DATE | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHURUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHURUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
|-----------|--|--|---|---|--|-------------------------------------|--|--|---------------------------------------|---|---|--|--|
| DEC 11... | .49 | .69 | .226 | .004 | .90 | .92 | .050 | .076 | .192 | .7 | <.1 | 4.5 | .7 |
| MAR 08... | .22 | .40 | .346 | <.003 | .71 | .75 | .097 | .027 | .070 | .7 | <.1 | 6.1 | .7 |
| MAY 22... | .46 | .98 | .257 | .011 | .93 | 1.2 | .359 | .016 | .243 | 4.7 | <.1 | 6.5 | 4.7 |
| AUG 15... | .16 | .60 | .233 | .010 | .68 | .83 | .202 | .020 | .149 | 2.7 | <.1 | 5.2 | 2.7 |

| DATE | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) |
|-----------|--|--|---------------------------------------|--|
| DEC 11... | 3.4 | -- | 24 | <1 |
| MAR 08... | E1.7 | -- | 18 | 4 |
| MAY 22... | 3.1 | 3.70 | 23 | 20 |
| AUG 15... | E1.5 | 7.00 | 29 | 10 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01467005 NORTH BRANCH RANOCAS CREEK AT IRON WORKS PARK, AT MOUNT HOLLY, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
 Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUL 02... | 1105 | 700 | 600 | 400 | JUL 09... | 1303 | 700 | 200 | 280 |
| | | | | | JUL 30... | 1100 | 340 | 500 | 190 |

DELAWARE RIVER BASIN

443

01467150 COOPER RIVER AT HADDONFIELD, NJ

LOCATION.--Lat 39°54'11", long 75°01'18", Camden County, Hydrologic Unit 02040202, on right bank of Wallworth Lake in Pennypacker Park, 200 ft upstream from bridge on State Highway 41 (Kings Highway) in Haddonfield, 0.6 mi upstream from North Branch Cooper River, and 7.7 mi upstream from mouth.

DRAINAGE AREA.--17.0 mi².

PERIOD OF RECORD.--Water years 1968-79, 1991 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: March 1968 to September 1969.

WATER TEMPERATURE: March 1968 to August 1969, recorded once daily; October 1998 to September 2001, recorded hourly.

INSTRUMENTATION.--

WATER TEMPERATURE: Water temperature data logger (in-situ system; measurements recorded every 15 or 30 minutes) located at gage.

REMARKS.--For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction". Fish community data for this and other sites are presented in "Water-Quality at Miscellaneous Surface-Water Sites."

COOPERATION.--Field data and samples for laboratory analyses on 11/16, 02/08, 05/09, and 08/02 were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. Coli, and enterococcus bacteria on those dates was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Other field data and samples for laboratory analyses were provided by the Delaware River Basin National Water-Quality Assessment Program (NAWQA).

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator, New Jersey Department of Environmental Protection Watershed Management Area 19.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 34.0°C, July 6, 1999; minimum, 0.0°C, on several days during January 2000.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 31.0°C, Aug. 9, 10; minimum, 0.5°C, on several days in December and January.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-AIRE (DEG C) (00020) |
|-------|------|---------------|---|---|--|--|--|---|-----------------------------------|--|---|-----------------------------|
| OCT | | | | | | | | | | | | |
| 02... | 1419 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 02... | 1420 | ENVIRONMENTAL | 14 | 31 | -- | -- | 764 | 125 | 11.9 | 7.0 | 209 | 22.5 |
| NOV | | | | | | | | | | | | |
| 06... | 1210 | ENVIRONMENTAL | 9.3 | 28 | -- | -- | 764 | 97 | 11.0 | 7.2 | 225 | 12.0 |
| 16... | 1000 | ENVIRONMENTAL | 16 | -- | .178 | .142 | 762 | 83 | 10.1 | 6.7 | 191 | -- |
| DEC | | | | | | | | | | | | |
| 19... | 1330 | ENVIRONMENTAL | 32 | 51 | -- | -- | 760 | 99 | 12.9 | 7.0 | 152 | 5.5 |
| FEB | | | | | | | | | | | | |
| 01... | 1200 | ENVIRONMENTAL | 21 | 30 | -- | -- | 763 | 114 | 14.7 | 7.0 | 389 | 10.5 |
| 05... | 1220 | ENVIRONMENTAL | 240 | 110 | -- | -- | 755 | 106 | 14.0 | 7.0 | 287 | .5 |
| 08... | 1000 | ENVIRONMENTAL | 27 | -- | .235 | .189 | 778 | 87 | 11.9 | 6.5 | 586 | -- |
| MAR | | | | | | | | | | | | |
| 08... | 1430 | ENVIRONMENTAL | 19 | 24 | -- | -- | 760 | 108 | 13.5 | 7.2 | 565 | 8.0 |
| 21... | 1920 | ENVIRONMENTAL | 491 | 200 | -- | -- | 753 | 92 | 11.0 | 6.9 | 177 | 8.5 |
| APR | | | | | | | | | | | | |
| 03... | 1020 | ENVIRONMENTAL | 21 | 31 | -- | -- | 766 | 88 | 10.5 | 7.0 | 240 | 9.5 |
| MAY | | | | | | | | | | | | |
| 01... | 1200 | ENVIRONMENTAL | 12 | -- | -- | -- | 768 | 103 | 10.0 | 6.9 | 263 | 27.5 |
| 09... | 1000 | ENVIRONMENTAL | 10 | 32 | .121 | .095 | 768 | 79 | 7.9 | 6.9 | 267 | 16.0 |
| JUN | | | | | | | | | | | | |
| 05... | 1310 | ENVIRONMENTAL | 16 | 24 | -- | -- | 760 | 99 | 8.9 | 7.0 | 225 | 25.0 |
| JUL | | | | | | | | | | | | |
| 05... | 1320 | ENVIRONMENTAL | 52 | 46 | -- | -- | 756 | 90 | 7.4 | 6.9 | 129 | 29.5 |
| AUG | | | | | | | | | | | | |
| 02... | 1000 | ENVIRONMENTAL | 6.5 | 43 | .097 | .077 | 770 | 69 | 6.0 | 6.9 | 246 | 21.0 |
| 09... | 1120 | ENVIRONMENTAL | 6.5 | 29 | -- | -- | 764 | 94 | 7.4 | 7.0 | 236 | 33.5 |

DELAWARE RIVER BASIN

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086) | BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) |
|-------|---|---|--|--|---|---|--|--|--|--|--|--|--|
| OCT | | | | | | | | | | | | | |
| 02... | -- | -- | <.02 | <.014 | <.24 | <.1 | -- | -- | -- | <.3 | <.1 | <.1 | <.3 |
| 02... | 17.6 | 57 | 15.9 | 4.18 | 3.26 | 11.7 | -- | 28 | 34 | 23.0 | .1 | 10.9 | 23.8 |
| NOV | | | | | | | | | | | | | |
| 06... | 9.8 | 63 | 17.3 | 4.86 | 4.19 | 13.9 | -- | 31 | 38 | 28.2 | .3 | 13.2 | 23.8 |
| 16... | 7.0 | 56 | 15.5 | 4.16 | 4.32 | 12.1 | 33 | -- | -- | 22.5 | .2 | 11.5 | 20.4 |
| DEC | | | | | | | | | | | | | |
| 19... | 4.4 | 43 | 12.1 | 3.07 | 2.83 | 8.6 | -- | -- | -- | 15.7 | E.1 | 7.0 | 18.8 |
| FEB | | | | | | | | | | | | | |
| 01... | 4.6 | 57 | 16.3 | 3.91 | 3.36 | 43.3 | -- | 26 | 31 | 77.2 | E.1 | 8.1 | 23.7 |
| 05... | 3.4 | 37 | 10.5 | 2.52 | 2.35 | 35.3 | -- | 17 | 20 | 58.3 | E.1 | 4.7 | 15.3 |
| 08... | 3.0 | 65 | 18.8 | 4.34 | 3.72 | 85.1 | 25 | -- | -- | 150 | E.1 | 8.3 | 23.7 |
| MAR | | | | | | | | | | | | | |
| 08... | 5.8 | 68 | 19.5 | 4.74 | 3.42 | 76.4 | -- | 24 | 30 | 136 | E.2 | 9.2 | 27.3 |
| 21... | 7.3 | 26 | 7.37 | 1.82 | 1.92 | 21.5 | -- | 16 | 20 | 34.6 | E.1 | 2.8 | 10.6 |
| APR | | | | | | | | | | | | | |
| 03... | 7.8 | 56 | 15.4 | 4.20 | 2.92 | 21.7 | -- | 28 | 34 | 39.2 | E.1 | 8.7 | 25.2 |
| MAY | | | | | | | | | | | | | |
| 01... | 17.3 | 64 | 17.5 | 4.93 | 3.43 | 20.4 | -- | 32 | 39 | 39.1 | .2 | 8.8 | 26.5 |
| 09... | 16.0 | 68 | 18.6 | 5.17 | 4.26 | 22.1 | 32 | -- | -- | 40.4 | .2 | 10.9 | 26.9 |
| JUN | | | | | | | | | | | | | |
| 05... | 20.4 | 60 | 16.8 | 4.48 | 3.83 | 16.0 | -- | 32 | 39 | 28.9 | .2 | 11.2 | 20.5 |
| JUL | | | | | | | | | | | | | |
| 05... | 24.9 | 35 | 9.89 | 2.42 | 3.03 | 8.5 | -- | 19 | 24 | 14.0 | E.1 | 5.2 | 12.6 |
| AUG | | | | | | | | | | | | | |
| 02... | 22.5 | 63 | 16.9 | 5.11 | 4.57 | 15.6 | 29 | -- | -- | 33.1 | .2 | 14.3 | 26.5 |
| 09... | 28.1 | 65 | 17.5 | 5.24 | 4.76 | 14.6 | -- | 32 | 39 | 30.1 | .2 | 13.7 | 26.1 |
| DATE | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR- TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) |
| OCT | | | | | | | | | | | | | |
| 02... | <10 | -- | <.020 | <.10 | -- | <.10 | <.050 | <.010 | -- | -- | -- | <.006 | <.010 |
| 02... | 129 | 112 | .214 | .45 | -- | .63 | .347 | <.010 | .80 | .97 | -- | .023 | .018 |
| NOV | | | | | | | | | | | | | |
| 06... | 125 | 125 | .076 | <.10 | -- | .36 | .143 | E.004 | -- | .51 | -- | E.005 | <.018 |
| 16... | 124 | 111 | <.030 | .34 | <.03 | .44 | .122 | .003 | .46 | .56 | .166 | .037 | -- |
| DEC | | | | | | | | | | | | | |
| 19... | 99 | 84 | .097 | .39 | -- | .55 | .339 | E.005 | .73 | .89 | -- | .038 | .027 |
| FEB | | | | | | | | | | | | | |
| 01... | 209 | 194 | .178 | .67 | -- | .59 | .374 | .007 | 1.0 | .97 | .150 | .015 | E.011 |
| 05... | 162 | 141 | .181 | .38 | -- | .72 | .422 | .014 | .81 | 1.1 | -- | .014 | <.018 |
| 08... | 335 | 311 | .130 | .32 | .16 | .47 | .425 | .004 | .75 | .89 | .149 | .027 | -- |
| MAR | | | | | | | | | | | | | |
| 08... | 304 | 294 | .114 | .27 | -- | .42 | .342 | E.004 | .61 | .76 | .133 | .006 | <.018 |
| 21... | 102 | 95 | .190 | .55 | -- | 1.5 | .917 | .009 | 1.5 | 2.4 | 1.0 | .029 | .021 |
| APR | | | | | | | | | | | | | |
| 03... | 148 | 137 | .174 | .41 | -- | .53 | .413 | .007 | .82 | .95 | <.022 | .023 | .019 |
| MAY | | | | | | | | | | | | | |
| 01... | 159 | 141 | E.021 | .30 | -- | .54 | .135 | E.005 | .44 | .68 | .312 | .020 | <.018 |
| 09... | 170 | 149 | .100 | .40 | .09 | .61 | .176 | .009 | .58 | .78 | .278 | .019 | -- |
| JUN | | | | | | | | | | | | | |
| 05... | 134 | 124 | .267 | .52 | -- | .71 | .334 | .017 | .85 | 1.0 | .222 | .027 | .019 |
| JUL | | | | | | | | | | | | | |
| 05... | 88 | 69 | .094 | .48 | -- | .86 | .403 | .016 | .88 | 1.3 | .614 | .030 | <.020 |
| AUG | | | | | | | | | | | | | |
| 02... | 154 | 135 | .220 | .45 | .23 | .76 | .290 | .013 | .74 | 1.0 | .284 | .019 | -- |
| 09... | 166 | 133 | .115 | .40 | -- | .69 | .227 | .014 | .62 | .92 | .303 | .011 | <.020 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

445

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155) | SEDI- MENT, SUS- PENDED (MG/L) (80154) |
|-------|---|--|---|---|--|---|---|---|---|---|--|---|---|
| OCT | | | | | | | | | | | | | |
| 02... | <.008 | -- | -- | -- | -- | -- | -- | <16 | <10 | <2.2 | -- | -- | 1 |
| 02... | .256 | -- | -- | 3.4 | .9 | -- | -- | 40 | 470 | 66.6 | -- | .53 | 14 |
| NOV | | | | | | | | | | | | | |
| 06... | .137 | -- | -- | 2.4 | .8 | -- | -- | 48 | 60 | 106 | -- | .22 | 9 |
| 16... | .194 | 1.5 | <.1 | 4.6 | 1.5 | 3.4 | -- | 31 | -- | -- | 14 | -- | -- |
| DEC | | | | | | | | | | | | | |
| 19... | .170 | -- | -- | 5.7 | 1.3 | -- | -- | 28 | 900 | 67.5 | -- | 1.8 | 21 |
| FEB | | | | | | | | | | | | | |
| 01... | .150 | 2.0 | -- | 3.7 | -- | -- | -- | 21 | 660 | 89.2 | -- | .77 | 14 |
| 05... | .324 | -- | -- | 3.4 | -- | -- | -- | 16 | 160 | 57.6 | -- | 35 | 53 |
| 08... | .123 | 1.8 | <.1 | 4.6 | 1.8 | E1.8 | -- | 25 | -- | -- | 3 | -- | -- |
| MAR | | | | | | | | | | | | | |
| 08... | .139 | 1.5 | <.1 | 3.0 | 1.5 | -- | -- | 26 | 610 | 94.8 | -- | .56 | 11 |
| 21... | .883 | 13 | .1 | 4.0 | 13 | -- | -- | 20 | 230 | 39.0 | -- | 211 | 160 |
| APR | | | | | | | | | | | | | |
| 03... | .175 | .2 | <.1 | 4.2 | .1 | -- | -- | 32 | 740 | 87.3 | -- | .98 | 17 |
| MAY | | | | | | | | | | | | | |
| 01... | .164 | 2.5 | <.1 | 3.3 | 2.5 | -- | -- | 44 | 350 | 83.7 | -- | .57 | 18 |
| 09... | .234 | 2.3 | <.1 | 3.5 | 2.3 | 2.3 | 24.0 | 44 | -- | -- | 13 | -- | -- |
| JUN | | | | | | | | | | | | | |
| 05... | .240 | 2.5 | <.1 | 4.3 | 2.5 | -- | -- | 36 | 680 | 87.3 | -- | .61 | 14 |
| JUL | | | | | | | | | | | | | |
| 05... | .281 | E3.2 | <.1 | 5.0 | E3.4 | -- | -- | 29 | 320 | 51.8 | -- | 8.6 | 61 |
| AUG | | | | | | | | | | | | | |
| 02... | .287 | 2.4 | <.1 | 2.9 | 2.4 | E1.3 | 30.6 | 47 | -- | -- | 26 | -- | -- |
| 09... | .212 | 2.2 | <.1 | 3.3 | 2.1 | -- | -- | 51 | 90 | 104 | -- | .23 | 13 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020/2021 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | 1,1,1-TRI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHYLENE | ACETONE WATER WHOLE | 1,2,3-TRI-CHLORO-BENZENE | BENZENE 1,2,4-TRI-CHLORO-UNFILTR | BENZENE 124-TRI-METHYL-UNFILTR | BENZENE 135-TRI-METHYL-WATER | BENZENE 1,3-DI-CHLORO-WATER | BENZENE 1,4-DI-CHLORO-WATER | ISO-PROPYLBENZENE WATER WHOLE | BENZENE O-DI-CHLORO-WATER | |
|-----------|------|--|---|---|--|--|--|--|--|--|---|---|---|---|
| DATE | TIME | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (81552) | REC (UG/L) (77613) | REC (UG/L) (34551) | RECOVER (UG/L) (77222) | REC (UG/L) (77226) | REC (UG/L) (34566) | REC (UG/L) (34571) | REC (UG/L) (77223) | REC (UG/L) (34536) | |
| OCT 02... | 1420 | <.03 | <.04 | <.04 | <.7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | |
| DATE | TIME | BENZENE TOTAL (UG/L) (34030) | BROMO-FORM TOTAL (UG/L) (32104) | CARBON DI-SULFIDE WATER WHOLE TOTAL (UG/L) (77041) | CHLORO-BENZENE TOTAL (UG/L) (34301) | BROMO-METHANE TOTAL (UG/L) (32105) | CHLORO-ETHYLENE TOTAL (UG/L) (32106) | CIS-1,2-DI-CHLORO-ETHYLENE TOTAL (UG/L) (77093) | BROMO-CHLORO-METHANE TOTAL (UG/L) (32101) | DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668) | ETHER ETHYL-WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT-PENTYL UNFLTRD RECOVER (UG/L) (50005) | BENZENE ETHYL-WATER TOTAL (UG/L) (34371) | FREON-113 WATER UNFLTRD REC (UG/L) (77652) |
| OCT 02... | | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| DATE | TIME | FURAN, TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607) | METHYL-TERT-BUTYL-ETHER WAT UNF REC (UG/L) (78032) | METHYL-CHLORIDE RIDE TOTAL (UG/L) (34418) | METHYL-CHLORIDE RIDE TOTAL (UG/L) (34423) | META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795) | O-CHLORO-TOLUENE WATER TOTAL (UG/L) (77275) | O-XYLENE WATER TOTAL (UG/L) (77135) | P-ISO-PROPYL-TOLUENE WATER TOTAL (UG/L) (77356) | TETRA-CHLORO-ETHYLENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI-CHLORO-ETHYLENE TOTAL (UG/L) (39180) | TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488) | |
| OCT 02... | | <.2 | .4 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA-BHC DIS- SOLVED (UG/L) (34253) | ATRA-ZINE, WATER, DISS, REC (UG/L) (39632) | BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR-PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA-ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040) | DI-AZINON, DIS- SOLVED (UG/L) (39572) |
|-----------|------|---|---|--|---|---|--|--|--|--|---|---|---|
| OCT 02... | 1420 | <.004 | <.002 | <.005 | E.002 | <.010 | E.066 | <.020 | E.004 | <.018 | <.003 | <.006 | .061 |
| FEB 01... | 1200 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |
| FEB 05... | 1220 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |
| MAR 21... | 1920 | <.004 | <.002 | <.005 | E.003 | E.007 | E.054 | <.020 | <.005 | <.018 | <.003 | <.006 | .067 |
| APR 03... | 1020 | <.004 | <.002 | <.005 | E.002 | <.010 | E.008 | <.020 | <.005 | <.018 | <.003 | <.006 | .005 |
| MAY 01... | 1200 | <.004 | <.002 | <.005 | E.004 | <.010 | E.036 | <.020 | <.005 | <.018 | <.003 | <.006 | .011 |
| JUN 05... | 1310 | <.004 | <.002 | <.005 | .010 | <.010 | E.042 | <.020 | E.003 | <.018 | <.003 | E.004 | .095 |
| JUL 05... | 1320 | <.004 | .011 | <.005 | .041 | <.010 | E.528 | <.020 | E.004 | <.018 | <.003 | <.006 | .470 |
| AUG 09... | 1120 | <.004 | <.002 | <.005 | E.006 | <.010 | E.148 | <.020 | <.005 | <.018 | <.003 | <.006 | .053 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

447

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, DISS, REC (UG/L) (04037) |
|-----------|--|---|--|---|--|---|---|--|--|---|---|---|---|
| OCT 02... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 | E.012 |
| FEB 01... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| 05... | <.005 | <.002 | <.004 | <.035 | E.026 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | .019 |
| MAR 21... | <.005 | <.010 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.010 | <.007 | <.003 | .084 | .041 |
| APR 03... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | .017 | E.007 |
| MAY 01... | <.005 | <.002 | <.004 | <.035 | E.013 | <.050 | E.005 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| JUN 05... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.006 | <.006 | <.002 | <.007 | <.003 | .010 | .016 |
| JUL 05... | <.005 | <.002 | <.004 | <.035 | E.015 | <.050 | .050 | <.006 | <.002 | <.007 | <.003 | .020 | .049 |
| AUG 09... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.001 | <.006 | <.002 | <.007 | <.003 | <.010 | .028 |

| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-----------|---|---|--|---|---|
| OCT 02... | <.011 | E.007 | <.034 | <.005 | <.009 |
| FEB 01... | <.011 | <.016 | <.034 | <.005 | <.009 |
| 05... | <.011 | <.016 | <.034 | <.005 | <.009 |
| MAR 21... | .015 | <.016 | <.034 | <.005 | .009 |
| APR 03... | .018 | <.016 | <.034 | <.005 | <.009 |
| MAY 01... | <.011 | <.016 | <.034 | <.005 | <.009 |
| JUN 05... | E.005 | E.005 | <.034 | <.005 | E.003 |
| JUL 05... | .299 | <.016 | <.034 | <.005 | <.009 |
| AUG 09... | .021 | <.016 | <.034 | <.005 | <.009 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-----------|------|---|--|---|-----------|------|---|--|---|
| JUN 06... | 1010 | 790 | 300 | 250 | JUL 05... | 1010 | 16000 | 5500 | 4900 |
| 20... | 1035 | 490 | 1100 | 250 | | | | | |
| 27... | 1000 | 2400 | 900 | 400 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01467150 COOPER RIVER AT HADDONFIELD, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|----------|------|------|----------|------|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 17.0 | 14.0 | 15.5 | 11.0 | 9.0 | 10.0 | 7.0 | 5.5 | 6.0 | 1.0 | .5 | 1.0 |
| 2 | 18.0 | 15.5 | 16.5 | 11.5 | 9.5 | 10.5 | 6.0 | 4.0 | 4.5 | 1.0 | 1.0 | 1.0 |
| 3 | 19.5 | 16.0 | 18.0 | 11.5 | 9.5 | 10.5 | 4.0 | 2.5 | 3.0 | 1.0 | .5 | 1.0 |
| 4 | 20.5 | 17.5 | 19.0 | 12.0 | 10.5 | 11.5 | 3.5 | 2.5 | 3.0 | 1.0 | .5 | 1.0 |
| 5 | 19.5 | 18.0 | 18.5 | 12.0 | 10.0 | 11.0 | 3.5 | 2.5 | 3.0 | 1.0 | 1.0 | 1.0 |
| 6 | 20.5 | 18.0 | 19.0 | 10.5 | 8.5 | 9.5 | 3.5 | 2.5 | 3.0 | 1.5 | 1.0 | 1.0 |
| 7 | 19.0 | 15.5 | 17.5 | 10.0 | 8.0 | 9.0 | 3.5 | 2.5 | 3.0 | 2.0 | 1.5 | 1.5 |
| 8 | 15.5 | 13.0 | 14.0 | 10.5 | 8.5 | 9.5 | 3.5 | 3.0 | 3.0 | 2.5 | 2.0 | 2.5 |
| 9 | 13.5 | 11.0 | 12.0 | 12.0 | 10.0 | 11.0 | 3.5 | 2.5 | 3.0 | 2.5 | 2.0 | 2.0 |
| 10 | 11.5 | 10.0 | 11.0 | 14.5 | 12.0 | 13.5 | 3.5 | 3.0 | 3.0 | 2.0 | 1.0 | 1.5 |
| 11 | 13.5 | 10.0 | 12.0 | 13.0 | 12.0 | 12.5 | 5.0 | 3.5 | 4.0 | 3.0 | 1.5 | 2.0 |
| 12 | 14.5 | 11.5 | 13.0 | 12.5 | 11.0 | 11.5 | 6.5 | 4.5 | 5.5 | 3.0 | 2.5 | 3.0 |
| 13 | 15.0 | 12.0 | 13.5 | 12.0 | 11.0 | 11.5 | 4.5 | 3.0 | 3.5 | 3.0 | 2.0 | 2.5 |
| 14 | 16.0 | 12.5 | 14.5 | 11.5 | 10.0 | 11.0 | 4.5 | 3.5 | 4.0 | 3.0 | 2.0 | 2.5 |
| 15 | 16.5 | 14.0 | 15.0 | 10.0 | 8.5 | 9.0 | 4.5 | 3.5 | 4.0 | 3.5 | 3.0 | 3.5 |
| 16 | 16.0 | 15.0 | 16.0 | 8.5 | 7.0 | 8.0 | 5.5 | 3.5 | 4.0 | 4.0 | 3.5 | 3.5 |
| 17 | 16.0 | 15.0 | 15.5 | 9.0 | 7.5 | 8.5 | 12.5 | 5.5 | 10.0 | 4.0 | 3.0 | 3.5 |
| 18 | 16.0 | 15.0 | 15.5 | 8.0 | 6.5 | 7.5 | 9.0 | 4.5 | 6.5 | 3.5 | 3.0 | 3.0 |
| 19 | 16.5 | 14.0 | 15.0 | 7.5 | 6.0 | 6.5 | 4.5 | 3.5 | 4.0 | 3.5 | 3.5 | 3.5 |
| 20 | 15.0 | 13.0 | 14.5 | 6.0 | 4.5 | 5.5 | 4.5 | 2.5 | 3.5 | 3.5 | 2.5 | 3.0 |
| 21 | 16.0 | 13.0 | 14.5 | 5.5 | 4.5 | 5.0 | 3.0 | 1.5 | 2.5 | 3.0 | 1.0 | 2.0 |
| 22 | 15.5 | 14.0 | 14.5 | 4.5 | 2.5 | 3.5 | 2.5 | 1.5 | 2.5 | 2.5 | .5 | 1.5 |
| 23 | 14.0 | 12.0 | 13.0 | 3.5 | 1.5 | 2.5 | 1.5 | .5 | 1.0 | 2.0 | 1.0 | 1.5 |
| 24 | 13.5 | 11.5 | 12.5 | 3.5 | 3.0 | 3.0 | 1.5 | .5 | 1.0 | 3.5 | 1.5 | 2.0 |
| 25 | 14.5 | 12.0 | 13.0 | 3.5 | 3.0 | 3.5 | 1.5 | .5 | 1.0 | 3.5 | 2.0 | 3.0 |
| 26 | 15.5 | 13.5 | 14.5 | 9.5 | 3.5 | 7.5 | 1.5 | .5 | 1.0 | 3.0 | 1.5 | 2.0 |
| 27 | 15.5 | 14.0 | 14.5 | 9.0 | 7.5 | 8.0 | 1.0 | .5 | 1.0 | 3.0 | 2.0 | 2.5 |
| 28 | 15.5 | 12.5 | 14.5 | 9.5 | 7.5 | 8.5 | 1.5 | .5 | 1.0 | 4.0 | 2.0 | 3.0 |
| 29 | 12.5 | 10.5 | 11.5 | 8.5 | 6.5 | 7.5 | 1.5 | .5 | 1.0 | 3.5 | 2.5 | 3.0 |
| 30 | 10.5 | 8.5 | 9.5 | 7.5 | 7.0 | 7.0 | 1.0 | .5 | 1.0 | 4.5 | 3.0 | 3.5 |
| 31 | 10.5 | 8.0 | 9.5 | --- | --- | --- | 1.0 | .5 | .5 | 5.0 | 3.5 | 4.0 |
| MONTH | 20.5 | 8.0 | 14.4 | 14.5 | 1.5 | 8.4 | 12.5 | .5 | 3.1 | 5.0 | .5 | 2.3 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 6.0 | 3.5 | 4.5 | 7.0 | 5.0 | 6.0 | --- | --- | --- | --- | --- | --- |
| 2 | 6.0 | 4.5 | 5.0 | 7.5 | 5.0 | 6.0 | --- | --- | --- | --- | --- | --- |
| 3 | 4.5 | 2.5 | 3.5 | 8.0 | 7.0 | 7.5 | --- | --- | --- | --- | --- | --- |
| 4 | 4.0 | 2.5 | 3.0 | 8.0 | 4.0 | 6.5 | --- | --- | --- | --- | --- | --- |
| 5 | 3.5 | 1.5 | 3.0 | 4.0 | 3.0 | 3.5 | --- | --- | --- | --- | --- | --- |
| 6 | 4.0 | 2.0 | 3.0 | 4.0 | 2.5 | 3.0 | --- | --- | --- | --- | --- | --- |
| 7 | 5.5 | 3.0 | 4.0 | 7.0 | 3.0 | 4.5 | --- | --- | --- | --- | --- | --- |
| 8 | 4.5 | 3.0 | 4.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 7.5 | 3.5 | 5.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 9.5 | 7.5 | 8.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 7.5 | 3.5 | 5.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 4.5 | 2.5 | 3.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 7.0 | 3.5 | 5.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 6.5 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 7.5 | 6.5 | 7.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 7.5 | 6.5 | 7.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 7.0 | 4.5 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 5.0 | 2.0 | 3.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 5.0 | 2.5 | 3.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 7.0 | 3.5 | 5.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 8.0 | 6.0 | 7.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 6.5 | 2.0 | 4.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 3.5 | 1.0 | 2.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 4.5 | 3.0 | 3.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 6.0 | 3.5 | 4.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 8.5 | 5.5 | 6.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 8.5 | 5.0 | 7.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 8.0 | 6.0 | 7.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | 9.5 | 1.0 | 4.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- |

DELAWARE RIVER BASIN

01467155 NORTH BRANCH COOPER RIVER AT KRESSON, NJ

LOCATION.--Lat 39°51'33", long 74°55'46", Camden County, Hydrologic Unit 02040202, at bridge on Kresson Road, 0.5 mi northwest of Kresson Road, 0.5 mi northwest of Kresson Lake, 2.3 mi south of Marlton.

DRAINAGE AREA.--1.04 mi².

PERIOD OF RECORD.--Water year 1998 and November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY | UV ABSORB- ANCE | UV ABSORB- ANCE | BARO- METRIC PRES- | OXYGEN, DIS- SOLVED | OXYGEN, DIS- SOLVED (MG/L) | PH WATER WHOLE | SPE- CIFIC | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | HARD- NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS- SOLVED (MG/L AS CA) | |
|--------------|------|---|--|--|--|--|---|---|--|--|--|---|--|---|
| | | FIELD WATER | 254 NM, WTR FLT | 280 NM, WTR FLT | SURE (MM OF HG) | (PER- CENT SATUR- ATION) | | (STAND- ARD UNITS) | CON- DUCT- ANCE (US/CM) | | | | | |
| | | UNFLTRD (NTU) (61028) | (UNITS /CM) (50624) | (UNITS /CM) (61726) | (00025) | (00301) | | (00300) | (00400) | | | | | (00095) |
| NOV 29... | 1000 | -- | .642 | .499 | 764 | 67 | 8.7 | 6.7 | 119 | 10.0 | 4.5 | 42 | 14.1 | |
| FEB 22... | 1000 | -- | .318 | .245 | 773 | 73 | 10.7 | 7.0 | 157 | -5.0 | .5 | 43 | 14.2 | |
| MAY 24... | 1000 | 4.0 | .521 | .404 | 760 | 66 | 6.7 | 6.7 | 143 | 20.0 | 14.5 | 47 | 15.8 | |
| AUG 30... | 1000 | 11 | .227 | .171 | 763 | 3 | .3 | 7.2 | 244 | 22.0 | 20.0 | 97 | 34.1 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AM- MONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| | | NOV 29... | 1.56 | 1.19 | 6.0 | 29 | 9.8 | E.1 | 9.4 | 8.1 | 101 | 68 | <.030 | .51 |
| FEB 22... | 1.83 | 1.21 | 11.1 | 26 | 18.5 | <.2 | 6.8 | 12.6 | 105 | 82 | .050 | .26 | .03 | |
| MAY 24... | 1.87 | 1.47 | 8.4 | 32 | 13.3 | <.2 | 8.4 | 11.8 | 106 | 81 | .060 | .52 | .06 | |
| AUG 30... | 2.87 | 2.59 | 8.4 | 81 | 15.1 | <.2 | 12.1 | 10.1 | 160 | 135 | .590 | 1.2 | .71 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| | | NOV 29... | .52 | <.037 | <.003 | -- | -- | .047 | .031 | .040 | .6 | <.1 | 14 | .6 |
| FEB 22... | .34 | .125 | <.003 | .38 | .47 | .050 | .016 | .032 | .7 | <.1 | 6.9 | .7 | <1.0 | |
| MAY 24... | .55 | .099 | .004 | .62 | .65 | .088 | .033 | .047 | 1.0 | <.1 | 11 | 1.0 | <1.0 | |
| AUG 30... | 1.5 | E.068 | .015 | -- | -- | .444 | .046 | .192 | 3.6 | <.1 | 5.5 | 3.6 | E2.4 | |
| DATE | | | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | |
| | | NOV 29... | -- | 17 | <1 | | | | | | | | | |
| FEB 22... | -- | 15 | 6 | | | | | | | | | | | |
| MAY 24... | .700 | 18 | 7 | | | | | | | | | | | |
| AUG 30... | .300 | 16 | 13 | | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

451

01467155 NORTH BRANCH COOPER RIVER AT KRESSON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) |
|--------------|------|--|--|--|--|--|---|--|--|--|--|--|--|
| AUG 30... | 1000 | 3 | 62.9 | <.06 | 17 | E.03 | <1 | .9 | 2830 | <1 | 232 | <.01 | 1 |

| DATE | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) |
|--------------|---|--|--|
| AUG 30... | <.4 | <.05 | 5 |

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) |
|--------------|------|---|--|---|--|---|--|---|---|---|---------------------------------------|--|---|
| FEB 22... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |

| DATE | TIME | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | BENZENE ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
|--------------|------|--|---|---|---|---|---|---|--|---|---|--|---|--|
| FEB 22... | <.10 | <.2 | .10 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 |

| DATE | TIME | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) |
|--------------|------|--|--|--|---------------------------------------|--|---------------------------------------|--|---|--|
| FEB 22... | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DISS, SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|--|--|--|---|---|--|--|--|--|---|--|---|
| MAY 24... | 1000 | <.004 | <.002 | <.005 | E.003 | <.010 | <.050 | <.020 | <.005 | <.018 | <.003 | <.006 | .007 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01467155 NORTH BRANCH COOPER RIVER AT KRESSON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER (UG/L) (39415) | METRI- BUZIN WATER (UG/L) (82630) | MOL- INATE WATER 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|---|---|--|---|---|---|--|---|---|--|---|---|---|
| MAY 24... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.004 | <.006 | <.002 | <.007 | <.003 | <.010 | E.003 |
| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| MAY 24... | E.004 | <.016 | <.034 | <.005 | <.009 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUN 06... | 1050 | 80 | 300 | 140 | JUL 05... | 1045 | 3500 | 2500 | 4200 |
| 20... | 1005 | 3500 | 1500 | 200 | | | | | |
| 27... | 1025 | 110 | 100 | 290 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

01467359 NORTH BRANCH BIG TIMBER CREEK AT GLENDORA, NJ

LOCATION.--Lat 39°50'04", long 75°04'02", Camden County, Hydrologic Unit 02040206, at bridge on Chews Landing-Clementon Road (County Route 683), 0.7 mi south of Glendora, 1.8 mi upstream of South Branch Big Timber Creek, and 2.5 mi north of Blackwood.

DRAINAGE AREA.--18.8 mi².

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Site is tide-affected; all samples collected at low tide. Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Urban Land Use Indicator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | |
|-----------|------|--|---|--|--|--|--|--|--|---|---|---|--|--|
| | | | | | | | | | | | | | | |
| DEC 11... | 0910 | 18 | -- | .102 | .084 | 764 | 85 | 11.2 | 6.8 | 173 | 5.0 | 4.0 | 50 | |
| MAR 13... | 1300 | 156 | -- | .157 | .123 | 747 | 84 | 9.7 | 6.7 | 266 | 15.0 | 8.0 | 37 | |
| MAY 22... | 1020 | E70 | 32 | .231 | .183 | 755 | 68 | 6.7 | 6.8 | 126 | 18.5 | 15.5 | 34 | |
| AUG 16... | 0900 | E22 | 15 | .200 | .162 | 766 | 47 | 4.2 | 6.9 | 164 | 23.5 | 21.0 | 46 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ANC TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) |
| DEC 11... | 15.3 | 2.89 | 2.75 | 10.0 | 28 | 15.0 | E.1 | 11.3 | 20.7 | 102 | 98 | .130 | .26 | |
| MAR 13... | 11.7 | 1.99 | 2.16 | 33.3 | 19 | 53.1 | E.1 | 4.8 | 14.9 | 145 | 136 | .080 | .36 | |
| MAY 22... | 10.1 | 2.09 | 2.60 | 9.0 | 21 | 12.3 | E.1 | 5.2 | 13.5 | 89 | 70 | .150 | .46 | |
| AUG 16... | 13.7 | 2.89 | 3.09 | 8.9 | 27 | 14.9 | E.1 | 9.0 | 18.9 | 100 | 90 | .110 | .34 | |
| DATE | | NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) | |
| DEC 11... | .13 | .36 | .754 | <.003 | 1.0 | 1.1 | .157 | .014 | .199 | 2.0 | <.1 | 1.9 | 2.0 | |
| MAR 13... | .08 | .58 | .598 | .007 | .96 | 1.2 | .273 | .024 | .246 | 2.6 | <.1 | 3.6 | 2.6 | |
| MAY 22... | .19 | .69 | .411 | .015 | .87 | 1.1 | .340 | .032 | .267 | 3.3 | <.1 | 5.1 | 3.2 | |
| AUG 16... | .11 | .55 | .407 | .019 | .75 | .96 | .116 | .038 | .226 | 1.0 | <.1 | 3.6 | 1.0 | |
| DATE | | | | | | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310) | CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS-SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530) | | | | | |
| DEC 11... | | | | | | E1.6 | -- | 235 | 10 | | | | | |
| MAR 13... | | | | | | 2.5 | -- | 55 | 23 | | | | | |
| MAY 22... | | | | | | 3.6 | 4.60 | 153 | 23 | | | | | |
| AUG 16... | | | | | | <1.0 | 3.80 | 200 | 14 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01467359 NORTH BRANCH BIG TIMBER CREEK AT GLENDORA, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES
Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUN | | | | | JUL | | | | |
| 06... | 0935 | 3500 | 600 | 460 | 05... | 0940 | 9200 | 4000 | 7500 |
| 20... | 1110 | 3500 | 800 | 360 | | | | | |
| 27... | 0925 | 330 | 100 | 200 | | | | | |

01467359 NORTH BRANCH BIG TIMBER CREEK AT GLENDORA, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

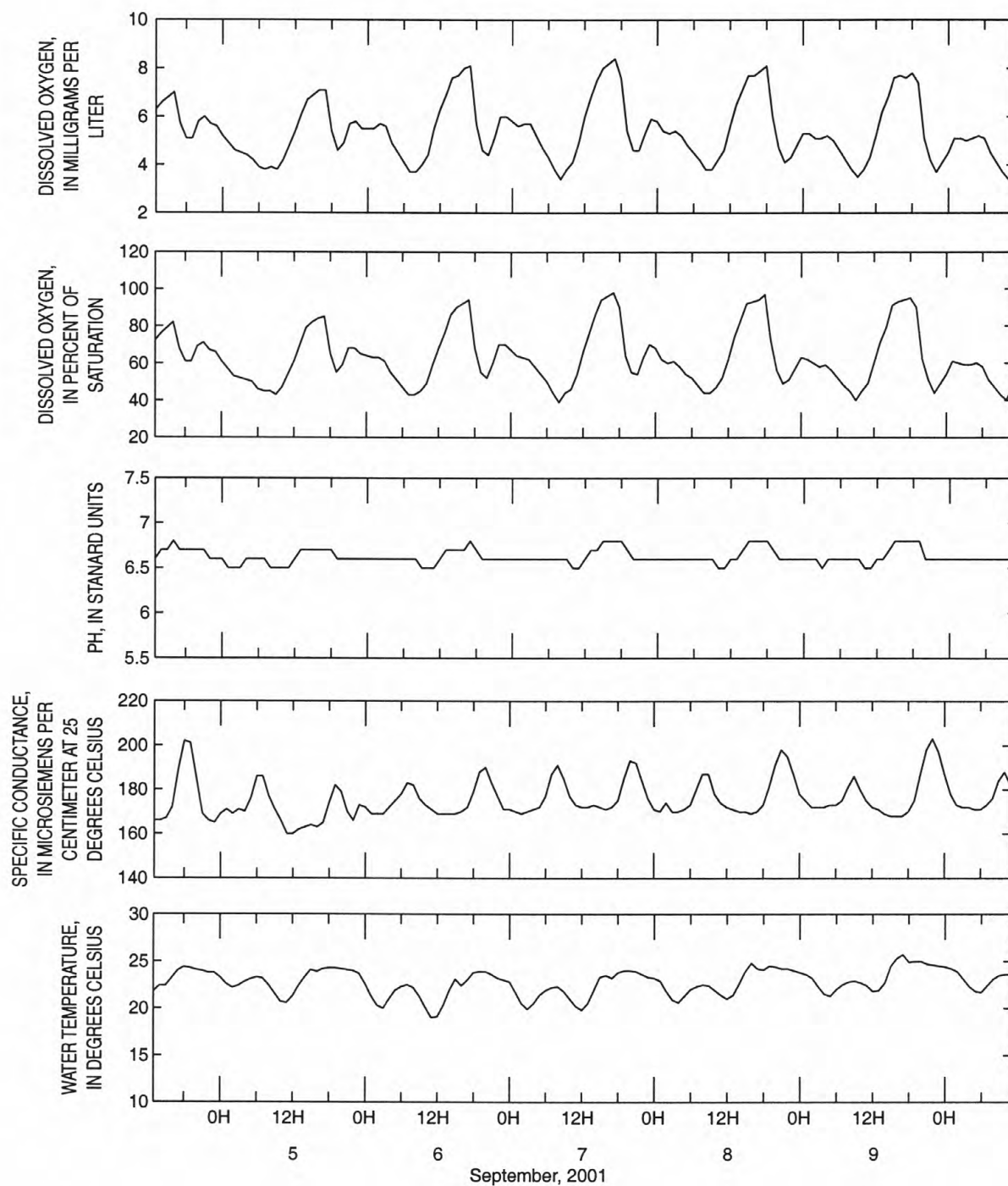


Figure 56. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01467359 North Branch Big Timber Creek at Glendora, water year 2001.

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA

LOCATION.--Lat 40°24'48", long 76°10'19", Berks County, PA, Hydrologic Unit 02040203, at bridge at Kricks Mill, 0.4 mi upstream from Mill Creek, and 3.5 mi west of Bernville.

DRAINAGE AREA.--66.5 mi².

PERIOD OF RECORD.--October 1998, revised, to August 2001 (discontinued).

REMARKS.--These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (DELRAWQA). For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction." Fish community data for this and other sites are presented in "Water-Quality at Miscellaneous Surface-Water Sites."

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) |
|-----------|------|-----------------|---|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|---|
| OCT 03... | 0900 | ENVIRONMENTAL | 59 | 749 | 92 | 9.2 | 8.2 | 584 | 14.5 | 14.6 | 270 | 75.7 |
| NOV 02... | 1010 | ENVIRONMENTAL | 50 | 760 | 116 | 13.3 | 8.2 | 575 | 16.0 | 9.1 | 270 | 72.7 |
| DEC 27... | 1140 | ENVIRONMENTAL | 66 | 759 | 108 | 15.3 | 8.2 | 592 | -0.5 | .8 | 280 | 80.5 |
| FEB 06... | 1209 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | .04 |
| 06... | 1210 | ENVIRONMENTAL | 86 | 758 | 98 | 12.4 | 8.4 | 581 | 7.0 | 5.0 | 270 | 78.7 |
| 06... | 1211 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR 14... | 0950 | ENVIRONMENTAL | 131 | 759 | 105 | 12.8 | 8.2 | 545 | 8.5 | 6.7 | 250 | 73.2 |
| APR 04... | 1000 | ENVIRONMENTAL | 214 | 762 | 106 | 12.3 | 8.2 | 573 | 8.5 | 8.7 | 270 | 77.9 |
| MAY 03... | 1330 | ENVIRONMENTAL | 84 | 761 | 120 | 11.2 | 8.2 | 593 | 34.0 | 18.7 | 270 | 76.1 |
| JUN 06... | 0930 | ENVIRONMENTAL | 57 | -- | -- | -- | 8.3 | 589 | 20.5 | -- | 270 | 76.0 |
| 06... | 0931 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 27... | 0930 | ENVIRONMENTAL | 49 | 761 | 91 | 8.0 | 8.3 | 602 | 28.5 | 21.3 | 280 | 77.0 |
| AUG 08... | 1040 | ENVIRONMENTAL | 36 | 756 | 100 | 8.2 | 8.0 | 586 | 32.5 | 24.6 | 260 | 69.6 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086) | BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, TOTAL (MG/L AS N) (00600) |
|-----------|---|--|---|--|--|--|---|---|--|--|---|--|--------------------------------------|
| OCT 03... | 19.8 | 3.22 | 10.3 | 206 | 252 | 20.9 | <.1 | 5.2 | 32.5 | .28 | .30 | .048 | 8.7 |
| NOV 02... | 20.5 | 3.28 | 12.2 | 216 | 263 | 22.8 | .2 | 4.3 | 32.5 | .27 | .31 | E.029 | 8.8 |
| DEC 27... | 18.8 | 3.25 | 11.8 | 207 | 252 | 24.7 | E.1 | 8.0 | 34.0 | .42 | .49 | .224 | 9.8 |
| FEB 06... | <.008 | <.24 | <.1 | -- | -- | <.1 | <.2 | <.1 | <.1 | <.10 | .08 | <.041 | -- |
| 06... | 17.5 | 3.14 | 12.4 | 199 | 243 | 25.9 | E.1 | 5.7 | 32.0 | .19 | .40 | .065 | 9.4 |
| 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR 14... | 16.0 | 3.35 | 13.3 | 176 | 215 | 26.3 | <.2 | 6.2 | 30.8 | .42 | .62 | .074 | 9.1 |
| APR 04... | 17.3 | 3.01 | 11.8 | 200 | 244 | 23.3 | <.2 | 5.3 | 31.3 | .26 | .33 | .045 | 9.4 |
| MAY 03... | 18.3 | 3.11 | 11.1 | 206 | 252 | 26.2 | E.1 | 4.9 | 30.0 | .24 | .42 | E.021 | 9.4 |
| JUN 06... | 20.0 | 3.15 | 12.1 | 203 | 247 | 26.1 | <.2 | 6.9 | 31.4 | .27 | .44 | <.040 | 8.9 |
| 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 27... | 20.1 | 3.34 | 12.5 | 208 | 253 | 26.4 | E.1 | 7.6 | 31.1 | .27 | .42 | <.040 | 8.4 |
| AUG 08... | 20.9 | 3.95 | 13.6 | 198 | 242 | 29.3 | E.1 | 7.2 | 32.9 | .30 | .50 | E.032 | 7.9 |

E Estimated value.

< Value shown is know to be less than the value shown.

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605) | NITRO- GEN, PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) |
|-----------|--|--|--|---|---|--|--|---|---|---|---|--|---|
| OCT 03... | 8.7 | 8.41 | .065 | .26 | -- | .059 | .047 | .079 | -- | -- | 1.5 | .2 | 343 |
| NOV 02... | 8.8 | 8.49 | .083 | -- | -- | .035 | .025 | .051 | -- | -- | 1.5 | .2 | 334 |
| DEC 27... | 9.7 | 9.31 | .039 | .26 | -- | .044 | .039 | .055 | -- | -- | 1.1 | .3 | 344 |
| FEB 06... | -- | <.047 | <.006 | -- | -- | <.006 | <.018 | <.004 | -- | -- | -- | -- | <10 |
| 06... | 9.2 | 9.00 | .041 | .33 | .045 | .024 | .019 | .043 | .4 | -- | 1.1 | -- | 334 |
| 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR 14... | 8.9 | 8.45 | .049 | .54 | .088 | .031 | .022 | .069 | .7 | <.1 | 2.0 | .7 | 328 |
| APR 04... | 9.4 | 9.10 | .041 | .28 | <.022 | .026 | .023 | .044 | <.1 | <.1 | 1.5 | <.1 | 327 |
| MAY 03... | 9.3 | 9.03 | .068 | -- | .175 | .033 | E.012 | .076 | E1.1 | <.1 | 1.4 | E1.1 | 351 |
| JUN 06... | 8.8 | 8.51 | .049 | -- | .075 | .058 | .033 | .099 | .5 | <.1 | 1.6 | .5 | 343 |
| 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 27... | 8.2 | 7.94 | .055 | -- | .140 | .072 | .044 | .112 | 1.1 | <.1 | 4.6 | 1.1 | 332 |
| AUG 08... | 7.7 | 7.39 | .034 | -- | .126 | .069 | .057 | .092 | .9 | <.1 | 1.9 | .9 | 286 |

| DATE | SOLIDS, SUM OF CONSTI- TUTENTS, DIS- SOLVED (MG/L) (70301) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | ARSENIC DIS- SOLVED (UG/L AS AS) (01000) | ARSENIC TOTAL (UG/L AS AS) (01002) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155) | SEDI- MENT, SUS- PENDE (MG/L) (80154) |
|-----------|---|--|---|--|---|---|---|--|--|
| OCT 03... | 329 | 8.0 | 4.0 | 4 | 23 | M | 8.1 | 7.9 | 50 |
| NOV 02... | 336 | 3.1 | 2.9 | 3 | 26 | M | 6.7 | 9.3 | 69 |
| DEC 27... | 347 | 7.3 | 3.9 | -- | 20 | <10 | 14.8 | 1.1 | 6 |
| FEB 06... | -- | -- | <2.0 | <2 | <13 | <10 | <3.2 | -- | -- |
| 06... | 335 | 6.6 | 4.0 | 4 | 21 | M | 18.5 | 21 | 92 |
| 06... | -- | -- | 4.3 | 4 | -- | -- | -- | -- | -- |
| MAR 14... | 312 | 19 | 2.6 | 3 | 13 | M | 22.8 | 11 | 32 |
| APR 04... | 330 | 9.9 | 3.8 | 5 | 18 | M | 25.4 | 48 | 83 |
| MAY 03... | 334 | 15 | 4.0 | 4 | 22 | 20 | 21.5 | 14 | 62 |
| JUN 06... | 335 | -- | -- | 4 | 20 | M | 7.8 | 9.2 | 60 |
| 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 27... | 338 | 21 | 5.1 | 4 | 20 | <10 | 8.2 | 12 | 89 |
| AUG 08... | 329 | 18 | 5.1 | 5 | 22 | M | 10.3 | 6.8 | 70 |

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020/2021 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | ACETONE WATER WHOLE TOTAL (UG/L) (81552) | 1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613) | BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551) | BENZENE 124-TRI METHYL UNFILT RECOVER (UG/L) (77222) | BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) |
|-----------|------|---|--|---|---|--|---|--|--|---|---|--|---|
| OCT 03... | 0900 | <.03 | <.04 | <.04 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | | CARBON DI- SULFIDE | | CHLORO- DI- BROMO- METHANE | | CIS-1,2 -DI- CHLORO- ETHENE | | BROMO- DI- CHLORO- METHANE | | DI- CHLORO- DI- FLUORO- METHANE | | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER | | ETHER ETHYL WATER UNFLTRD RECOVER | | ETHYL- BENZENE TOTAL (UG/L) | | FREON- 113 WATER UNFLTRD REC (UG/L) |
|--------------|--|--|--|--|--|---|--|---|--|--|--|---|--|--|---|--|--------------------------------------|--|--|
| DATE | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | WATER WHOLE TOTAL (UG/L) (77041) | CHLORO- BENZENE TOTAL (UG/L) (34301) | METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | WATER TOTAL (UG/L) (77093) | ETHENE TOTAL (UG/L) (32101) | CHLORO- METHANE TOTAL (UG/L) (34668) | FLUORO- METHANE TOTAL (UG/L) (34668) | WATER UNFLTRD RECOVER (UG/L) (81576) | ETHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | WATER UNFLTRD REC (UG/L) (77652) | | | | | |
| OCT 03... | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 | | | | | | |
| DATE | FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL- CHLO- RIDE TOTAL (UG/L) (34418) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- CHLORO- TOLUENE WHOLE TOTAL (UG/L) (77275) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | P-ISO- PROPYL- TOLUENE WHOLE REC (UG/L) (77356) | TETRA- CHLORO- ETHYL- WATER TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | | | | | | | |
| OCT 03... | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | M | <.05 | <.04 | <.09 | | | | | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| | | | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD GF, REC (UG/L) (82682) | |
|--------------|--|---|--|--|---|--|--|--|---|--|---|--|---|
| DATE | TIME | SAMPLE TYPE | | | | | | | | | | | |
| OCT 03... | 0900 | ENVIRONMENTAL | | | | | | | | | | | |
| FEB 06... | 1210 | ENVIRONMENTAL | | | | | | | | | | | |
| APR 04... | 1000 | ENVIRONMENTAL | | | | | | | | | | | |
| MAY 03... | 1330 | ENVIRONMENTAL | | | | | | | | | | | |
| JUN 06... | 0930 | ENVIRONMENTAL | | | | | | | | | | | |
| 06... | 0931 | SPLIT REPLICATE | | | | | | | | | | | |
| 27... | 0930 | ENVIRONMENTAL | | | | | | | | | | | |
| AUG 08... | 1040 | ENVIRONMENTAL | | | | | | | | | | | |
| DATE | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) |
| OCT 03... | E.245 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .021 | <.006 | <.002 | <.007 | <.003 |
| FEB 06... | E.204 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.009 | <.006 | <.002 | <.007 | E.001 |
| APR 04... | E.145 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.011 | <.006 | <.007 | <.007 | <.003 |
| MAY 03... | E.118 | <.005 | <.005 | .005 | <.004 | <.035 | <.027 | <.050 | E.009 | <.006 | <.002 | <.007 | <.003 |
| JUN 06... | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .014 | <.006 | <.002 | <.007 | <.003 |
| 06... | <.006 | E.002 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .015 | <.006 | <.004 | <.007 | <.003 |
| 27... | E.066 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .017 | <.006 | <.002 | <.007 | <.003 |
| AUG 08... | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.011 | <.006 | <.002 | <.007 | <.003 |

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-------|---|---|---|---|--|--|---|---|
| OCT | | | | | | | | |
| 03... | <.010 | .016 | .019 | E.013 | <.034 | <.005 | <.005 | <.009 |
| FEB | | | | | | | | |
| 06... | <.010 | E.012 | .028 | E.011 | <.034 | -- | <.005 | E.002 |
| APR | | | | | | | | |
| 04... | <.010 | E.012 | .019 | E.007 | <.034 | -- | <.005 | <.009 |
| MAY | | | | | | | | |
| 03... | <.010 | E.013 | .091 | E.007 | <.034 | -- | <.005 | <.009 |
| JUN | | | | | | | | |
| 06... | <.010 | E.010 | .023 | E.009 | <.034 | -- | <.005 | <.009 |
| 06... | <.010 | E.010 | .024 | E.010 | <.034 | -- | <.005 | <.009 |
| 27... | <.010 | <.015 | .015 | E.004 | <.034 | -- | <.005 | <.009 |
| AUG | | | | | | | | |
| 08... | <.010 | E.013 | .017 | E.013 | <.034 | -- | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA

LOCATION.--Lat 40°09'05", long 75°36'06", Chester County, PA, Hydrologic Unit 02040203, at two-span county bridge on French Creek Road, 4.5 mi northwest of Phoenixville, and 7.3 mi upstream from mouth.

DRAINAGE AREA.--59.1 mi².

PERIOD OF RECORD.--October 1950, revised, to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1998 to September 2001.

INSTRUMENTATION.--Water-temperature data logger (in situ system; measurements recorded every 15 minutes) located at gage.

REMARKS.--These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (DELNR NAWQA). For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality-Control Data" in the "Introduction." Fish community data for this and other sites are presented in "Water-Quality at Miscellaneous Surface-Water Sites."

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: maximum, 30.5°C, July 5, 6, 1999; minimum, -0.5°C, Dec. 25, 1998, Jan. 31, Mar. 12, 13, 1999.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | | |
|--------------|------|---|--|---|--|--|---|--|---|--|--|---|--|--|
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| OCT 02... | 1130 | ENVIRONMENTAL | 38 | 756 | 108 | 11.3 | 7.7 | 173 | 20.5 | 13.0 | 62 | 16.4 | | |
| NOV 02... | 1320 | ENVIRONMENTAL | 25 | 762 | -- | -- | 7.8 | 173 | 17.5 | 9.0 | 62 | 16.5 | | |
| DEC 27... | 1600 | ENVIRONMENTAL | 59 | 760 | 105 | 15.3 | 7.5 | 166 | -2.5 | .00 | 58 | 15.1 | | |
| FEB 07... | 1020 | ENVIRONMENTAL | 112 | 764 | 108 | 14.8 | 7.4 | 239 | 11.0 | 2.5 | 56 | 14.6 | | |
| MAR 14... | 1250 | ENVIRONMENTAL | 139 | 755 | 109 | 13.3 | 7.7 | 152 | 8.0 | 6.5 | 47 | 12.0 | | |
| APR 04... | 1409 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| 04... | 1410 | ENVIRONMENTAL | 122 | 765 | 110 | 12.2 | 7.8 | 143 | 14.0 | 10.5 | 47 | 12.1 | | |
| 04... | 1411 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | 47 | 12.1 | | |
| MAY 03... | 1120 | ENVIRONMENTAL | 67 | 766 | 97 | 9.1 | 7.7 | 151 | 28.0 | 18.5 | 51 | 13.2 | | |
| 22... | 1220 | ENVIRONMENTAL | 340 | 756 | 97 | 9.9 | 7.3 | 147 | 17.0 | 14.0 | 46 | 12.2 | | |
| JUN 06... | 1200 | ENVIRONMENTAL | 62 | 758 | -- | -- | 7.8 | 157 | 19.0 | 16.0 | 56 | 14.6 | | |
| 27... | 1400 | ENVIRONMENTAL | 35 | 762 | 112 | 9.3 | 8.0 | 165 | 29.5 | 24.5 | 58 | 15.2 | | |
| AUG 08... | 1330 | ENVIRONMENTAL | 16 | 758 | 127 | 10.0 | 8.4 | 168 | 33.0 | 27.0 | 58 | 15.6 | | |
| SEP 11... | 0930 | ENVIRONMENTAL | 17 | 761 | 101 | 9.5 | 7.8 | 174 | 20.0 | 18.5 | 63 | 17.1 | | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086) | BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453) | CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) |
| OCT 02... | 5.19 | 1.93 | 8.1 | -- | -- | -- | 10.9 | <.1 | 17.1 | 12.8 | .15 | .18 | <.041 | |
| NOV 02... | 5.16 | 1.62 | 7.7 | 45 | 54 | -- | 11.3 | E.1 | 15.9 | 12.2 | .16 | .19 | <.041 | |
| DEC 27... | 4.87 | 1.50 | 7.6 | 34 | 42 | -- | 12.7 | <.2 | 17.0 | 14.7 | .15 | .17 | <.041 | |
| FEB 07... | 4.81 | 1.72 | 20.8 | 28 | 34 | -- | 40.6 | <.2 | 13.2 | 13.3 | .18 | .36 | <.041 | |
| MAR 14... | 4.08 | 1.54 | 10.3 | 23 | 28 | -- | 18.0 | <.2 | 11.6 | 12.7 | .27 | .73 | <.041 | |
| APR 04... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <.10 | <.08 | <.041 | |
| 04... | 4.15 | 1.23 | 7.7 | 28 | 34 | -- | 11.8 | <.2 | 12.5 | 13.5 | .13 | .15 | <.041 | |
| 04... | 4.15 | 1.26 | 7.7 | -- | -- | -- | 11.7 | <.2 | 12.5 | 13.4 | .13 | .15 | <.041 | |
| MAY 03... | 4.27 | 1.20 | 7.2 | 30 | 37 | -- | 11.7 | <.2 | 9.1 | 11.8 | .16 | .20 | <.041 | |
| 22... | 3.79 | 1.94 | 8.7 | 28 | 34 | -- | 13.0 | <.2 | 11.7 | 11.9 | .45 | 1.1 | -- | |
| JUN 06... | 4.80 | 1.29 | 7.8 | 38 | 46 | -- | 11.7 | <.2 | 16.2 | 12.2 | .15 | .20 | <.040 | |
| 27... | 4.80 | 1.38 | 7.4 | 40 | 48 | -- | 11.5 | <.2 | 17.5 | 11.7 | .16 | .21 | E.024 | |
| AUG 08... | 4.68 | 1.54 | 7.5 | 46 | 53 | 1 | 11.3 | E.1 | 14.4 | 11.6 | .16 | .18 | E.032 | |
| SEP 11... | 4.95 | 1.65 | 6.9 | 49 | 59 | -- | 11.5 | <.2 | 14.4 | 11.8 | .13 | .16 | <.040 | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

461

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) |
|-----------|--|--|--|--|--|--|--|---|--|---|---|--|---|
| OCT 02... | 1.7 | 1.7 | 1.53 | E.003 | -- | .024 | .021 | .039 | -- | -- | 2.3 | <.2 | 113 |
| NOV 02... | 1.3 | 1.3 | 1.10 | E.003 | -- | .008 | <.018 | .016 | -- | -- | 2.1 | .3 | 113 |
| DEC 27... | 2.4 | 2.4 | 2.26 | .006 | -- | .016 | E.012 | .027 | -- | -- | 1.6 | .2 | 108 |
| FEB 07... | 1.9 | 1.7 | 1.51 | .008 | <.022 | .018 | E.015 | .033 | .3 | -- | 2.4 | -- | 155 |
| MAR 14... | 2.0 | 1.6 | 1.29 | E.003 | .094 | .014 | <.018 | .038 | .5 | <.1 | 3.4 | .5 | 99 |
| APR 04... | -- | -- | <.047 | <.006 | -- | <.006 | <.018 | <.004 | -- | -- | -- | -- | -- |
| 04... | 1.7 | 1.6 | 1.51 | E.004 | .068 | .013 | E.010 | .025 | .3 | <.1 | 1.8 | .3 | 96 |
| 04... | 1.7 | 1.6 | 1.50 | E.004 | -- | .014 | E.011 | .022 | -- | -- | -- | -- | 92 |
| MAY 03... | 1.3 | 1.2 | 1.07 | .018 | .106 | .010 | <.018 | .024 | E.6 | <.1 | 2.1 | E.6 | 95 |
| 22... | 2.0 | 1.4 | .950 | .011 | .887 | .046 | .024 | .293 | 7.9 | <.1 | 5.4 | 7.9 | 107 |
| JUN 06... | 1.5 | 1.4 | 1.29 | .007 | .095 | .018 | E.010 | .034 | .9 | <.1 | 2.1 | .9 | 103 |
| 27... | 1.4 | 1.3 | 1.18 | .023 | .047 | .029 | <.020 | .045 | .5 | <.1 | 4.6 | .5 | 102 |
| AUG 08... | .69 | .67 | .516 | E.005 | .039 | .024 | .020 | .023 | .3 | <.1 | 2.0 | .3 | 97 |
| SEP 11... | 1.1 | 1.0 | .917 | <.006 | <.022 | .016 | <.020 | .023 | .3 | <.1 | 1.7 | .3 | 109 |

| DATE | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | TUR- BID- ITY FIELD WATER UNFITRD (NTU) (61028) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155) | SEDI- MENT, SUS- PENDE (MG/L) (80154) |
|-----------|---|--|---|---|---|--|--|
| OCT 02... | 107 | 2.4 | E15 | 60 | 9.0 | .23 | 2 |
| NOV 02... | 102 | <2.0 | E9 | 50 | 4.4 | .13 | 2 |
| DEC 27... | 104 | 4.9 | E12 | 50 | 13.8 | .51 | 3 |
| FEB 07... | 132 | 8.6 | E6 | 80 | 26.4 | 1.3 | 4 |
| MAR 14... | 90 | 13 | E7 | 80 | 15.0 | 1.7 | 4 |
| APR 04... | -- | -- | -- | -- | -- | -- | -- |
| 04... | 87 | 4.7 | E11 | 60 | 11.8 | 1.3 | 4 |
| 04... | -- | -- | E11 | 60 | 11.3 | -- | 3 |
| MAY 03... | 82 | 4.9 | <13 | 90 | 11.8 | .60 | 3 |
| 22... | 85 | 160 | E11 | 160 | 51.1 | 83 | 91 |
| JUN 06... | 97 | -- | E11 | 80 | 10.3 | 1.1 | 7 |
| 27... | 99 | 7.4 | E9 | 110 | 6.9 | .38 | 4 |
| AUG 08... | 96 | 3.0 | <13 | 40 | 7.6 | -- | <1 |
| SEP 11... | 102 | <2.0 | E9 | 20 | 5.1 | .11 | 2 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA--Continued

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020/2021 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | 1,1,1-TRI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHANE | 1,1-DI-CHLORO-ETHYLENE | ACETONE WATER WHOLE | 1,2,3-TRI-CHLORO-BENZENE WAT, WH | BENZENE 1,2,4-TRI-METHYL CHLORO-UNFLT | BENZENE 135-TRI-METHYL WATER UNFLT | BENZENE 1,3-DI-CHLORO-WATER UNFLT | BENZENE 1,4-DI-CHLORO-WATER UNFLT | ISO-PROPYL-BENZENE WATER WHOLE | BENZENE O-DI-CHLORO-WATER UNFLT | | |
|-----------|------|--|---|---|--|--|--|---|--|--|---|--|---|---|
| DATE | TIME | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (81552) | REC (UG/L) (77613) | REC (UG/L) (34551) | RECOVER (UG/L) (77222) | REC (UG/L) (77226) | REC (UG/L) (34566) | REC (UG/L) (34571) | REC (UG/L) (77223) | REC (UG/L) (34536) | |
| OCT 02... | 1130 | <.03 | <.04 | <.04 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | |
| | | BENZENE TOTAL (UG/L) (34030) | BROMO-FORM TOTAL (UG/L) (32104) | CARBON DI-SULFIDE WATER WHOLE TOTAL (UG/L) (77041) | CHLORO-BENZENE TOTAL (UG/L) (34301) | CHLORO-METHANE TOTAL (UG/L) (32105) | CIS-1,2-DI-CHLORO-ETHYLENE WATER TOTAL (UG/L) (32106) | BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (77093) | DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (32101) | DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668) | ETHER-ETHYL WATER UNFLT/REC (UG/L) (81576) | ETHER-TERT-PENTYL METHYL UNFLT/REC (UG/L) (50005) | ETHYL-BENZENE TOTAL (UG/L) (34371) | FREON-113 WATER UNFLT/REC (UG/L) (77652) |
| DATE | | | | | | | | | | | | | | |
| OCT 02... | | <.04 | <.06 | E.01 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| | | FURAN, TETRA-HYDRO-WATER UNFLT/REC (UG/L) (81607) | METHYL-TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL-CHLORIDE RIDE TOTAL (UG/L) (34418) | METHYL-CHLORIDE RIDE TOTAL (UG/L) (34423) | META/PARA-XYLENE WATER UNFLT/REC (UG/L) (85795) | O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275) | O-CHLORO-XYLENE WATER WHOLE TOTAL (UG/L) (77135) | P-ISO-PROPYL-TOLUENE WATER WHOLE TOTAL (UG/L) (77356) | TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180) | TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488) | |
| OCT 02... | | <2 | E.1 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | E.03 | E.02 | <.09 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA-CHLOR, WATER, DISS, REC (UG/L) (46342) | ALPHA-BHC DIS- SOLVED (UG/L) (34253) | ATRA-ZINE, WATER, DISS, REC (UG/L) (39632) | BEN-FLUR-ALIN WAT FLD GF, REC (UG/L) (82673) | CAR-BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO-FURAN WATER FLTRD GF, REC (UG/L) (82674) | CHLOR-PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA-ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD GF, REC (UG/L) (82682) | DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040) | DI-AZINON, DIS- SOLVED (UG/L) (39572) |
|-----------|------|---|---|--|---|--|---|---|--|--|--|---|--|
| OCT 02... | 1130 | <.004 | E.002 | <.005 | .012 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.030 | <.005 |
| FEB 07... | 1020 | <.004 | .005 | <.005 | .007 | <.010 | E.060 | <.100 | <.005 | <.018 | <.003 | E.021 | <.005 |
| APR 04... | 1410 | <.004 | <.002 | <.005 | .008 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.022 | <.005 |
| MAY 03... | 1120 | <.004 | <.002 | <.005 | .009 | <.010 | <.041 | E.016 | <.005 | <.018 | <.003 | E.022 | <.005 |
| 22... | 1220 | <.004 | <.002 | <.005 | .270 | <.010 | E.007 | <.020 | <.005 | <.018 | <.003 | E.023 | .006 |
| JUN 06... | 1200 | E.004 | <.002 | <.005 | .110 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |
| 27... | 1400 | <.004 | <.002 | <.005 | .103 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.014 | <.005 |
| AUG 08... | 1330 | <.004 | <.002 | <.005 | .017 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.005 |
| SEP 11... | 0930 | <.004 | <.002 | <.005 | .011 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.023 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

463

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|--------------|--|---|--|---|--|---|---|--|--|---|---|---|---|
| OCT 02... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.006 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| FEB 07... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.006 | <.006 | <.002 | <.007 | <.003 | <.010 | E.002 |
| APR 04... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.008 | <.006 | <.003 | <.007 | <.003 | <.010 | <.015 |
| MAY 03... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.008 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| 22... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .147 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| JUN 06... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .030 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| 27... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.006 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| AUG 08... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 | .022 |
| SEP 11... | <.005 | <.030 | <.004 | <.035 | <.027 | <.050 | E.007 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |

| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|--------------|---|---|--|---|---|
| OCT 02... | .017 | <.016 | <.034 | <.005 | E.001 |
| FEB 07... | .012 | <.016 | <.034 | <.005 | <.009 |
| APR 04... | E.008 | <.016 | <.034 | <.005 | <.009 |
| MAY 03... | E.007 | <.016 | <.034 | <.005 | <.009 |
| 22... | .054 | <.016 | <.034 | <.005 | <.009 |
| JUN 06... | .394 | <.016 | <.034 | <.005 | <.009 |
| 27... | .665 | <.016 | <.034 | <.005 | <.009 |
| AUG 08... | .026 | <.016 | <.030 | <.005 | <.009 |
| SEP 11... | E.010 | <.016 | <.034 | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA---Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---------|------|------|----------|------|------|----------|------|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 14.0 | 11.0 | 12.5 | 9.5 | 6.5 | 8.0 | 5.5 | 3.5 | 4.5 | .0 | .0 | .0 |
| 2 | --- | --- | --- | 9.5 | 6.5 | 8.0 | 3.5 | 1.5 | 2.5 | .0 | .0 | .0 |
| 3 | 16.5 | 12.5 | 14.5 | 9.5 | 6.5 | 8.0 | 1.5 | .0 | .5 | .0 | .0 | .0 |
| 4 | 17.0 | 14.0 | 15.5 | 11.0 | 8.5 | 9.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 5 | 17.0 | 16.0 | 16.0 | 10.0 | 7.5 | 9.0 | 1.5 | .0 | .5 | .0 | .0 | .0 |
| 6 | 17.0 | 15.5 | 16.0 | 8.5 | 6.0 | 7.5 | .5 | .0 | .0 | .0 | .0 | .0 |
| 7 | 15.5 | 12.5 | 14.5 | 8.0 | 5.5 | 6.5 | 1.0 | .0 | .5 | .0 | .0 | .0 |
| 8 | 12.5 | 10.0 | 11.0 | 9.5 | 6.5 | 8.0 | 2.0 | .0 | 1.0 | .0 | .0 | .0 |
| 9 | 10.0 | 8.5 | 9.0 | 11.0 | 9.0 | 10.0 | 2.0 | .0 | .5 | .0 | .0 | .0 |
| 10 | 9.5 | 7.5 | 8.5 | 12.5 | 11.0 | 11.5 | 1.5 | .0 | .5 | .0 | .0 | .0 |
| 11 | 11.0 | 8.0 | 9.5 | 12.0 | 10.0 | 11.0 | 3.5 | 1.5 | 2.5 | .5 | .0 | .0 |
| 12 | 12.0 | 8.5 | 10.0 | 11.0 | 9.0 | 10.0 | 4.0 | 1.5 | 3.5 | .0 | .0 | .0 |
| 13 | 12.5 | 9.0 | 11.0 | 10.5 | 9.0 | 10.0 | 1.5 | .0 | 1.0 | .0 | .0 | .0 |
| 14 | 13.5 | 10.0 | 11.5 | 10.0 | 7.5 | 9.0 | 2.5 | 1.0 | 2.0 | .0 | .0 | .0 |
| 15 | 14.0 | 11.0 | 12.5 | 7.5 | 6.5 | 7.0 | 2.5 | 2.0 | 2.0 | .0 | .0 | .0 |
| 16 | 13.5 | 12.5 | 13.0 | 7.0 | 5.0 | 6.0 | 3.5 | 2.0 | 2.5 | .5 | .0 | .0 |
| 17 | 13.5 | 13.0 | 13.0 | 8.0 | 5.5 | 6.5 | 10.0 | 3.5 | 8.0 | 1.0 | .0 | .5 |
| 18 | 14.0 | 13.0 | 13.0 | 6.5 | 4.5 | 5.0 | 7.5 | 2.5 | 4.0 | .5 | .0 | .5 |
| 19 | 14.0 | 11.5 | 12.5 | 5.0 | 3.0 | 4.0 | 2.5 | 1.5 | 2.0 | 1.0 | .5 | 1.0 |
| 20 | 13.0 | 10.0 | 11.5 | 4.0 | 1.5 | 3.0 | 2.0 | .0 | 1.0 | 1.5 | .5 | 1.0 |
| 21 | 13.5 | 10.0 | 12.0 | 3.0 | 1.5 | 2.0 | .5 | .0 | .0 | .5 | .0 | .0 |
| 22 | 13.5 | 10.5 | 12.0 | 2.0 | .0 | 1.0 | 1.0 | .0 | .5 | .0 | .0 | .0 |
| 23 | 12.0 | 9.0 | 10.0 | 1.0 | .0 | .5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 24 | 12.0 | 9.0 | 10.5 | 2.0 | .0 | .5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 25 | 13.5 | 10.0 | 11.5 | 2.0 | .0 | .5 | .0 | .0 | .0 | .0 | .0 | .0 |
| 26 | 13.5 | 11.0 | 12.0 | 6.0 | 2.0 | 4.0 | .0 | .0 | .0 | .0 | .0 | .0 |
| 27 | 14.0 | 11.0 | 12.5 | 6.5 | 5.5 | 6.0 | .0 | .0 | .0 | .5 | .0 | .0 |
| 28 | 13.0 | 9.5 | 12.0 | 7.5 | 6.0 | 7.0 | .0 | .0 | .0 | 1.0 | .0 | .5 |
| 29 | 10.0 | 8.0 | 9.0 | 6.5 | 5.0 | 5.5 | .0 | .0 | .0 | .5 | .0 | .0 |
| 30 | 9.0 | 7.0 | 8.0 | 6.5 | 5.5 | 5.5 | .0 | .0 | .0 | 1.0 | .0 | .5 |
| 31 | 9.5 | 6.5 | 7.5 | --- | --- | --- | .0 | .0 | .0 | 2.0 | .5 | 1.0 |
| MONTH | 17.0 | 6.5 | 11.7 | 12.5 | .0 | 6.3 | 10.0 | .0 | 1.3 | 2.0 | .0 | .2 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|-----|-----|-------|-----|-----|-------|------|------|------|------|------|------|
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 3.5 | 1.5 | 2.5 | 4.0 | 2.0 | 3.0 | --- | --- | --- | 19.5 | 13.5 | 16.0 |
| 2 | 4.0 | 2.5 | 3.0 | 5.5 | 3.0 | 4.0 | --- | --- | --- | 21.0 | 15.5 | 18.0 |
| 3 | 2.5 | .5 | 1.5 | 6.5 | 5.0 | 5.5 | --- | --- | --- | 22.0 | 17.0 | 19.0 |
| 4 | 2.0 | .0 | 1.0 | 5.5 | 2.5 | 4.0 | --- | --- | --- | 22.5 | 18.0 | 20.0 |
| 5 | 2.0 | .0 | .5 | 2.5 | 1.0 | 1.5 | 12.0 | 7.5 | 9.5 | 21.0 | 17.5 | 19.5 |
| 6 | 2.5 | .0 | 1.0 | 3.5 | 1.0 | 2.0 | 10.0 | 9.0 | 9.5 | 19.5 | 15.0 | 17.0 |
| 7 | 4.0 | 2.0 | 2.5 | 6.0 | 2.0 | 4.0 | 9.5 | 9.0 | 9.0 | 18.0 | 13.0 | 15.0 |
| 8 | 3.0 | 1.5 | 2.0 | 5.5 | 3.0 | 4.5 | 9.0 | 8.0 | 8.5 | 18.0 | 13.0 | 15.0 |
| 9 | 4.5 | 2.5 | 3.0 | 5.5 | 4.0 | 4.5 | 14.5 | 8.5 | 11.0 | 18.5 | 14.0 | 16.0 |
| 10 | 4.5 | 2.5 | 3.5 | 6.0 | 3.0 | 4.0 | 14.5 | 12.5 | 13.5 | 19.5 | 14.5 | 16.5 |
| 11 | 2.5 | .5 | 1.5 | 5.5 | 3.0 | 4.0 | 13.5 | 11.0 | 12.0 | 20.5 | 15.5 | 18.0 |
| 12 | 2.0 | .0 | 1.0 | 7.0 | 3.0 | 5.0 | 11.5 | 10.0 | 11.0 | 20.5 | 17.0 | 18.5 |
| 13 | 4.5 | 2.0 | 3.0 | 5.5 | 4.5 | 5.5 | 15.5 | 11.5 | 13.0 | 19.5 | 15.5 | 17.0 |
| 14 | 4.5 | 3.5 | 4.0 | 7.0 | 5.0 | 6.0 | 15.5 | 11.5 | 13.5 | 18.0 | 13.5 | 15.5 |
| 15 | 5.5 | 4.5 | 5.0 | 5.5 | 4.0 | 5.0 | 14.5 | 11.5 | 13.0 | 18.0 | 13.0 | 15.0 |
| 16 | 5.0 | 4.5 | 4.5 | --- | --- | --- | 13.0 | 11.0 | 12.0 | 17.5 | 13.0 | 15.0 |
| 17 | 4.5 | 2.5 | 4.0 | --- | --- | --- | 11.0 | 9.5 | 10.0 | 15.0 | 14.0 | 14.5 |
| 18 | 2.5 | .5 | 1.5 | --- | --- | --- | 10.5 | 7.5 | 9.0 | 14.0 | 13.5 | 14.0 |
| 19 | 3.0 | .0 | 1.5 | --- | --- | --- | 11.5 | 7.0 | 9.5 | 17.5 | 14.0 | 15.5 |
| 20 | 4.5 | 2.0 | 3.0 | --- | --- | --- | 11.0 | 8.5 | 10.0 | 16.5 | 15.0 | 15.5 |
| 21 | 6.0 | 3.0 | 4.5 | --- | --- | --- | 13.0 | 10.5 | 12.0 | 15.0 | 13.5 | 14.0 |
| 22 | 3.0 | .0 | 1.0 | --- | --- | --- | 17.5 | 12.5 | 15.0 | 15.0 | 13.5 | 14.0 |
| 23 | 2.0 | .0 | .5 | --- | --- | --- | 20.5 | 15.5 | 18.0 | 17.0 | 14.5 | 15.5 |
| 24 | 3.0 | .0 | 1.5 | --- | --- | --- | 21.0 | 17.0 | 19.0 | 18.5 | 15.5 | 16.5 |
| 25 | 3.5 | 2.0 | 3.0 | --- | --- | --- | 17.0 | 12.5 | 14.5 | 17.0 | 15.5 | 16.5 |
| 26 | 5.5 | 3.0 | 4.0 | --- | --- | --- | 16.0 | 10.5 | 13.0 | 15.5 | 14.5 | 15.0 |
| 27 | 5.5 | 3.0 | 4.0 | --- | --- | --- | 16.5 | 11.5 | 14.0 | 15.5 | 14.0 | 14.5 |
| 28 | 5.5 | 3.0 | 4.5 | --- | --- | --- | 17.5 | 13.5 | 15.0 | 17.5 | 14.5 | 16.0 |
| 29 | --- | --- | --- | --- | --- | --- | 16.5 | 11.5 | 13.5 | 17.0 | 14.5 | 15.5 |
| 30 | --- | --- | --- | --- | --- | --- | 17.0 | 11.5 | 14.0 | 16.5 | 14.5 | 15.5 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 16.0 | 12.5 | 14.0 |
| MONTH | 6.0 | .0 | 2.6 | --- | --- | --- | 21.0 | 7.0 | 12.4 | 22.5 | 12.5 | 16.0 |

DELAWARE RIVER BASIN

01472157 FRENCH CREEK NEAR PHOENIXVILLE, PA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 14.0 | 12.0 | 13.0 | 26.0 | 22.5 | 24.0 | 23.0 | 18.5 | 21.0 | 24.0 | 20.0 | 22.0 |
| 2 | 14.5 | 12.0 | 13.0 | 23.5 | 19.0 | 21.0 | 24.5 | 19.0 | 21.5 | 21.5 | 17.5 | 19.5 |
| 3 | 15.5 | 14.0 | 14.5 | 21.5 | 17.0 | 19.5 | 24.5 | 20.5 | 22.0 | 21.5 | 17.0 | 19.0 |
| 4 | 17.0 | 13.0 | 14.5 | 22.5 | 19.0 | 20.5 | 23.0 | 21.5 | 22.0 | 22.0 | 18.5 | 20.0 |
| 5 | 18.5 | 14.5 | 16.0 | 22.0 | 19.5 | 21.0 | 25.5 | 21.0 | 23.0 | 22.0 | 18.5 | 20.0 |
| 6 | 17.0 | 15.5 | 16.0 | 22.5 | 18.5 | 20.5 | 26.5 | 22.0 | 24.0 | 21.0 | 16.5 | 18.5 |
| 7 | 19.0 | 15.0 | 16.5 | 22.5 | 17.0 | 20.0 | 27.5 | 23.0 | 25.0 | 21.5 | 16.5 | 19.0 |
| 8 | 19.0 | 14.5 | 16.5 | 20.5 | 19.5 | 20.0 | 28.0 | 23.0 | 25.5 | 22.0 | 17.5 | 19.5 |
| 9 | 19.0 | 14.0 | 16.5 | 25.0 | 19.5 | 21.5 | 28.5 | 22.5 | 25.5 | 22.5 | 18.5 | 20.5 |
| 10 | 19.0 | 14.5 | 16.5 | 25.0 | 20.0 | 22.5 | 27.5 | 24.5 | 25.5 | 22.5 | 20.0 | 21.0 |
| 11 | 20.5 | 16.0 | 18.0 | 24.5 | 20.5 | 22.0 | 24.5 | 21.5 | 23.0 | 22.5 | 18.5 | 20.5 |
| 12 | 21.5 | 17.0 | 19.5 | 23.0 | 19.0 | 21.0 | 22.5 | 21.0 | 21.5 | 21.5 | 17.0 | 19.0 |
| 13 | 22.5 | 18.5 | 20.5 | 21.5 | 18.0 | 20.0 | 22.5 | 21.0 | 22.0 | 21.5 | 16.5 | 19.0 |
| 14 | 22.0 | 19.5 | 20.5 | 22.0 | 17.5 | 19.5 | 24.5 | 21.0 | 22.5 | 19.5 | 15.5 | 17.5 |
| 15 | 21.0 | 19.5 | 20.0 | 23.0 | 17.5 | 20.0 | 24.5 | 20.5 | 22.5 | 17.5 | 13.5 | 15.5 |
| 16 | 20.0 | 19.5 | 19.5 | 23.0 | 19.0 | 21.0 | 24.5 | 20.5 | 22.5 | 17.5 | 13.0 | 15.5 |
| 17 | 22.0 | 18.5 | 20.0 | 24.5 | 20.0 | 22.0 | 24.0 | 21.5 | 22.5 | 18.0 | 13.0 | 15.5 |
| 18 | 23.5 | 18.5 | 20.5 | 22.5 | 20.5 | 21.5 | 23.5 | 20.0 | 22.0 | 17.0 | 14.0 | 15.5 |
| 19 | 24.0 | 18.5 | 21.0 | 23.5 | 20.0 | 21.5 | 22.0 | 20.0 | 21.0 | 18.0 | 14.0 | 16.5 |
| 20 | 24.5 | 19.5 | 22.0 | 24.5 | 19.0 | 21.5 | 24.0 | 20.5 | 22.0 | 17.5 | 16.5 | 17.0 |
| 21 | 23.5 | 20.0 | 21.5 | 24.0 | 18.0 | 21.0 | 23.0 | 20.0 | 21.5 | 19.5 | 17.0 | 18.0 |
| 22 | 23.5 | 20.5 | 21.5 | 24.5 | 19.0 | 21.5 | 24.0 | 19.5 | 21.5 | 21.0 | 17.5 | 19.0 |
| 23 | 23.0 | 20.5 | 21.5 | 25.5 | 20.0 | 22.5 | 21.5 | 20.0 | 21.0 | 20.5 | 17.5 | 19.0 |
| 24 | 21.5 | 19.0 | 20.5 | 27.0 | 22.0 | 24.0 | 23.5 | 19.5 | 21.5 | 20.5 | 18.0 | 19.0 |
| 25 | 24.0 | 18.0 | 20.5 | 27.0 | 23.5 | 25.0 | 23.5 | 20.0 | 22.0 | 20.0 | 17.0 | 18.5 |
| 26 | 24.5 | 19.0 | 21.5 | 25.0 | 21.5 | 23.5 | 23.5 | 19.0 | 21.0 | 17.0 | 14.0 | 15.5 |
| 27 | 26.0 | 20.0 | 23.0 | 23.5 | 19.0 | 21.0 | 24.0 | 20.5 | 22.0 | 15.5 | 13.0 | 14.5 |
| 28 | 26.5 | 21.5 | 23.5 | 22.0 | 18.0 | 20.0 | 24.5 | 20.5 | 22.5 | 14.5 | 12.5 | 13.5 |
| 29 | 25.5 | 22.0 | 24.0 | 20.5 | 18.5 | 19.5 | 24.5 | 20.5 | 22.0 | 14.5 | 13.0 | 13.5 |
| 30 | 26.0 | 22.5 | 24.0 | 22.0 | 18.5 | 20.0 | 23.0 | 20.0 | 21.5 | 13.5 | 12.0 | 12.5 |
| 31 | --- | --- | --- | 23.0 | 18.0 | 20.5 | 24.5 | 21.0 | 22.5 | --- | --- | --- |
| MONTH | 26.5 | 12.0 | 19.2 | 27.0 | 17.0 | 21.3 | 28.5 | 18.5 | 22.4 | 24.0 | 12.0 | 17.8 |

DELAWARE RIVER BASIN

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA

LOCATION.--Lat 39°58'04", long 75°11'20", Philadelphia County, PA, Hydrologic Unit 02040203, upstream from Fairmount Dam, 1,500 ft upstream from bridge on Spring Garden Street in Philadelphia, and 8.7 mi upstream from mouth.

DRAINAGE AREA.--1,893 mi².

PERIOD OF RECORD.--October 1998, revised, to current year. Records for January 1898 to December 1912, published in WSP 35, 48, 65, 82, 97, 125, 166, 202, 214, 261, 301, and 381, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1936(M). WSP 1432: 1945. See also PERIOD OF RECORD.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1998 to April 1999, July 1999 to September 1999.

WATER TEMPERATURE: September 1998 to September 2001.

INSTRUMENTATION.--Water-quality monitor (in situ system; measurements recorded every 15 minutes) located inside raw-water water intake of Belmont Pumping Station, Philadelphia, PA.

REMARKS.--These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (DELNR NAWQA). For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) |
|-----------|------|-----------------|---|--|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|---|
| OCT 11... | 1050 | ENVIRONMENTAL | 1400 | 766 | 103 | 10.8 | 7.9 | 430 | 16.0 | 13.4 | 150 | 37.8 |
| NOV 07... | 1340 | ENVIRONMENTAL | 757 | 762 | 98 | 10.7 | 8.0 | 562 | 12.5 | 11.4 | 200 | 44.6 |
| JAN 17... | 1050 | ENVIRONMENTAL | 1550 | 762 | 110 | 14.7 | 7.9 | 545 | 8.5 | 3.2 | 160 | 39.7 |
| JAN 17... | 1051 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB 08... | 1050 | ENVIRONMENTAL | 4290 | 774 | 111 | 14.9 | 7.7 | 541 | 4.0 | 3.5 | 120 | 31.5 |
| MAR 15... | 0950 | ENVIRONMENTAL | 5610 | 761 | 107 | 13.2 | 7.6 | 342 | 11.5 | 6.1 | 96 | 25.3 |
| APR 05... | 1140 | ENVIRONMENTAL | 4350 | 770 | 106 | 12.0 | 8.0 | 304 | 18.0 | 10.4 | 100 | 26.6 |
| MAY 02... | 1109 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | .02 |
| MAY 02... | 1110 | ENVIRONMENTAL | 2160 | 766 | 86 | 8.2 | 7.9 | 382 | 29.5 | 18.1 | 120 | 31.7 |
| JUN 06... | 1230 | ENVIRONMENTAL | 1930 | 758 | 111 | 10.0 | 7.9 | 369 | 20.5 | 20.2 | 130 | 32.7 |
| JUN 28... | 1340 | ENVIRONMENTAL | 2160 | 762 | 143 | 11.5 | 8.3 | 351 | 35.0 | 26.4 | 120 | 30.7 |
| AUG 06... | 1220 | ENVIRONMENTAL | 993 | 763 | 122 | 9.6 | 7.6 | 490 | 35.0 | 27.5 | 170 | 36.0 |
| SEP 19... | 1120 | ENVIRONMENTAL | 500 | 759 | 86 | 7.6 | 7.8 | 605 | 27.5 | 21.2 | 190 | 43.4 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CaCO3 (39086) | BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453) | CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) |
|-----------|---|--|---|--|--|---|--|---|---|--|--|---|---|
| OCT 11... | 14.3 | 4.04 | 23.6 | 95 | 116 | -- | 33.2 | .2 | 8.3 | 61.7 | .43 | .60 | .109 |
| NOV 07... | 20.6 | 4.72 | 33.9 | 98 | 120 | -- | 47.5 | .2 | 3.8 | 90.4 | .50 | .57 | .129 |
| JAN 17... | 14.8 | 4.06 | 39.0 | 82 | 101 | -- | 62.3 | E.1 | 9.8 | 68.7 | 1.1 | 1.2 | .718 |
| JAN 17... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB 08... | 10.3 | 2.81 | 51.9 | 60 | 73 | -- | 95.5 | E.1 | 8.2 | 33.7 | .67 | .71 | .304 |
| MAR 15... | 8.09 | 2.50 | 22.7 | 53 | 65 | -- | 43.7 | E.1 | 6.8 | 28.3 | .51 | .71 | .218 |
| APR 05... | 8.55 | 2.46 | 16.8 | 55 | 67 | -- | 29.4 | E.1 | 7.0 | 29.9 | .37 | .57 | .157 |
| MAY 02... | <.008 | <.09 | <.1 | -- | -- | -- | <.1 | <.2 | <.1 | <.1 | <.10 | <.08 | <.041 |
| MAY 02... | 11.1 | 2.61 | 19.5 | 74 | 90 | -- | 33.9 | E.2 | 4.1 | 41.6 | .40 | .64 | .045 |
| JUN 06... | 12.0 | 3.17 | 19.7 | 77 | 94 | -- | 33.2 | E.1 | 8.6 | 39.2 | .39 | .51 | <.040 |
| JUN 28... | 11.7 | 3.33 | 18.5 | 69 | 81 | 2 | 28.6 | E.1 | 8.2 | 39.2 | .31 | .68 | <.040 |
| AUG 06... | 18.3 | 4.25 | 30.3 | 76 | 93 | -- | 47.6 | .2 | 6.7 | 72.6 | .43 | .62 | .062 |
| SEP 19... | 19.4 | 5.30 | 42.6 | 97 | 118 | -- | 60.4 | .3 | 6.4 | 92.9 | .48 | .54 | .109 |

E Estimated value.

< Actual value known to be less than the value shown.

DELAWARE RIVER BASIN

467

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, TOTAL (MG/L AS N) (00605) | NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INORG- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) |
|-------|--|--|--|--|--|--|--|--|---|--|--|---|--|
| OCT | | | | | | | | | | | | | |
| 11... | 3.5 | 3.4 | 2.93 | .031 | .49 | -- | .230 | .216 | .237 | -- | -- | 3.1 | .3 |
| NOV | | | | | | | | | | | | | |
| 07... | 3.8 | 3.7 | 3.23 | .041 | .44 | -- | .356 | .305 | .390 | -- | -- | 3.3 | .3 |
| JAN | | | | | | | | | | | | | |
| 17... | 5.0 | 4.9 | 3.77 | .081 | .50 | .038 | .263 | .255 | .324 | .6 | -- | 2.6 | -- |
| 17... | -- | -- | -- | -- | -- | .031 | -- | -- | -- | .5 | -- | 2.6 | -- |
| FEB | | | | | | | | | | | | | |
| 08... | 3.8 | 3.8 | 3.09 | .052 | .40 | E.028 | .123 | .115 | .156 | E.6 | -- | 2.7 | -- |
| MAR | | | | | | | | | | | | | |
| 15... | 3.1 | 2.9 | 2.43 | .032 | .49 | .175 | .073 | .063 | .129 | 1.0 | .1 | 3.1 | .9 |
| APR | | | | | | | | | | | | | |
| 05... | 3.4 | 3.2 | 2.79 | .036 | .42 | .114 | .078 | .065 | .106 | .7 | <.1 | 1.9 | .7 |
| MAY | | | | | | | | | | | | | |
| 02... | -- | -- | <.047 | <.006 | -- | -- | <.006 | <.018 | <.004 | -- | -- | -- | -- |
| 02... | 3.3 | 3.1 | 2.69 | .065 | .60 | .171 | .133 | .101 | .170 | 1.1 | <.1 | 2.4 | 1.1 |
| JUN | | | | | | | | | | | | | |
| 06... | 3.1 | 3.0 | 2.57 | .058 | -- | .236 | .176 | .114 | .202 | 1.2 | <.1 | 3.2 | 1.2 |
| 28... | 3.2 | 2.8 | 2.52 | .053 | -- | .177 | .126 | .074 | .191 | 2.2 | <.1 | 3.2 | 2.2 |
| AUG | | | | | | | | | | | | | |
| 06... | 3.7 | 3.6 | 3.12 | .036 | .56 | .230 | .332 | .315 | .390 | 1.1 | <.1 | 2.7 | 1.1 |
| SEP | | | | | | | | | | | | | |
| 19... | 4.6 | 4.5 | 4.03 | .038 | .43 | <.022 | .474 | .453 | .491 | .3 | <.1 | 3.4 | .3 |

| DATE | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155) | SEDI- MENT, SUS- PENDE (MG/L) (80154) |
|-------|---|---|--|---|---|---|--|--|
| OCT | | | | | | | | |
| 11... | 257 | 254 | <2.0 | 75 | 30 | 50.4 | 18 | 5 |
| NOV | | | | | | | | |
| 07... | 335 | 320 | 2.0 | 99 | 50 | 48.0 | 4.7 | 2 |
| JAN | | | | | | | | |
| 17... | 319 | 307 | 5.5 | 75 | 40 | 132 | 12 | 3 |
| 17... | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | |
| 08... | 295 | 284 | 10 | 29 | 30 | 71.8 | 92 | 8 |
| MAR | | | | | | | | |
| 15... | 195 | 181 | 25 | 33 | 40 | 72.4 | 206 | 14 |
| APR | | | | | | | | |
| 05... | 175 | 167 | 7.0 | 39 | 30 | 69.5 | 51 | 4 |
| MAY | | | | | | | | |
| 02... | <10 | -- | -- | <13 | <10 | <3.2 | -- | <1 |
| 02... | 228 | 201 | 6.0 | 49 | 40 | 29.5 | 33 | 6 |
| JUN | | | | | | | | |
| 06... | 218 | 207 | 11 | 43 | 30 | 36.9 | 30 | 6 |
| 28... | 200 | 193 | 10 | 53 | 10 | <3.0 | 48 | 8 |
| AUG | | | | | | | | |
| 06... | 287 | 277 | 7.0 | 81 | M | 40.7 | 16 | 6 |
| SEP | | | | | | | | |
| 19... | 363 | 348 | 4.5 | 111 | 20 | 37.3 | -- | <1 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020/2021 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | ACETONE WATER WHOLE TOTAL (UG/L) (81552) | 1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613) | BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551) | BENZENE 124-TRI METHYL UNFLTRD RECOVER (UG/L) (77222) | BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) |
|--------------|------|--|--|--|---|--|---|---|--|---|--|--|---|
| OCT 11... | 1050 | <.03 | <.04 | <.04 | <7 | <.3 | <.2 | E.04 | E.03 | <.03 | <.05 | <.03 | <.03 |
| DATE | TIME | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34668) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- PENTYL METHYL WATER UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) |
| OCT 11... | E.03 | <.06 | <.07 | <.03 | <.2 | .14 | <.04 | E.05 | <.3 | <.2 | <.1 | E.01 | <.06 |
| DATE | TIME | FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL- CHLO- RIDE TOTAL (UG/L) (34418) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | P-ISO- PROPYL- TOLUENE WATER WHOLE TOTAL (UG/L) (77356) | TETRA- CHLORO- ETHYL- WATER TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- WATER TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) |
| OCT 11... | <2 | .5 | <.2 | <.2 | E.10 | <.03 | E.05 | <.07 | M | E.10 | E.02 | <.09 | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--------------|------|--|---|---|---|--|---|---|--|--|--|--|---|
| OCT 11... | 1050 | <.004 | <.002 | <.005 | .094 | <.010 | E.010 | <.020 | <.005 | <.018 | <.003 | E.071 | .013 |
| FEB 08... | 1050 | <.004 | <.002 | <.005 | E.004 | <.010 | E.040 | <.020 | <.005 | <.018 | <.003 | E.002 | <.005 |
| APR 05... | 1140 | <.004 | <.002 | <.005 | .025 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.028 | <.005 |
| MAY 02... | 1110 | <.004 | <.002 | <.005 | .032 | <.010 | <.041 | <.050 | <.005 | <.018 | <.003 | E.040 | <.005 |
| JUN 06... | 1230 | .018 | .004 | <.005 | .440 | <.010 | <.041 | <.020 | <.005 | E.004 | <.003 | E.088 | .009 |
| JUN 28... | 1340 | .012 | .006 | <.005 | .330 | <.010 | <.041 | <.020 | E.001 | <.018 | <.003 | E.027 | .008 |
| AUG 06... | 1220 | <.004 | <.002 | <.005 | .122 | <.010 | E.003 | <.020 | <.005 | <.018 | <.003 | E.046 | .012 |
| SEP 19... | 1120 | <.004 | <.002 | <.005 | .062 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 | E.029 | .007 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

DELAWARE RIVER BASIN

469

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
|-----------|--|---|--|---|--|---|---|--|--|---|---|---|---|
| OCT 11... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .017 | <.006 | <.002 | <.007 | <.003 | <.010 | <.019 |
| FEB 08... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| APR 05... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .016 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 |
| MAY 02... | <.005 | <.008 | <.004 | <.035 | <.027 | <.050 | .015 | <.006 | <.002 | <.007 | <.003 | <.010 | E.014 |
| JUN 06... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .166 | <.006 | <.002 | <.007 | <.003 | <.010 | .019 |
| JUN 28... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .163 | <.006 | <.002 | <.007 | <.003 | <.010 | <.020 |
| AUG 06... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .036 | <.006 | <.002 | <.007 | <.003 | <.010 | .052 |
| SEP 19... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .017 | <.006 | <.002 | <.007 | <.003 | <.010 | .054 |

| DATE | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-----------|---|---|--|--|---|---|
| OCT 11... | .028 | E.010 | <.034 | -- | <.005 | <.009 |
| FEB 08... | E.010 | E.005 | <.034 | -- | <.005 | <.009 |
| APR 05... | <.011 | <.016 | <.034 | -- | <.005 | <.009 |
| MAY 02... | .025 | <.016 | <.034 | -- | <.005 | <.009 |
| JUN 06... | .056 | E.013 | <.034 | -- | <.005 | <.009 |
| JUN 28... | .055 | E.008 | <.034 | E.003 | <.005 | <.009 |
| AUG 06... | .066 | E.013 | <.034 | E.031 | <.005 | <.009 |
| SEP 19... | .020 | <.016 | <.034 | -- | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|----------|------|------|----------|------|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 17.5 | 16.5 | 17.0 | 13.0 | 12.0 | 12.0 | 7.5 | 7.0 | 7.5 | .5 | .5 | .5 |
| 2 | 18.5 | 16.5 | 17.5 | 12.5 | 11.5 | 12.0 | 7.0 | 6.0 | 6.5 | .5 | .5 | .5 |
| 3 | 19.0 | 17.0 | 18.0 | 13.0 | 11.0 | 12.0 | 6.0 | 5.5 | 5.5 | .5 | .5 | .5 |
| 4 | 19.5 | 18.0 | 18.5 | 12.5 | 11.5 | 12.0 | 5.5 | 4.5 | 5.0 | .5 | .5 | .5 |
| 5 | 20.0 | 19.0 | 19.5 | 12.0 | 11.5 | 12.0 | 5.0 | 4.0 | 4.5 | .5 | .5 | .5 |
| 6 | 20.0 | 19.0 | 19.5 | 12.0 | 11.0 | 11.5 | 4.5 | 3.5 | 4.0 | 1.0 | .5 | 1.0 |
| 7 | 19.5 | 18.0 | 19.0 | 12.0 | 11.0 | 11.5 | 3.5 | 3.0 | 3.5 | 1.5 | 1.0 | 1.5 |
| 8 | 18.0 | 17.0 | 17.5 | 12.0 | 11.0 | 11.5 | 3.0 | 3.0 | 3.0 | 1.5 | 1.0 | 1.5 |
| 9 | 17.0 | 15.5 | 16.0 | 12.0 | 11.5 | 12.0 | 3.0 | 2.5 | 3.0 | 2.0 | 1.0 | 1.5 |
| 10 | 15.5 | 13.5 | 14.5 | 12.5 | 12.0 | 12.5 | 3.0 | 2.5 | 3.0 | 1.5 | 1.0 | 1.0 |
| 11 | --- | --- | --- | 13.0 | 12.5 | 13.0 | 4.5 | 3.0 | 3.5 | 1.5 | 1.0 | 1.0 |
| 12 | 16.5 | 13.0 | 13.5 | 12.5 | 12.0 | 12.5 | 5.5 | 4.5 | 5.0 | 2.0 | 1.5 | 2.0 |
| 13 | 14.5 | 13.5 | 14.0 | 13.0 | 12.5 | 12.5 | 4.5 | 4.0 | 4.5 | 3.0 | 2.0 | 2.5 |
| 14 | 15.5 | 13.5 | 14.5 | 12.5 | 12.0 | 12.5 | 5.0 | 4.0 | 4.5 | 3.5 | 2.5 | 3.0 |
| 15 | 16.5 | 14.5 | 15.5 | 12.0 | 10.5 | 11.0 | 5.5 | 4.0 | 4.5 | 4.0 | 3.5 | 3.5 |
| 16 | 16.0 | 15.5 | 16.0 | 10.5 | 10.0 | 10.0 | 4.5 | 4.0 | 4.0 | 4.0 | 3.0 | 3.5 |
| 17 | 16.0 | 15.5 | 16.0 | 10.5 | 10.0 | 10.0 | 10.0 | 4.5 | 7.5 | 4.0 | 3.0 | 3.5 |
| 18 | 16.0 | 15.5 | 16.0 | 10.0 | 9.0 | 9.5 | 9.5 | 5.5 | 7.5 | 3.5 | 3.0 | 3.0 |
| 19 | 16.0 | 15.5 | 15.5 | 9.5 | 8.5 | 9.0 | 5.5 | 4.0 | 4.5 | 3.5 | 3.0 | 3.5 |
| 20 | 15.5 | 14.5 | 15.0 | 8.5 | 8.0 | 8.0 | 4.0 | 3.0 | 3.5 | 3.5 | 1.5 | 2.5 |
| 21 | 16.0 | 15.0 | 15.5 | 8.0 | 7.0 | 7.5 | 3.0 | 3.0 | 3.0 | 2.0 | 1.5 | 2.0 |
| 22 | 16.5 | 15.5 | 16.0 | 7.0 | 5.5 | 6.0 | 3.0 | 2.0 | 3.0 | 2.0 | 1.0 | 1.5 |
| 23 | 16.0 | 14.5 | 15.5 | 5.5 | 4.5 | 5.0 | 2.0 | 1.0 | 1.5 | 2.0 | 1.0 | 1.5 |
| 24 | 15.5 | 15.0 | 15.0 | 5.0 | 4.5 | 4.5 | 1.5 | 1.0 | 1.0 | 2.0 | 1.0 | 1.5 |
| 25 | 16.5 | 14.5 | 15.5 | 4.5 | 3.5 | 4.0 | 1.0 | .5 | .5 | 3.0 | 1.5 | 2.0 |
| 26 | 16.5 | 15.0 | 15.5 | 6.0 | 4.0 | 5.0 | .5 | .0 | .5 | 2.5 | 1.5 | 2.0 |
| 27 | 16.5 | 15.0 | 15.5 | 6.0 | 5.5 | 6.0 | .5 | .0 | .5 | 3.0 | 2.0 | 2.5 |
| 28 | 16.0 | 15.0 | 15.5 | 7.0 | 6.0 | 6.5 | .5 | .5 | .5 | 3.5 | 2.5 | 3.0 |
| 29 | 15.0 | 13.5 | 14.0 | 7.5 | 6.0 | 7.0 | .5 | .0 | .5 | 3.5 | 2.5 | 3.0 |
| 30 | 13.5 | 12.5 | 13.0 | 7.5 | 7.0 | 7.5 | .5 | .5 | .5 | 3.5 | 2.5 | 3.0 |
| 31 | 13.0 | 12.0 | 12.5 | --- | --- | --- | .5 | .5 | .5 | 4.0 | 2.5 | 3.5 |
| MONTH | 20.0 | 12.0 | 15.9 | 13.0 | 3.5 | 9.5 | 10.0 | .0 | 3.4 | 4.0 | .5 | 2.0 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 3.5 | 2.5 | 3.0 | 6.5 | 5.5 | 6.0 | 6.5 | 6.0 | 6.5 | --- | --- | --- |
| 2 | 4.5 | 3.5 | 4.0 | 7.0 | 6.0 | 6.5 | 7.0 | 6.5 | 7.0 | --- | --- | --- |
| 3 | 4.0 | 3.5 | 4.0 | 7.0 | 6.0 | 6.5 | 8.5 | 7.0 | 7.5 | --- | --- | --- |
| 4 | 3.5 | 3.0 | 3.5 | 7.0 | 6.0 | 6.5 | 10.0 | 8.0 | 9.0 | --- | --- | --- |
| 5 | 3.5 | 2.0 | 3.0 | 6.0 | 4.5 | 5.5 | --- | --- | --- | --- | --- | --- |
| 6 | 3.0 | 2.0 | 2.5 | 4.5 | 3.5 | 4.0 | --- | --- | --- | --- | --- | --- |
| 7 | 3.5 | 2.0 | 2.5 | 5.5 | 3.5 | 4.5 | --- | --- | --- | --- | --- | --- |
| 8 | 4.0 | 3.0 | 4.0 | 6.0 | 4.5 | 5.5 | --- | --- | --- | --- | --- | --- |
| 9 | 5.0 | 4.0 | 4.5 | 7.0 | 6.0 | 6.5 | --- | --- | --- | --- | --- | --- |
| 10 | 6.0 | 5.0 | 5.5 | 6.5 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- |
| 11 | 5.0 | 3.5 | 4.0 | 6.5 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- |
| 12 | 4.0 | 3.0 | 3.5 | 7.5 | 5.5 | 6.5 | --- | --- | --- | --- | --- | --- |
| 13 | 4.5 | 3.5 | 4.0 | 7.5 | 6.0 | 6.5 | --- | --- | --- | --- | --- | --- |
| 14 | 5.0 | 4.0 | 4.5 | 7.0 | 5.5 | 6.5 | --- | --- | --- | --- | --- | --- |
| 15 | 5.5 | 5.0 | 5.5 | 6.5 | 6.0 | 6.0 | --- | --- | --- | --- | --- | --- |
| 16 | 5.5 | 5.5 | 5.5 | 6.5 | 6.0 | 6.5 | --- | --- | --- | --- | --- | --- |
| 17 | 6.0 | 5.0 | 5.5 | 7.0 | 6.5 | 6.5 | --- | --- | --- | --- | --- | --- |
| 18 | 5.0 | 4.0 | 4.5 | 7.5 | 6.5 | 7.0 | --- | --- | --- | --- | --- | --- |
| 19 | 4.5 | 3.5 | 4.0 | 7.5 | 6.0 | 7.0 | --- | --- | --- | --- | --- | --- |
| 20 | 4.0 | 3.5 | 4.0 | 8.0 | 6.5 | 7.5 | --- | --- | --- | --- | --- | --- |
| 21 | 5.5 | 4.0 | 4.5 | 7.5 | 7.5 | 7.5 | --- | --- | --- | --- | --- | --- |
| 22 | 4.0 | 3.0 | 3.5 | 7.5 | 6.5 | 7.0 | --- | --- | --- | --- | --- | --- |
| 23 | 4.0 | 3.0 | 3.5 | 7.5 | 6.0 | 6.5 | --- | --- | --- | --- | --- | --- |
| 24 | 4.5 | 3.0 | 3.5 | 7.5 | 7.0 | 7.0 | --- | --- | --- | --- | --- | --- |
| 25 | 5.0 | 3.5 | 4.0 | 7.5 | 6.5 | 7.0 | --- | --- | --- | --- | --- | --- |
| 26 | 6.0 | 5.0 | 5.0 | 7.5 | 6.5 | 6.5 | --- | --- | --- | --- | --- | --- |
| 27 | 6.0 | 4.5 | 5.5 | 7.5 | 6.0 | 6.5 | --- | --- | --- | --- | --- | --- |
| 28 | 6.5 | 5.5 | 6.0 | 7.5 | 6.0 | 6.5 | --- | --- | --- | --- | --- | --- |
| 29 | --- | --- | --- | 7.0 | 6.5 | 6.5 | --- | --- | --- | --- | --- | --- |
| 30 | --- | --- | --- | 6.5 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- |
| 31 | --- | --- | --- | 6.0 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- |
| MONTH | 6.5 | 2.0 | 4.2 | 8.0 | 3.5 | 6.3 | 10.0 | 6.0 | 7.5 | --- | --- | --- |

DELAWARE RIVER BASIN

01475090 EDWARDS RUN AT JEFFERSON, NJ

LOCATION.--Lat 39°44'48", long 75°11'43", Gloucester County, Hydrologic Unit 02040206, at bridge on Pitman-Jefferson Road, 1.0 mi southeast of Jefferson, 1.6 mi northeast of Mullica Hill, and 1.3 mi upstream of confluence with Myers Creek.

DRAINAGE AREA.--2.92 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status, New Jersey Department of Environmental Protection Watershed Management Area 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | | |
|--------------|------|---|--|--|--|---|---|--|--|--|--|--|--|---|------|
| | | NOV 28... | 1000 | -- | .191 | .151 | 760 | 68 | 8.1 | 6.9 | 193 | -- | 7.5 | 61 | 16.4 |
| | | FEB 22... | 1000 | -- | .112 | .087 | 770 | 88 | 12.7 | 7.4 | 201 | -2.0 | 1.0 | 64 | 17.2 |
| MAY 23... | 1000 | 22 | .275 | .216 | 754 | 87 | 8.7 | 7.1 | 187 | 17.0 | 15.0 | 57 | 15.3 | | |
| AUG 23... | 1100 | 4.4 | .148 | .116 | 760 | 84 | 7.5 | 7.5 | 192 | 23.0 | 20.5 | 66 | 17.8 | | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | |
| NOV 28... | 4.88 | 8.01 | 6.8 | 22 | 17.3 | .2 | 11.3 | 28.6 | 126 | 112 | .170 | .63 | .21 | | |
| FEB 22... | 5.19 | 5.90 | 6.4 | 15 | 16.2 | .2 | 9.5 | 34.1 | 129 | 116 | .150 | .34 | .14 | | |
| MAY 23... | 4.67 | 8.15 | 7.7 | 24 | 15.2 | .2 | 8.2 | 28.5 | 130 | 108 | .420 | 1.1 | .46 | | |
| AUG 23... | 5.32 | 6.65 | 7.9 | 36 | 21.4 | .2 | 10.0 | 22.2 | 137 | 121 | <.030 | .31 | .05 | | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | |
| NOV 28... | .80 | 1.20 | .007 | 1.8 | 2.0 | .124 | .060 | .152 | 1.0 | <.1 | 5.6 | 1.0 | 2.0 | | |
| FEB 22... | .54 | 2.89 | .006 | 3.2 | 3.4 | .139 | .025 | .104 | 1.2 | <.1 | 3.0 | 1.2 | E1.5 | | |
| MAY 23... | 1.4 | 1.15 | .017 | 2.3 | 2.5 | .266 | .182 | .382 | 2.0 | <.1 | 7.4 | 2.0 | 3.1 | | |
| AUG 23... | .37 | 1.88 | .011 | 2.2 | 2.3 | .050 | .056 | .119 | .3 | <.1 | 3.2 | .3 | <1.0 | | |
| DATE | | | | | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) | | | | | | | |
| NOV 28... | | | | | | -- | 30 | <1 | | | | | | | |
| FEB 22... | | | | | | -- | 16 | 9 | | | | | | | |
| MAY 23... | | | | | | 15.8 | 35 | 17 | | | | | | | |
| AUG 23... | | | | | | 15.5 | 40 | 2 | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

473

01475090 EDWARDS RUN AT JEFFERSON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | PH SED BED MAT (STD UNITS) (70310) | NITRO- GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626) | NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611) | PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668) | CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693) | CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | |
|--------------|------|--|--|--|---|---|--|---|--|---|--|--|--|---|
| AUG 23... | 1100 | -- | -- | -- | -- | -- | -- | E1 | 50.0 | <.06 | 34 | .12 | <1 | |
| 23... | 1100 | 6.60 | 120 | .3 | 450 | 4.1 | <.2 | -- | -- | -- | -- | -- | -- | |
| DATE | | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS) (01003) | CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD) (01028) | CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01029) | COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO) (01038) |
| AUG 23... | .9 | 710 | <1 | 16 | <.01 | 2 | <.4 | <.05 | 6 | -- | -- | -- | -- | |
| 23... | -- | -- | -- | -- | -- | -- | -- | -- | -- | <1 | 1.8 | 11 | .8 | |
| DATE | | COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU) (01043) | IRON, SEDIMT, BED MA- TERIAL (UG/G AS FE) (01170) | LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB) (01052) | MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS MN) (01053) | MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) (71921) | NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI) (01068) | SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G AS SE) (01148) | ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN) (01093) | 4HCYPEN PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49411) | 9H-FLU- ORENE, 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49398) | 9H-FLU- ORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399) | ACENAPH THENE SED, BM WS, <2MM DW, REC (UG/KG) (49429) | ACENAPH THYLENE SED, BM WS, <2MM DW, REC (UG/KG) (49428) |
| AUG 23... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 23... | 5 | 5200 | 4.7 | 9.5 | .01 | .4 | <1 | 10 | <50 | <50 | <50 | <50 | <50 | |
| DATE | | ANTHRA- CENE, 2- METHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49435) | ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49434) | BENZ(A) ANTHRA- CENE SED, BM WS, <2MM DW, REC (UG/KG) (49436) | BENZO (A) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49389) | BENZOB FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49458) | BENZO(G HI)PERY LENE SED, BM WS, <2MM DW, REC (UG/KG) (49408) | BENZO K FLUOR- ANTHENE SED, BM WS, <2MM DW, REC (UG/KG) (49397) | CHRY- SENE SED, BM WS, <2MM DW, REC (UG/KG) (49450) | DIBENZ (AH), AN THRACEN SED, BM WS, <2MM DW, REC (UG/KG) (49461) | FLUOR- ANTHENE BED MAT WS, <2MM DRY WGT REC (UG/KG) (49466) | INDENO 123-CD PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390) | ISOPHOR ONE SED, BM WS, <2MM DW, REC (UG/KG) (49400) | NAPTHAL ENE, 1,2 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49403) |
| AUG 23... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 23... | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | |
| DATE | | NAPTHAL ENE, 16 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49404) | NAPTHAL ENE, 236 TRIMETH SED, BM WS, <2MM DW, REC (UG/KG) (49405) | NAPTHAL ENE, 26 DIMETHYL SED, BM WS, <2MM DW, REC (UG/KG) (49406) | NAPTHAL ENE, 2- ETHYL- SED, BM WS, <2MM DW, REC (UG/KG) (49948) | NAPHTH- ALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402) | PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG) (39519) | P- CRESOL SED, BM WS, <2MM DW, REC (UG/KG) (49451) | PHENAN- THRENE 1METHYL SED, BM WS, <2MM DW, REC (UG/KG) (49410) | PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409) | PHENAN- THRI- DINE SED, BM WS, <2MM DW, REC (UG/KG) (49393) | PYRENE, 1- METHYL, SED, BM WS, <2MM DW, REC (UG/KG) (49388) | PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387) | BED MAT. FALL DIAM. % FINER THAN .004 MM (80157) |
| AUG 23... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 23... | <50 | <50 | <50 | <50 | <50 | <5 | <50 | <50 | <50 | <50 | <50 | <50 | <1 | |
| DATE | | | | | | | | BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164) | | | | | | |
| AUG 23... | -- | -- | -- | -- | -- | -- | -- | | | | | | | |
| 23... | 2 | | | | | | | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01475090 EDWARDS RUN AT JEFFERSON, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHANE | 1,1-DI- CHLORO- ETHYL- ENE | 1,2-DI- CHLORO- ETHANE | 1,2-DI- CHLORO- PROPANE | TRANS- 1,2-DI- CHLORO- ETHENE | BENZENE 1,3-DI- CHLORO- WATER | BENZENE 1,4-DI- CHLORO- WATER | BENZENE O-DI- CHLORO- WATER | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM | CARBON TETRA- CHLO- RIDE |
|--------------|------|-------------------------------------|-------------------------------------|--------------------------------------|---------------------------------------|---|--|---|---|---|---|-------------------------------------|-------------------------------------|
| | | TOTAL (UG/L) (34506) | TOTAL (UG/L) (34496) | TOTAL (UG/L) (34501) | TOTAL (UG/L) (32103) | TOTAL (UG/L) (34541) | TOTAL (UG/L) (34546) | UNFLTRD REC (UG/L) (34566) | UNFLTRD REC (UG/L) (34571) | UNFLTRD REC (UG/L) (34536) | | TOTAL (UG/L) (32104) | |
| FEB 22... | 1000 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
| DATE | TIME | CHLORO- DI- BROMO- METHANE | CHLORO- FORM TOTAL | CIS-1,2 -DI- CHLORO- ETHENE | BROMO- DI- CHLORO- METHANE | DI- CHLORO- DI- FLUORO- METHANE | DI-ISO- PROPYL- ETHER, WATER, | ETHER ETHYL WATER | ETHER TERT- BUTYL ETHYL | ETHER TERT- PENTYL METHYL | ETHYL- BENZENE TOTAL | FREON- 113 WATER | METHYL TERT- BUTYL ETHER |
| | | TOTAL (UG/L) (34301) | TOTAL (UG/L) (32105) | TOTAL (UG/L) (32106) | TOTAL (UG/L) (77093) | TOTAL (UG/L) (32101) | TOTAL (UG/L) (34668) | UNFLTRD RECOVER (UG/L) (81577) | UNFLTRD RECOVER (UG/L) (81576) | UNFLTRD RECOVER (UG/L) (50004) | UNFLTRD RECOVER (UG/L) (50005) | UNFLTRD REC (UG/L) (34371) | UNFLTRD REC (UG/L) (77652) |
| FEB 22... | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | E.1 |
| DATE | TIME | METHYL ENE CHLO- RIDE | META/ PARA- XYLENE WATER | O- XYLENE WATER | TETRA- CHLORO- ETHYL- ENE | TOLUENE | TRI- CHLORO- ETHYL- ENE | TRI- CHLORO- FLUORO- METHANE | VINYL CHLO- RIDE | | | | |
| | | TOTAL (UG/L) (34423) | UNFLTRD REC (UG/L) (85795) | WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TOTAL (UG/L) (34475) | TOTAL (UG/L) (34010) | TOTAL (UG/L) (39180) | TOTAL (UG/L) (34488) | TOTAL (UG/L) (39175) | | | |
| FEB 22... | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLTD GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|------|------|--|---|--|---|---|---|--|---|--|---|--|---|---|
| | | MAY 23... | 1000 | <.004 | <.002 | .005 | .086 | <.010 | E.026 | <.020 | E.002 | <.018 | <.003 | E.013 |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER FLTRD DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER FLTRD DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | MAY 23... | <.005 | <.002 | <.004 | <.035 | <.027 | E.551 | .200 | <.006 | .029 | <.007 | <.003 | .108 |
| DATE | TIME | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| | | MAY 23... | <.011 | <.016 | E.056 | <.005 | <.009 | | | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01475090 EDWARDS RUN AT JEFFERSON, NJ--Continued

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 10... | 0940 | 940 | 300 | 230 | 07... | 0930 | 24000 | 1200 | 320 |
| 17... | 0940 | 1100 | 1300 | 900 | | | | | |
| 24... | 0940 | 16000 | 1300 | 210 | | | | | |
| 31... | 0950 | 940 | 600 | 870 | | | | | |

DELAWARE RIVER BASIN

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ

LOCATION.--Lat 39°44'26", long 75°15'34", Gloucester County, Hydrologic Unit 02040202, on right bank 25 ft downstream from County Bridge Route 607 on Gibbstown-Harrisonville Road (Tomlin Station Road), 1.8 mi west of Mullica Hill, and 2.8 mi east of Swedesboro.

DRAINAGE AREA.--26.9 mi².

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

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: June 1966 to September 1969.

WATER TEMPERATURE: May 1966 to September 1973, daily maximum-minimum; October 1998 to October 2001, recorded hourly.

INSTRUMENTATION.--

WATER TEMPERATURE: Water temperature data logger (in-situ system; measurements recorded every 15 or 30 minutes) located at gage.

REMARKS.--For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction". Fish community data for this and other sites are presented in "Water-Quality at Miscellaneous Surface-Water Sites."

COOPERATION.--Field data and samples for laboratory analyses on 11/16, 02/07, 05/17, and 08/23 were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria on those dates was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory. Other field data and samples for laboratory analyses were provided by the Delaware River Basin National Water-Quality Assessment Program (NAWQA).

COOPERATIVE NETWORK SITE DESCRIPTOR.--Watershed Integrator, New Jersey Department of Environmental Protection Watershed Management Area 18.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 27.5°C, July 6, 1999; minimum, 0.0°C, on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 26.5°C, Aug. 9, 10; minimum, 0.0°C, on several days during December and January.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) |
|-----------|------|-----------------|---|---|--|--|---------------------------------------|--|-----------------------------------|--|---|----------------------------------|
| OCT 02... | 1110 | ENVIRONMENTAL | 17 | 3.2 | -- | -- | 765 | 101 | 10.1 | 6.9 | 226 | 20.5 |
| NOV 06... | 0920 | ENVIRONMENTAL | 16 | 8.0 | -- | -- | 764 | 87 | 10.2 | 7.4 | 248 | 8.0 |
| 16... | 1000 | ENVIRONMENTAL | 19 | -- | .126 | .102 | 766 | 87 | 10.8 | 7.3 | 227 | -- |
| DEC 19... | 1100 | ENVIRONMENTAL | 48 | 58 | -- | -- | 764 | 99 | 13.2 | 7.0 | 192 | 2.0 |
| 19... | 1101 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB 01... | 0950 | ENVIRONMENTAL | 35 | 21 | -- | -- | 764 | -- | -- | 7.0 | 205 | 9.0 |
| 07... | 0930 | ENVIRONMENTAL | 82 | -- | .220 | .174 | 771 | 84 | 11.5 | 7.2 | 199 | 9.5 |
| MAR 08... | 1040 | ENVIRONMENTAL | 32 | 8.8 | -- | -- | 763 | 109 | 14.0 | 7.2 | 230 | 8.5 |
| 21... | 1720 | ENVIRONMENTAL | 118 | 180 | -- | -- | 753 | 92 | 11.0 | 7.1 | 158 | 9.5 |
| 30... | 1100 | ENVIRONMENTAL | 661 | 210 | -- | -- | 744 | 90 | 10.7 | 6.8 | 95 | 10.0 |
| MAY 01... | 1010 | ENVIRONMENTAL | 27 | -- | -- | -- | 769 | 98 | 9.9 | 7.2 | 220 | 23.5 |
| 01... | 1011 | SPLIT REPLICATE | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 17... | 1000 | ENVIRONMENTAL | 18 | 6.8 | .121 | .096 | 765 | 77 | 7.9 | 7.0 | 232 | 14.1 |
| JUN 05... | 0920 | ENVIRONMENTAL | 32 | 12 | -- | -- | 762 | 95 | 9.1 | 7.0 | 193 | 21.0 |
| JUL 05... | 1040 | ENVIRONMENTAL | 34 | 16 | -- | -- | 757 | 84 | 7.4 | 7.2 | 194 | 27.5 |
| AUG 09... | 0930 | ENVIRONMENTAL | 9.3 | 6.0 | -- | -- | 764 | 86 | 7.3 | 7.2 | 263 | 30.5 |
| 23... | 1000 | ENVIRONMENTAL | 12 | 4.7 | .125 | .100 | 766 | 83 | 7.4 | 7.2 | 239 | -- |

DELAWARE RIVER BASIN

477

01477120 RACCOON CREEK NEAR SWEDESBO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD LAB (MG/L AS CACO3) (90410) | ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086) | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) |
|--------------|---|--|---|--|---|---|--|--|--|---|--|--|--|
| | | | | | | | | | | | | | |
| OCT 02... | 15.5 | 69 | 21.2 | 3.99 | 4.00 | 11.5 | -- | 38 | 46 | 19.9 | .2 | 10.1 | 25.3 |
| NOV 06... | 8.4 | 76 | 23.8 | 4.16 | 4.50 | 13.9 | -- | 49 | 60 | 23.4 | .2 | 11.2 | 24.1 |
| 16... | 6.5 | 71 | 22.5 | 3.71 | 4.23 | 10.3 | 43 | -- | -- | 18.6 | .2 | 12.1 | 24.1 |
| DEC 19... | 3.2 | 55 | 16.1 | 3.51 | 4.11 | 9.0 | -- | 22 | 27 | 19.4 | E.1 | 8.4 | 26.5 |
| 19... | -- | 54 | 15.8 | 3.45 | 4.09 | 9.0 | -- | -- | -- | 16.8 | E.1 | 8.3 | 26.2 |
| FEB 01... | 3.5 | 56 | 16.7 | 3.46 | 3.64 | 11.0 | -- | 25 | 31 | 19.5 | .2 | 8.5 | 27.4 |
| 07... | 3.0 | 48 | 14.3 | 3.05 | 3.89 | 13.9 | 18 | -- | -- | 24.3 | E.1 | 7.2 | 23.3 |
| MAR 08... | 4.8 | 64 | 19.3 | 3.91 | 3.74 | 13.4 | -- | 24 | 30 | 25.4 | .2 | 8.4 | 28.8 |
| 21... | 7.3 | 42 | 12.5 | 2.48 | 2.80 | 10.3 | -- | -- | -- | 16.6 | .2 | 5.6 | 18.7 |
| 30... | 7.1 | 25 | 7.50 | 1.62 | 2.91 | 4.9 | -- | 11 | 13 | 8.1 | E.2 | 3.4 | 12.6 |
| MAY 01... | 15.2 | 65 | 19.5 | 4.03 | 3.31 | 11.8 | -- | 34 | 41 | 21.7 | .2 | 6.2 | 26.5 |
| 01... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 17... | 14.5 | 73 | 23.0 | 3.86 | 3.47 | 12.6 | 39 | -- | -- | 22.2 | .2 | 9.3 | 25.2 |
| JUN 05... | 17.2 | 60 | 17.5 | 3.94 | 3.96 | 10.2 | -- | 28 | 34 | 18.1 | .2 | 9.5 | 22.5 |
| JUL 05... | 21.3 | 62 | 18.6 | 3.69 | 4.07 | 9.7 | -- | 36 | 43 | 19.0 | .2 | 8.0 | 21.0 |
| AUG 09... | 24.1 | 74 | 22.6 | 4.23 | 4.64 | 17.7 | -- | 49 | 60 | 28.2 | .2 | 10.7 | 22.9 |
| 23... | 21.0 | 69 | 20.8 | 4.05 | 3.84 | 16.1 | 45 | -- | -- | 25.4 | .2 | 9.8 | 22.4 |
| DATE | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA, DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | |
| OCT 02... | 140 | 126 | .127 | .31 | -- | .40 | 1.44 | .022 | 1.7 | 1.8 | -- | .069 | .059 |
| NOV 06... | 138 | 136 | .079 | .21 | -- | .38 | .140 | E.004 | .35 | .52 | -- | E.004 | <.018 |
| 16... | 135 | 126 | .040 | .35 | .04 | .37 | .953 | .009 | 1.3 | 1.3 | .080 | .030 | -- |
| DEC 19... | 117 | 107 | .282 | .61 | -- | .80 | 1.31 | .009 | 1.9 | 2.1 | -- | .037 | .024 |
| 19... | 116 | -- | .286 | -- | -- | .80 | 1.31 | .009 | -- | 2.1 | -- | .036 | .024 |
| FEB 01... | 123 | 113 | .272 | .47 | -- | .62 | 1.45 | .011 | 1.9 | 2.1 | .098 | .016 | E.013 |
| 07... | 117 | 107 | .160 | .49 | .17 | .76 | 1.28 | .006 | 1.8 | 2.0 | .163 | .053 | -- |
| MAR 08... | 142 | 126 | .279 | .48 | -- | .50 | 1.72 | .013 | 2.2 | 2.2 | .052 | .017 | E.012 |
| 21... | 95 | -- | .147 | .55 | -- | 1.4 | .234 | .010 | .79 | 1.6 | 1.1 | .026 | .019 |
| 30... | 74 | 51 | .197 | .67 | -- | 1.7 | .658 | .010 | 1.3 | 2.3 | 1.1 | .039 | .025 |
| MAY 01... | 139 | 120 | .185 | .53 | -- | .67 | 1.27 | .038 | 1.8 | 1.9 | .140 | .057 | .037 |
| 01... | -- | -- | -- | -- | -- | -- | -- | -- | -- | .213 | -- | -- | -- |
| 17... | 130 | 130 | .360 | .69 | .35 | .77 | 1.29 | .108 | 2.0 | 2.1 | .076 | .050 | -- |
| JUN 05... | 120 | 109 | .083 | .36 | -- | .45 | 1.30 | .056 | 1.7 | 1.8 | .125 | .045 | .035 |
| JUL 05... | 130 | 110 | E.033 | .34 | -- | .55 | .992 | .025 | 1.3 | 1.5 | .089 | .041 | <.020 |
| AUG 09... | 173 | 148 | .050 | .31 | -- | .41 | 1.35 | .043 | 1.7 | 1.8 | .066 | .214 | .214 |
| 23... | 148 | 137 | .030 | .32 | .04 | .29 | 1.65 | .019 | 2.0 | 1.9 | .062 | .091 | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01477120 RACCOON CREEK NEAR SWEDESBO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | PHOS- TOTAL (MG/L) AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L) AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L) AS C) (00688) | CARBON, ORGANIC DIS- SOLVED TOTAL (MG/L) AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L) AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L) AS B) (01020) | IRON, DIS- SOLVED (UG/L) AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L) AS MN) (01056) | RESIDUE TOTAL AT 105 DEG. C, PENDEED (MG/L) (00530) | SEDI- MENT, DIS- CHARGE, PENDEED (T/DAY) (80155) | SEDI- MENT, SUS- PENDEED (MG/L) (80154) |
|-----------|--|---|--|---|---|---|---|--|--|--|---|--|--|
| OCT 02... | .152 | -- | -- | 3.1 | .3 | -- | -- | 57 | 280 | 40.3 | -- | .26 | 6 |
| NOV 06... | .260 | -- | -- | 2.4 | 1.0 | -- | -- | 67 | 250 | 69.0 | -- | .49 | 11 |
| 16... | .096 | .8 | <.1 | 3.0 | .8 | E1.9 | -- | 35 | -- | -- | 5 | -- | -- |
| DEC 19... | .161 | -- | -- | 4.7 | 1.1 | -- | -- | 41 | 460 | 72.7 | -- | 2.6 | 20 |
| 19... | .166 | -- | -- | -- | -- | -- | -- | 44 | 450 | 72.3 | -- | -- | 24 |
| FEB 01... | .095 | .9 | -- | 3.6 | -- | -- | -- | 33 | 340 | 59.9 | -- | 1.5 | 16 |
| 07... | .137 | 1.4 | <.1 | 5.5 | 1.3 | 2.1 | -- | 30 | -- | -- | 16 | -- | -- |
| MAR 08... | .074 | .5 | <.1 | 2.9 | .5 | -- | -- | 38 | 340 | 49.2 | -- | .48 | 6 |
| 21... | .682 | 9.1 | .1 | 4.7 | 9.0 | -- | -- | 25 | 220 | 37.9 | -- | 46 | 146 |
| 30... | .746 | 10 | <.1 | 6.2 | 10 | -- | -- | 26 | 290 | 53.0 | -- | 310 | 174 |
| MAY 01... | .164 | 1.2 | <.1 | 3.4 | 1.2 | -- | -- | 50 | 350 | 37.8 | -- | .50 | 7 |
| 01... | -- | 1.6 | <.1 | 3.3 | 1.6 | -- | -- | -- | -- | -- | -- | -- | -- |
| 17... | .108 | .6 | <.1 | 2.2 | .6 | 3.1 | 1.50 | 56 | -- | -- | <1 | -- | -- |
| JUN 05... | .135 | 1.0 | <.1 | 4.8 | 1.0 | -- | -- | 41 | 470 | 37.2 | -- | .74 | 9 |
| JUL 05... | .174 | E1.3 | <.1 | 4.6 | E1.3 | -- | -- | 46 | 410 | 36.1 | -- | 1.7 | 18 |
| AUG 09... | .318 | .4 | <.1 | 2.7 | .4 | -- | -- | 88 | 120 | 26.0 | -- | .11 | 4 |
| 23... | .148 | .6 | <.1 | 2.9 | .6 | <1.0 | 1.40 | 77 | -- | -- | 5 | -- | -- |

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

Selected samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020/2021 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs identified by the analyses in one or more samples are listed in the following table.

| | | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | ACETONE WATER WHOLE TOTAL (UG/L) (81552) | 1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613) | BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551) | BENZENE 124-TRI METHYL UNFLTRD RECOVER (UG/L) (77222) | BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) |
|--------------|---------------------------------------|--|--|---|---|--|---|---|--|---|---|--|---|
| DATE | TIME | | | | | | | | | | | | |
| OCT 02... | 1110 | <.03 | <.04 | <.04 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| | | | CARBON DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041) | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) |
| DATE | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | | | | | | | | | | | |
| OCT 02... | <.04 | <.06 | <.07 | <.03 | <.2 | E.02 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| | | FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607) | METHYL TERT- BUTYL WAT UNF REC (UG/L) (78032) | METHYL- CHLO- RIDE TOTAL (UG/L) (34418) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) |
| DATE | | | | | | | | | | | | | |
| OCT 02... | <2 | .2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

479

01477120 RACCOON CREEK NEAR SWEDSBORO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| DATE | TIME | SAMPLE TYPE | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) |
|-------|------|-----------------|---|--|---|---|---|--|--|--|--|---|
| OCT | | | | | | | | | | | | |
| 02... | 1110 | ENVIRONMENTAL | <.004 | <.002 | <.005 | E.007 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 |
| FEB | | | | | | | | | | | | |
| 01... | 0950 | ENVIRONMENTAL | <.004 | <.002 | <.005 | E.005 | <.010 | <.041 | <.020 | <.005 | <.018 | <.003 |
| MAR | | | | | | | | | | | | |
| 21... | 1720 | ENVIRONMENTAL | <.004 | <.002 | <.005 | E.003 | E.071 | <.041 | <.020 | <.005 | <.018 | <.003 |
| 30... | 1100 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .104 | E.005 | <.041 | <.020 | <.005 | <.018 | <.003 |
| MAY | | | | | | | | | | | | |
| 01... | 1010 | ENVIRONMENTAL | <.004 | <.002 | <.005 | E.007 | <.010 | E.573 | <.020 | <.005 | <.018 | <.003 |
| 01... | 1011 | SPLIT REPLICATE | <.004 | <.002 | <.005 | E.006 | <.010 | E.520 | <.040 | <.005 | <.018 | <.003 |
| JUN | | | | | | | | | | | | |
| 05... | 0920 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .078 | <.010 | E.005 | E.008 | E.004 | <.018 | <.003 |
| JUL | | | | | | | | | | | | |
| 05... | 1040 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .154 | <.010 | E.035 | <.020 | <.005 | <.018 | <.003 |
| AUG | | | | | | | | | | | | |
| 09... | 0930 | ENVIRONMENTAL | <.004 | <.002 | <.005 | .009 | <.010 | E.043 | <.020 | <.005 | <.018 | <.003 |

| DATE | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) |
|-------|--|---|--|---|--|---|--|---|---|--|--|---|---|
| OCT | | | | | | | | | | | | | |
| 02... | E.005 | E.003 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .016 | <.006 | <.002 | <.007 | <.003 |
| FEB | | | | | | | | | | | | | |
| 01... | E.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .022 | <.006 | <.002 | <.007 | <.003 |
| MAR | | | | | | | | | | | | | |
| 21... | <.006 | E.003 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .026 | <.006 | <.020 | <.007 | <.003 |
| 30... | E.004 | .010 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .258 | <.006 | <.002 | <.007 | <.005 |
| MAY | | | | | | | | | | | | | |
| 01... | E.006 | .005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .025 | <.006 | <.002 | <.007 | <.003 |
| 01... | E.004 | E.004 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .021 | <.006 | <.002 | <.007 | <.003 |
| JUN | | | | | | | | | | | | | |
| 05... | E.017 | .011 | <.005 | <.002 | <.004 | <.035 | <.027 | E.013 | .100 | <.006 | <.002 | E.005 | <.003 |
| JUL | | | | | | | | | | | | | |
| 05... | E.007 | .294 | <.005 | <.002 | <.004 | <.035 | <.027 | E.007 | .211 | .013 | <.002 | E.006 | <.003 |
| AUG | | | | | | | | | | | | | |
| 09... | E.004 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .019 | <.006 | <.002 | <.007 | <.003 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01477120 RACCOON CREEK NEAR SWEDESBO, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | PENDI- METH- ALIN WAT FLT 0.7 U (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82661) |
|-------|--|---|---|--|---|--|--|
| OCT | | | | | | | |
| 02... | <.010 | E.004 | E.004 | <.016 | E.068 | <.005 | <.009 |
| FEB | | | | | | | |
| 01... | <.010 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 |
| MAR | | | | | | | |
| 21... | .027 | E.004 | <.011 | <.016 | E.039 | <.005 | <.009 |
| 30... | .015 | <.015 | <.011 | <.016 | <.034 | <.005 | E.005 |
| MAY | | | | | | | |
| 01... | <.010 | E.004 | E.007 | <.016 | E.087 | <.005 | <.009 |
| 01... | <.010 | E.004 | E.006 | <.016 | E.065 | <.005 | <.009 |
| JUN | | | | | | | |
| 05... | <.010 | E.011 | E.005 | <.016 | E.061 | <.005 | <.009 |
| JUL | | | | | | | |
| 05... | .033 | <.015 | E.005 | <.016 | E.047 | <.005 | <.009 |
| AUG | | | | | | | |
| 09... | <.010 | E.003 | E.002 | <.016 | E.056 | <.005 | <.009 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUL | | | | | AUG | | | | |
| 10... | 1000 | 20 | 200 | 190 | 07... | 0945 | 80 | <100 | 390 |
| 17... | 1000 | 130 | 100 | 320 | | | | | |
| 24... | 1000 | 170 | 100 | 470 | | | | | |
| 31... | 1005 | 110 | 100 | 330 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

481

01477120 RACCOON CREEK NEAR SWEDESBORO, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---------|------|------|----------|------|------|----------|------|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 15.5 | 13.0 | 14.5 | 10.5 | 8.5 | 9.5 | 6.5 | 5.5 | 6.0 | 1.5 | .0 | .5 |
| 2 | 16.5 | 15.0 | 15.5 | 10.5 | 8.5 | 9.5 | 5.5 | 3.5 | 4.5 | 1.5 | .0 | 1.0 |
| 3 | 18.0 | 15.5 | 17.0 | 10.5 | 8.5 | 10.0 | 3.5 | 2.0 | 3.0 | .5 | .0 | .0 |
| 4 | 18.5 | 16.5 | 17.5 | 12.0 | 10.5 | 11.0 | 3.5 | 1.5 | 2.5 | 1.5 | .0 | .5 |
| 5 | 18.5 | 17.5 | 18.0 | 11.5 | 10.0 | 10.5 | 4.0 | 2.0 | 3.0 | 1.0 | .0 | .5 |
| 6 | 18.5 | 17.5 | 18.0 | 10.0 | 8.5 | 9.0 | 3.5 | 2.0 | 2.5 | 2.0 | .5 | 1.0 |
| 7 | 18.0 | 15.0 | 16.5 | 10.0 | 7.5 | 8.5 | 3.5 | 2.5 | 3.0 | 2.5 | .5 | 1.5 |
| 8 | 15.0 | 12.5 | 13.5 | 10.5 | 8.5 | 9.5 | 4.0 | 2.5 | 3.0 | 2.5 | 1.5 | 2.0 |
| 9 | 12.5 | 10.5 | 11.0 | 12.5 | 10.5 | 11.0 | 3.5 | 2.0 | 3.0 | 2.5 | 1.0 | 2.0 |
| 10 | 10.5 | 10.0 | 10.5 | 13.5 | 12.5 | 13.0 | 4.0 | 2.5 | 3.5 | 2.5 | 1.0 | 1.5 |
| 11 | 12.0 | 10.5 | 11.0 | 12.5 | 11.5 | 12.0 | 5.0 | 4.0 | 4.5 | 3.5 | 1.0 | 2.0 |
| 12 | 12.5 | 10.5 | 12.0 | 11.5 | 10.5 | 11.0 | 6.0 | 4.0 | 5.0 | 3.0 | 1.5 | 2.0 |
| 13 | 13.0 | 11.0 | 12.5 | 12.0 | 11.0 | 11.5 | 4.0 | 2.5 | 3.0 | 3.0 | 1.0 | 2.0 |
| 14 | 14.0 | 12.5 | 13.5 | 11.5 | 9.5 | 11.0 | 4.0 | 3.5 | 3.5 | 3.5 | 1.0 | 2.5 |
| 15 | 15.0 | 13.0 | 14.0 | 9.5 | 8.5 | 9.0 | 4.0 | 3.0 | 3.5 | 3.5 | 3.0 | 3.5 |
| 16 | 15.5 | 14.5 | 15.0 | 8.5 | 7.5 | 8.0 | 6.0 | 4.0 | 4.5 | 4.5 | 3.0 | 3.5 |
| 17 | 15.5 | 15.0 | 15.5 | 9.0 | 8.0 | 8.5 | 10.5 | 6.0 | 8.5 | 4.0 | 2.5 | 3.0 |
| 18 | 16.0 | 15.0 | 15.5 | 8.0 | 7.0 | 7.5 | 8.0 | 4.0 | 5.5 | 3.5 | 2.5 | 3.0 |
| 19 | 15.0 | 13.5 | 14.5 | 7.0 | 6.0 | 6.5 | 4.0 | 3.0 | 3.5 | 3.5 | 2.5 | 3.0 |
| 20 | 14.0 | 12.0 | 13.5 | 6.5 | 4.5 | 5.5 | 4.0 | 2.0 | 3.0 | 3.0 | 2.5 | 2.5 |
| 21 | 15.0 | 12.5 | 13.5 | 5.5 | 4.0 | 5.0 | 2.5 | 1.0 | 2.0 | 2.5 | 1.0 | 1.5 |
| 22 | 14.5 | 12.5 | 13.5 | 4.0 | 3.5 | 3.5 | 3.0 | .5 | 2.0 | 1.5 | .5 | 1.0 |
| 23 | 13.0 | 11.0 | 12.0 | 4.0 | 3.0 | 3.0 | 1.0 | .0 | .5 | 1.5 | .5 | 1.0 |
| 24 | 13.0 | 11.0 | 12.0 | 4.0 | 3.0 | 3.5 | 1.5 | .5 | 1.0 | 2.5 | .5 | 1.5 |
| 25 | 14.0 | 11.5 | 13.0 | 5.0 | 2.5 | 3.5 | .5 | .0 | .5 | 3.0 | 1.5 | 2.0 |
| 26 | 14.5 | 13.0 | 13.5 | 8.0 | 5.0 | 6.5 | .5 | .0 | .5 | 2.5 | 1.0 | 2.0 |
| 27 | 15.0 | 13.0 | 14.0 | 8.5 | 7.5 | 8.0 | 1.5 | .5 | 1.0 | 3.0 | 2.0 | 2.5 |
| 28 | 14.5 | 11.5 | 13.5 | 8.5 | 7.5 | 8.0 | 1.0 | .5 | 1.0 | 3.0 | 2.5 | 3.0 |
| 29 | 11.5 | 10.0 | 10.5 | 8.0 | 6.5 | 7.5 | 1.0 | .0 | .5 | 3.0 | 2.5 | 3.0 |
| 30 | 10.0 | 8.5 | 9.5 | 7.5 | 6.5 | 7.0 | 1.0 | .0 | 1.0 | 3.5 | 3.0 | 3.0 |
| 31 | 10.0 | 8.5 | 9.5 | --- | --- | --- | 1.0 | .0 | .5 | 4.0 | 3.5 | 3.5 |
| MONTH | 18.5 | 8.5 | 13.7 | 13.5 | 2.5 | 8.2 | 10.5 | .0 | 2.9 | 4.5 | .0 | 2.0 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|-----|-----|-------|-----|-----|-------|------|------|------|------|------|------|
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 4.5 | 4.0 | 4.0 | 6.5 | 5.5 | 6.0 | 8.5 | 8.0 | 8.0 | 19.0 | 14.5 | 17.0 |
| 2 | 5.0 | 4.0 | 4.5 | 7.0 | 5.5 | 6.0 | 8.5 | 8.5 | 8.5 | 20.0 | 16.5 | 18.5 |
| 3 | 5.0 | 4.0 | 4.0 | 8.5 | 6.5 | 7.5 | 9.5 | 8.0 | 8.5 | 21.0 | 18.0 | 19.5 |
| 4 | 4.0 | 3.5 | 3.5 | 8.0 | 5.5 | 7.0 | 10.5 | 9.5 | 10.0 | 21.5 | 19.0 | 20.5 |
| 5 | 4.0 | 2.5 | 3.0 | 5.5 | 4.0 | 4.5 | 11.0 | 10.0 | 10.5 | 21.0 | 18.5 | 20.0 |
| 6 | 4.0 | 2.5 | 3.0 | 4.5 | 3.5 | 4.0 | 11.5 | 10.5 | 11.0 | 18.5 | 16.0 | 17.5 |
| 7 | --- | --- | --- | 6.0 | 4.0 | 4.5 | 11.5 | 10.5 | 11.0 | 16.5 | 14.0 | 15.5 |
| 8 | --- | --- | --- | 6.5 | 5.0 | 6.0 | 11.0 | 10.5 | 10.5 | 17.0 | 14.0 | 15.5 |
| 9 | --- | --- | --- | 7.5 | 6.0 | 6.5 | 15.0 | 10.5 | 12.5 | 17.0 | 15.0 | 16.0 |
| 10 | --- | --- | --- | 7.5 | 4.5 | 6.0 | 15.0 | 13.5 | 14.0 | 18.5 | 15.5 | 17.5 |
| 11 | --- | --- | --- | 7.5 | 5.0 | 6.5 | 13.5 | 12.0 | 12.5 | 20.0 | 17.0 | 18.5 |
| 12 | --- | --- | --- | 8.5 | 5.5 | 7.0 | 13.5 | 11.5 | 12.5 | 20.5 | 18.5 | 19.5 |
| 13 | --- | --- | --- | 8.5 | 7.0 | 7.5 | 15.0 | 13.0 | 14.0 | 19.5 | 17.0 | 18.0 |
| 14 | --- | --- | --- | 9.0 | 7.0 | 8.0 | 15.5 | 12.5 | 14.0 | 17.5 | 15.5 | 16.5 |
| 15 | --- | --- | --- | 8.0 | 6.5 | 7.5 | 15.5 | 13.0 | 14.5 | 17.0 | 15.0 | 16.0 |
| 16 | --- | --- | --- | 9.0 | 7.0 | 8.5 | 14.5 | 12.5 | 13.5 | 16.5 | 15.0 | 16.0 |
| 17 | --- | --- | --- | 9.0 | 8.5 | 8.5 | 13.0 | 11.0 | 12.0 | 16.0 | 15.0 | 15.5 |
| 18 | 6.0 | 4.5 | 5.0 | 8.5 | 7.5 | 8.0 | 13.0 | 10.0 | 11.5 | 15.0 | 15.0 | 15.0 |
| 19 | 4.5 | 3.5 | 4.0 | 9.5 | 6.5 | 8.0 | 13.0 | 9.5 | 11.5 | 17.5 | 15.0 | 16.0 |
| 20 | 6.0 | 4.5 | 5.0 | 9.5 | 6.5 | 8.0 | 13.0 | 10.5 | 12.0 | 17.5 | 16.0 | 16.5 |
| 21 | 6.5 | 6.0 | 6.0 | 8.5 | 7.5 | 8.0 | 15.5 | 12.5 | 14.0 | 16.0 | 14.5 | 15.0 |
| 22 | 6.0 | 3.0 | 5.0 | 8.5 | 7.5 | 8.0 | 20.0 | 15.0 | 17.5 | 17.0 | 15.0 | 16.0 |
| 23 | 3.5 | 2.5 | 3.0 | 9.5 | 7.0 | 8.0 | 22.0 | 17.5 | 20.0 | 18.0 | 16.0 | 17.0 |
| 24 | 4.0 | 3.5 | 3.5 | 9.0 | 8.0 | 8.5 | 22.0 | 19.0 | 20.5 | 18.5 | 16.5 | 17.5 |
| 25 | 5.0 | 4.0 | 4.5 | 8.0 | 7.0 | 7.5 | 19.0 | 14.0 | 16.0 | 18.5 | 17.0 | 17.5 |
| 26 | 6.5 | 5.0 | 5.5 | 8.0 | 7.5 | 7.5 | 15.5 | 12.0 | 14.0 | 18.0 | 16.0 | 17.0 |
| 27 | 6.5 | 5.5 | 6.0 | 7.5 | 6.0 | 7.0 | 16.5 | 12.5 | 14.5 | 18.0 | 16.0 | 17.0 |
| 28 | 6.5 | 6.0 | 6.5 | 9.0 | 5.0 | 7.0 | 17.0 | 14.5 | 15.5 | 17.5 | 16.0 | 16.5 |
| 29 | --- | --- | --- | 8.0 | 6.5 | 7.5 | 16.0 | 13.0 | 14.5 | 18.0 | 15.0 | 16.0 |
| 30 | --- | --- | --- | 8.0 | 7.0 | 7.5 | 17.0 | 13.0 | 15.0 | 18.0 | 16.5 | 17.0 |
| 31 | --- | --- | --- | 8.0 | 7.0 | 7.5 | --- | --- | --- | 17.0 | 14.5 | 16.0 |
| MONTH | --- | --- | --- | 9.5 | 3.5 | 7.1 | 22.0 | 8.0 | 13.1 | 21.5 | 14.0 | 17.0 |

DELAWARE RIVER BASIN

483

01482500 SALEM RIVER AT WOODSTOWN, NJ

LOCATION.--Lat 39°38'36", long 75°19'52", Salem County, Hydrologic Unit 02040206, downstream from Memorial Lake Dam at Woodstown, 0.2 mi upstream from small brook, and 0.3 mi downstream from Pennsylvania-Reading Seashore Lines bridge.

DRAINAGE AREA.--14.6 mi².

PERIOD OF RECORD.--Water years 1973 to current year.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses on 11/16 and 02/15 were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Agricultural Land Use Indicator and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB-ANCE 254 NM, WTR FLT (UNITS) /CM (50624) | UV ABSORB-ANCE 280 NM, WTR FLT (UNITS) /CM (61726) | BARO-METRIC PRES-SURE (MM OF HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | |
|-----------|------|---|---|--|--|---|---|--|--|--|---|---|---|--|
| NOV 16... | 1000 | E6.9 | -- | .164 | .130 | 766 | 85 | 10.5 | 7.4 | 282 | -- | 6.5 | 96 | |
| FEB 15... | 1000 | E12 | -- | .171 | .133 | 760 | 78 | 9.5 | 7.6 | 266 | 4.0 | 6.5 | 84 | |
| MAY 22... | 0950 | 34 | 8.9 | .246 | .195 | 755 | 89 | 8.5 | 7.6 | 256 | 19.0 | 17.0 | 88 | |
| AUG 16... | 1200 | 4.4 | 5.9 | .215 | .161 | 766 | 86 | 6.8 | 7.6 | 269 | 27.5 | 27.5 | 96 | |
| DATE | | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS Na) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS CaCO3) (90410) | CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
| NOV 16... | 21.5 | 10.2 | 7.14 | 9.3 | 45 | 24.8 | E.1 | 5.9 | 36.6 | 166 | 149 | .250 | .90 | |
| FEB 15... | 19.2 | 8.70 | 6.29 | 9.6 | 24 | 23.4 | E.1 | 9.1 | 40.0 | 171 | 146 | .370 | .95 | |
| MAY 22... | 19.8 | 9.47 | 5.10 | 8.6 | 48 | 25.4 | E.1 | 6.3 | 28.9 | 171 | 137 | .450 | 1.1 | |
| AUG 16... | 21.4 | 10.3 | 7.76 | 8.8 | 69 | 26.4 | E.1 | 3.7 | 17.4 | 156 | 137 | <.030 | .57 | |
| DATE | | NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602) | NITRO-GEN, TOTAL (MG/L AS N) (00600) | NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666) | PHOS-PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689) |
| NOV 16... | .32 | 1.1 | 1.47 | .057 | 2.4 | 2.6 | .174 | .042 | .179 | 1.4 | <.1 | 5.2 | 1.4 | |
| FEB 15... | .34 | 1.4 | 3.43 | .053 | 4.4 | 4.8 | .202 | .029 | .140 | 1.1 | <.1 | 5.9 | 1.1 | |
| MAY 22... | .47 | 1.2 | .889 | .119 | 2.0 | 2.1 | .133 | .108 | .238 | .9 | <.1 | 6.6 | .9 | |
| AUG 16... | <.03 | 1.1 | .038 | .005 | .61 | 1.1 | .400 | .094 | .236 | 2.1 | <.1 | 6.9 | 2.1 | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01482500 SALEM RIVER AT WOODSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | BORON, DIS- SOLVED (UG/L AS B) (01020) | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530) |
|--------------|---|---|---|--|
| NOV 16... | 3.4 | -- | 19 | 40 |
| FEB 15... | 3.6 | -- | E10 | 16 |
| MAY 22... | 2.3 | 3.30 | 19 | 10 |
| AUG 16... | 3.0 | 75.1 | 21 | 10 |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|-------|------|---|--|---|-------|------|---|--|---|
| JUN | | | | | JUL | | | | |
| 14... | 1000 | 16000 | 7200 | 2900 | 05... | 1000 | 80 | 200 | 100 |
| 21... | 0930 | 230 | 600 | 100 | 12... | 0945 | 220 | 800 | 50 |
| 28... | 0930 | 170 | 300 | 60 | | | | | |

E Estimated value.

01482500 SALEM RIVER AT WOODSTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

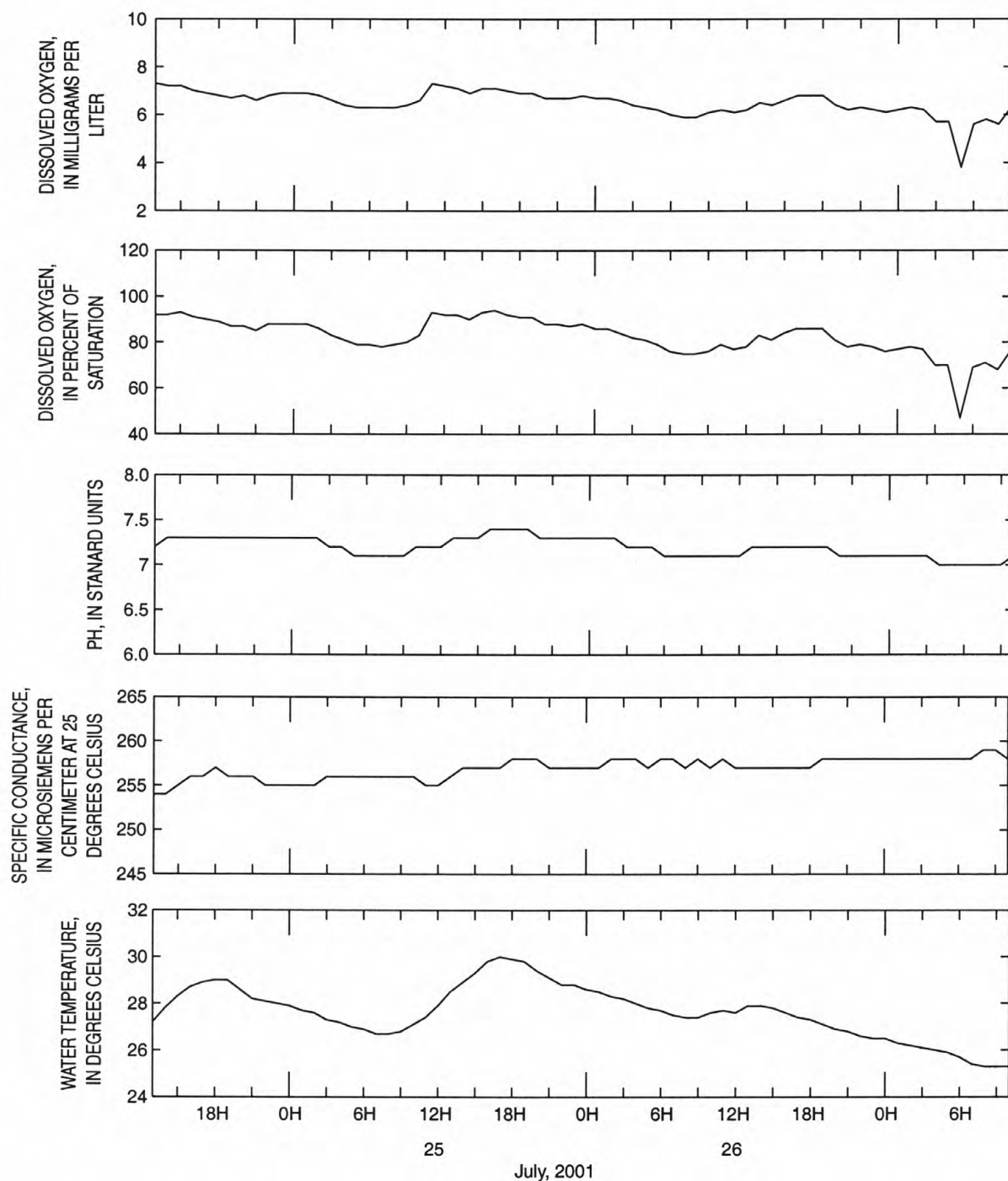


Figure 57. Reconnaissance Study--Physical characteristics and concentration of constituents measured at 01482500 Salem River at Woodstown, water year 2001.

DELAWARE RIVER BASIN

01482530 MAJOR RUN AT SHARPTOWN, NJ

LOCATION.--Lat 39°38'55", long 75°22'29", Salem County, Hydrologic Unit 02040206, at bridge on Pointers-Swedesboro Road (County Route 620), 0.7 mi southwest of Sharptown, 0.4 mi upstream from mouth, and 2.6 mi west of Woodstown.

DRAINAGE AREA.--3.04 mi².

PERIOD OF RECORD.--November 2000 to August 2001.

REMARKS.--Physical properties measured hourly over 3 to 6 days at this and other stations, as part of the 2001 water-year watershed-reconnaissance study, are presented in "Summary of Hydrologic Conditions" in the "Introduction." Measurements made to verify calibration of continuous-record water-quality sensors met the recalibration criteria; therefore, the data were not adjusted. Recalibration criteria are listed in the "Introduction" (see section "Explanation of the Records, On-Site Measurements and Sample Collection").

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection. Determination of dissolved ammonia, total ammonia, dissolved nitrite, BOD, total suspended solids, fecal coliform, E. coli, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of Chlorophyll A was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Statewide Status and Watershed Reconnaissance, New Jersey Department of Environmental Protection Watershed Management Area 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | UV ABSORB- ANCE 254 NM, WTR FLT (CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (CM) (61726) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | |
|--------------|------|---|--|--|---|---|--|--|--|--|--|--|--|---|
| NOV 30... | 0800 | -- | .111 | .085 | 758 | 61 | 7.6 | 7.5 | 558 | -- | 6.0 | 140 | 49.2 | |
| FEB 28... | 0930 | -- | .143 | .111 | 767 | 86 | 11.1 | 7.5 | 415 | 3.0 | 5.0 | 110 | 36.5 | |
| JUN 07... | 0800 | 26 | .297 | .225 | 758 | 58 | 5.2 | 7.4 | 374 | 17.0 | 20.5 | 98 | 31.1 | |
| AUG 16... | 0800 | 32 | .115 | .088 | 763 | 62 | 5.1 | 7.8 | 574 | 19.5 | 25.0 | 130 | 43.9 | |
| DATE | | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD LAB (MG/L AS CACO3) (90410) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610) |
| NOV 30... | 4.11 | 5.85 | 41.7 | 102 | 73.6 | .3 | 13.6 | 30.8 | 294 | 284 | 1.13 | 1.6 | 1.17 | |
| FEB 28... | 5.19 | 6.71 | 27.4 | 55 | 51.2 | .2 | 13.8 | 28.9 | 235 | 221 | 2.05 | 2.7 | 2.03 | |
| JUN 07... | 5.03 | 9.86 | 23.9 | 63 | 42.5 | .3 | 12.0 | 24.6 | 229 | 197 | 1.82 | 2.8 | 2.02 | |
| AUG 16... | 4.78 | 6.52 | 54.7 | 86 | 99.5 | .4 | 4.5 | 26.8 | 311 | 293 | .040 | .59 | .09 | |
| DATE | | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, WAT FLT TOTAL (MG/L AS N) (00600) | NITRO- GEN,PAR TICULATE SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310) |
| NOV 30... | 1.8 | .650 | .093 | 2.3 | 2.4 | .195 | .009 | .159 | .9 | <.1 | 4.4 | .9 | 3.8 | |
| FEB 28... | 2.9 | 3.51 | .181 | 6.2 | 6.4 | .455 | .045 | .231 | 2.5 | <.1 | 4.8 | 2.5 | 2.3 | |
| JUN 07... | 3.5 | 1.83 | .294 | 4.7 | 5.3 | .317 | .059 | .358 | 1.7 | <.1 | 8.9 | 1.7 | 4.5 | |
| AUG 16... | 1.9 | .111 | .004 | .70 | 2.0 | .592 | .034 | .358 | 3.8 | <.1 | 6.2 | 3.7 | 3.2 | |

< Actual value is known to be less than the value shown.

01482530 MAJOR RUN AT SHARPTOWN, NJ--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | | CHLORO- PHYLL A FLUORO- METRIC METHOD CORR. (UG/L) (32209) | | | | BORON, DIS- SOLVED (UG/L) AS B) (01020) | | RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530) | | | | | | |
|--------------|------|---|--|--|--|--|---|---|---|--|---|--|--|--|
| DATE | | | | | | | | | | | | | | |
| NOV 30... | | | | | | -- | | 16 | | 24 | | | | |
| FEB 28... | | | | | | -- | | 17 | | 13 | | | | |
| JUN 07... | | | | | | 89.3 | | 34 | | 27 | | | | |
| AUG 16... | | | | | | 194 | | 32 | | 42 | | | | |
| | | | | | | | | | | | | | | |
| DATE | TIME | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) | BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012) | BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022) | CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042) | IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051) | MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055) | MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900) | NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067) | |
| AUG 16... | 0800 | 4 | 38.9 | .07 | 28 | .09 | 1 | 1.4 | 2980 | 1 | 120 | <.01 | 3 | |
| | | | | | | | | | | | | | | |
| DATE | | | | | | SELE- NIUM, TOTAL (UG/L AS SE) (01147) | SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092) | | | | | | |
| AUG 16... | | | | | | E.3 | <.05 | 10 | | | | | | |
| | | | | | | | | | | | | | | |
| DATE | TIME | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | |
| FEB 28... | 0930 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 | |
| | | | | | | | | | | | | | | |
| DATE | TIME | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER TERT- BUTYL WATER, UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL WATER, UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL WATER, UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) |
| FEB 28... | | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | .2 |
| | | | | | | | | | | | | | | |
| DATE | | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | | | | |
| FEB 28... | | | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN

01482530 MAJOR RUN AT SHARPTOWN, NJ--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | |
|--------------|-------|--|---|--|---|---|---|--|--|--|---|--|---|---|
| | | | | | | | | | | | | | | |
| JUN 07... | 0800 | <.004 | <.010 | <.005 | 9.61 | <.010 | <.041 | <.020 | <.010 | <.018 | <.003 | E2.1 | .083 | |
| DATE | TIME | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR SENCOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER FLTRD 0.7 U GF, REC (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) |
| | | | | | | | | | | | | | | |
| JUN 07... | <.005 | <.002 | <.004 | <.035 | E.007 | <.050 | 4.02 | <.006 | <.002 | <.007 | <.003 | .024 | E.003 | |
| DATE | TIME | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | | | | | | | | |
| | | | | | | | | | | | | | | |
| JUN 07... | | .034 | <.016 | <.034 | <.005 | <.009 | | | | | | | | |

WATER-COLUMN BACTERIA ANALYSES

Samples collected synoptically during the summer months

| DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) | DATE | TIME | COLI- FORM, FECAL, EC BROTH (MPN) (31615) | E COLI, MTEC MF WATER (COL/ 100 ML) (31633) | ENTERO- COCCI, ME MF, WATER (COL/ 100 ML) (31649) |
|--------------|------|---|--|---|--------------|------|---|--|---|
| JUN 14... | 0930 | 2200 | 3000 | 390 | JUL 05... | 0920 | 330 | 100 | 400 |
| 21... | 1015 | 490 | 600 | 200 | 12... | 0945 | 3800 | 700 | 400 |
| 28... | 1030 | 790 | 400 | 360 | | | | | |

E Estimated value.

< Actual value is known to be less than the value shown.

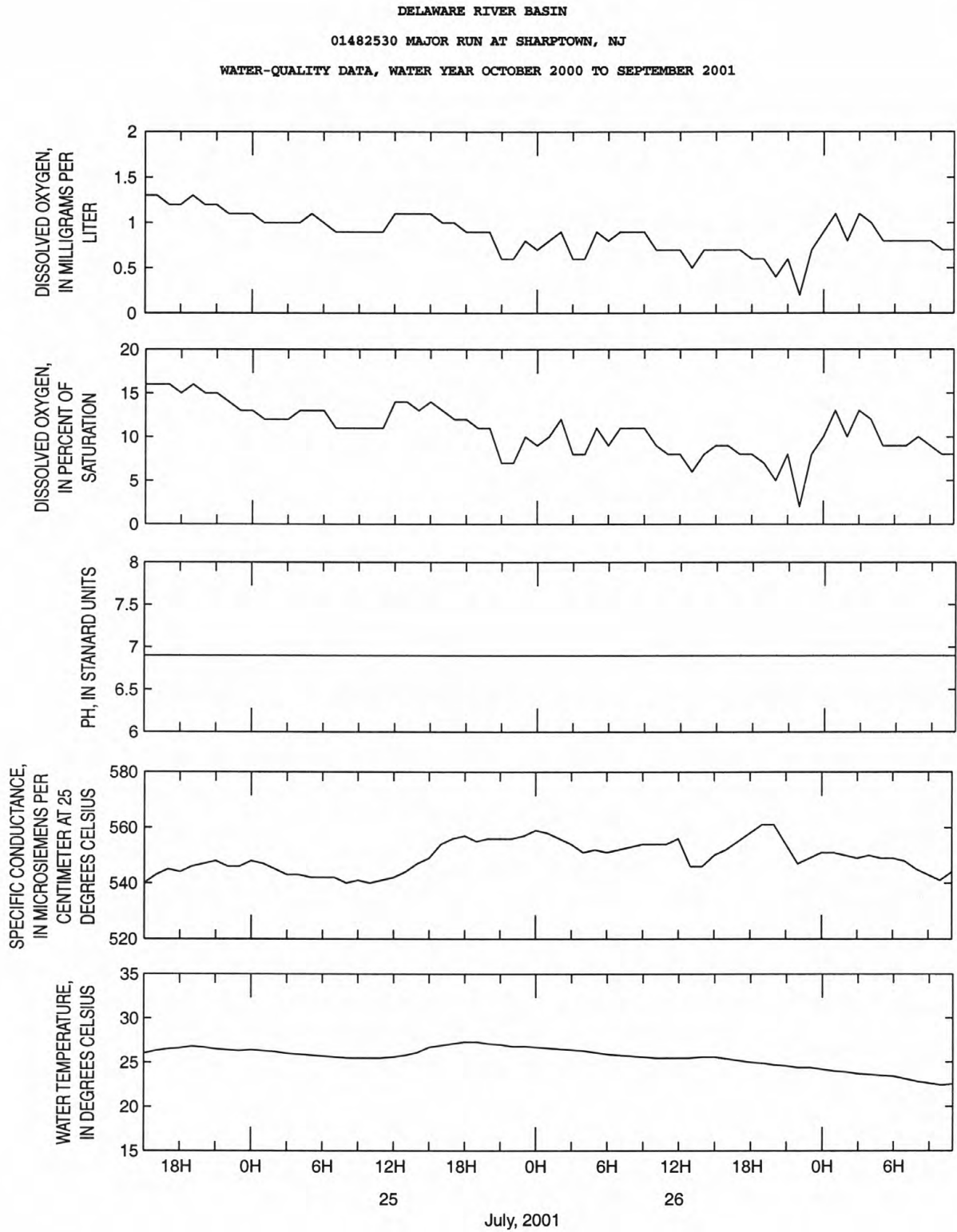


Figure 58. Reconnaissance Study--Physical characteristics and concentrations of constituents measured at 01482530 Major Run at Shaprtown, water year 2001.

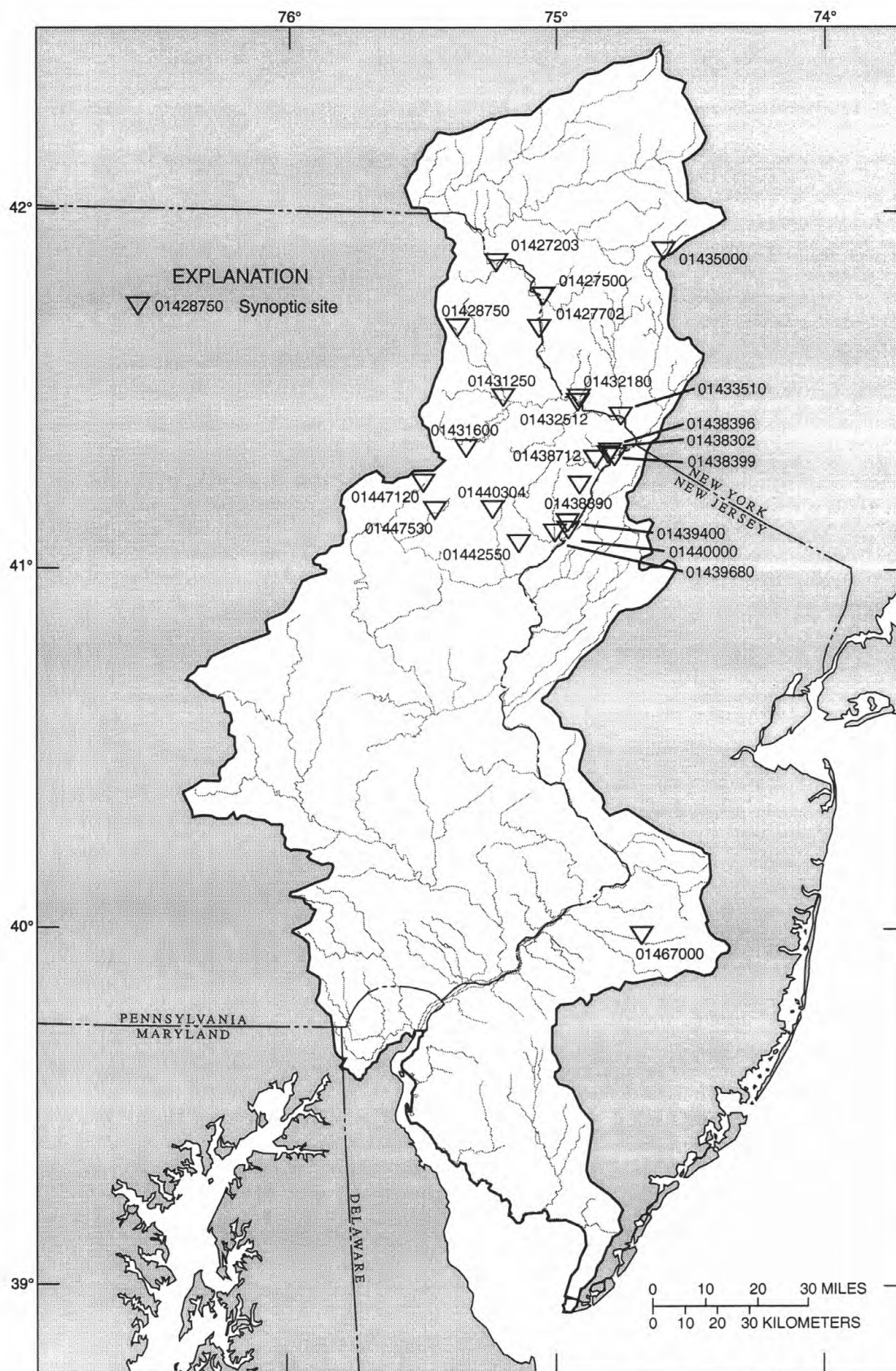


Figure 59. Location of sites in the Delaware River Basin National Water-Quality Assessment Program, surface-water synoptic study, water year 2001.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

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DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPSIS SAMPLING,
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

Miscellaneous water-quality sites are locations where non-routine water-quality data are collected during one year for use in hydrologic analyses. Data are collected either intermittently or systematically for a limited period of time. Water-quality data presented in this table were collected by the Delaware River Basin National Water-Quality Assessment Program (DELNR NAWQA) as part of two basin-wide surveys of nutrients, pesticides, major ions, and organic carbon, during periods of base flow; the first survey was May 7 through May 16, 2001, and the second was August 20 through August 29, 2001. Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the Introduction). Only pesticides identified by the analyses in one or more samples are listed in the following table. For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Quality Control Data" in the "Introduction."

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400) | SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095) | TEMPER-ATURE AIR (DEG C) (00020) | TEMPER-ATURE WATER (DEG C) (00010) | HARD-NESS TOTAL (MG/L AS CaCO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) |
|--|------|---------------|---|---------------------------------------|---|-----------------------------------|--|---|----------------------------------|------------------------------------|---|---|
| 01427203 EQUINUNK CREEK AT EQUINUNK, PA (LAT 41 51 21N LONG 075 13 31W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | |
| 09... | 1519 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09... | 1520 | ENVIRONMENTAL | 24 | 740 | 122 | 11.1 | 7.6 | 69 | 23.5 | 18.6 | 22 | 7.38 |
| AUG | | | | | | | | | | | | |
| 23... | 1009 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23... | 1010 | ENVIRONMENTAL | 4.4 | 739 | 105 | 9.6 | 7.2 | 84 | 19.0 | 18.0 | 29 | 9.60 |
| 01427500 CALLICOON CREEK AT CALLICOON NY (LAT 41 45 39N LONG 075 02 55W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | |
| 10... | 1250 | ENVIRONMENTAL | E46 | 717 | 146 | 13.1 | 9.4 | 134 | 27.5 | 17.6 | 31 | 9.80 |
| AUG | | | | | | | | | | | | |
| 23... | 1310 | ENVIRONMENTAL | E16 | 739 | 120 | 10.9 | 8.6 | 155 | 21.0 | 18.2 | 38 | 11.7 |
| 01427702 CALKINS CR 1200 FT AB MOUTH AT MILANVILLE, PA (LAT 41 40 21N LONG 075 03 53W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | |
| 10... | 1430 | ENVIRONMENTAL | 12 | 742 | 114 | 10.4 | 8.8 | 82 | 25.5 | 18.4 | 26 | 8.21 |
| AUG | | | | | | | | | | | | |
| 22... | 1000 | ENVIRONMENTAL | 1.3 | 748 | 105 | 9.5 | 7.3 | 100 | 22.5 | 19.6 | 33 | 10.3 |
| 01428750 WEST BRANCH LACKAWAXEN RIVER NEAR ALDENVILLE PA (LAT 41 40 28N LONG 075 22 35W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | |
| 09... | 1200 | ENVIRONMENTAL | 18 | 731 | 130 | 12.9 | 8.1 | 86 | 20.5 | 13.7 | 28 | 9.48 |
| AUG | | | | | | | | | | | | |
| 22... | 1659 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | E.01 |
| 22... | 1700 | ENVIRONMENTAL | 6.9 | 728 | 105 | 8.9 | 8.1 | 88 | 26.5 | 21.3 | 32 | 10.6 |
| 01431250 MIDDLE CREEK AT HAWLEY, PA (LAT 41 28 48N LONG 075 12 03W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | |
| 09... | 0830 | ENVIRONMENTAL | 33 | 741 | 108 | 10.4 | 7.4 | 94 | 15.5 | 16.0 | 30 | 10.0 |
| AUG | | | | | | | | | | | | |
| 22... | 1120 | ENVIRONMENTAL | 4.3 | 738 | 122 | 10.3 | 8.2 | 116 | 27.0 | 22.2 | 39 | 12.9 |
| 01431600 WALLENPAUPACK CREEK AT EAST STERLING, PA. (LAT 41 20 10N LONG 075 20 25W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | |
| 08... | 1500 | ENVIRONMENTAL | E92 | 732 | 123 | 11.9 | 7.6 | 81 | E17.0 | 15.2 | 22 | 7.12 |
| AUG | | | | | | | | | | | | |
| 22... | 0910 | ENVIRONMENTAL | E15 | 729 | 102 | 9.2 | 7.7 | 103 | 19.5 | 18.4 | 31 | 10.1 |
| 01432180 HALFWAY BROOK AT BARRYVILLE NY (LAT 41 28 38N LONG 074 54 39W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | |
| 09... | 1520 | ENVIRONMENTAL | 18 | 751 | -- | -- | 7.2 | 123 | 27.0 | 15.6 | 18 | 5.11 |
| AUG | | | | | | | | | | | | |
| 22... | 1449 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | .01 |
| 22... | 1450 | ENVIRONMENTAL | 1.5 | 752 | 102 | 9.2 | 7.4 | 185 | E25.0 | 19.9 | 26 | 7.37 |
| 01432512 SHOHOLA CREEK AT SHOHOLA, PA (LAT 41 27 53N LONG 074 55 02W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | |
| 09... | 1210 | ENVIRONMENTAL | 46 | 754 | 77 | 7.6 | 7.0 | 77 | 21.5 | 15.9 | 14 | 3.46 |
| AUG | | | | | | | | | | | | |
| 22... | 1710 | ENVIRONMENTAL | 15 | 749 | 99 | 8.3 | 7.2 | 86 | E22.5 | 23.1 | 16 | 3.89 |

E Estimated value.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPSIS SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086) | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453) | CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) |
|--|---|--|---|--|--|---|--|---|--|--|--|---|--|
| 01427203 EQUINUNK CREEK AT EQUINUNK, PA (LAT 41 51 21N LONG 075 13 31W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09... | .915 | .79 | 2.9 | 16 | 20 | -- | 4.8 | <.2 | 1.6 | 6.4 | .12 | .13 | <.040 |
| AUG | | | | | | | | | | | | | |
| 23... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23... | 1.24 | .75 | 4.1 | 22 | 27 | -- | 7.3 | <.2 | 2.0 | 5.9 | E.07 | .08 | <.040 |
| 01427500 CALLICOON CREEK AT CALLICOON NY (LAT 41 45 39N LONG 075 02 55W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | 1.68 | 1.65 | 9.8 | 19 | 13 | 5 | 19.3 | <.2 | 1.0 | 8.0 | .21 | .47 | <.041 |
| AUG | | | | | | | | | | | | | |
| 23... | 2.19 | 1.85 | 13.4 | 27 | 28 | 2 | 26.7 | <.2 | 1.4 | 8.3 | .16 | .20 | <.040 |
| 01427702 CALKINS CR 1200 FT AB MOUTH AT MILANVILLE, PA (LAT 41 40 21N LONG 075 03 53W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | 1.28 | 1.39 | 4.0 | 18 | 22 | -- | 6.3 | <.2 | 2.2 | 7.6 | .17 | .21 | <.041 |
| AUG | | | | | | | | | | | | | |
| 22... | 1.75 | 1.36 | 4.9 | 26 | 32 | -- | 8.6 | <.2 | 3.1 | 7.0 | .10 | .13 | <.040 |
| 01428750 WEST BRANCH LACKAWAXEN RIVER NEAR ALDENVILLE PA (LAT 41 40 28N LONG 075 22 35W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | 1.14 | 1.01 | 3.7 | 20 | 24 | -- | 6.2 | <.2 | 1.9 | 7.1 | .17 | .15 | <.041 |
| AUG | | | | | | | | | | | | | |
| 22... | <.008 | <.09 | <.1 | -- | -- | -- | M | <.2 | E.1 | <.1 | <.10 | <.08 | <.040 |
| 22... | 1.30 | 1.09 | 4.1 | 24 | 30 | -- | 8.1 | <.2 | 1.7 | 6.2 | .15 | .20 | <.040 |
| 01431250 MIDDLE CREEK AT HAWLEY, PA (LAT 41 28 48N LONG 075 12 03W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | 1.22 | .98 | 4.6 | 22 | 26 | -- | 6.7 | <.2 | 1.5 | 8.6 | .16 | .33 | <.040 |
| AUG | | | | | | | | | | | | | |
| 22... | 1.73 | 1.15 | 5.6 | 34 | 37 | 2 | 8.9 | <.2 | 1.1 | 6.8 | .20 | .26 | <.040 |
| 01431600 WALLENPAUPACK CREEK AT EAST STERLING, PA. (LAT 41 20 10N LONG 075 20 25W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | .997 | .51 | 5.0 | 10 | 12 | -- | 10 | <.2 | 1.8 | 7.3 | .10 | .15 | <.041 |
| AUG | | | | | | | | | | | | | |
| 22... | 1.44 | .59 | 6.3 | 19 | 24 | -- | 12.9 | <.2 | 2.2 | 6.7 | E.07 | .14 | <.040 |
| 01432180 HALFWAY BROOK AT BARRYVILLE NY (LAT 41 28 38N LONG 074 54 39W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | 1.30 | .66 | 14.7 | 6 | 8 | -- | 24.1 | <.2 | 3.0 | 8.1 | .10 | .12 | <.040 |
| AUG | | | | | | | | | | | | | |
| 22... | <.008 | <.09 | <.1 | -- | -- | -- | <.1 | <.2 | .1 | <.1 | <.10 | <.08 | <.040 |
| 22... | 1.92 | .78 | 23.3 | 19 | 24 | -- | 38.1 | E.1 | 3.5 | 7.8 | E.08 | .17 | <.040 |
| 01432512 SHOHOLA CREEK AT SHOHOLA, PA (LAT 41 27 53N LONG 074 55 02W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | 1.38 | .51 | 7.9 | 4 | 6 | -- | 12.5 | <.2 | 1.5 | 7.1 | .16 | .19 | <.041 |
| AUG | | | | | | | | | | | | | |
| 22... | 1.55 | .48 | 8.6 | 7 | 9 | -- | 15.6 | <.2 | 1.0 | 4.6 | .24 | .27 | <.040 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

493

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) |
|--|--|---|--|--|--|--|---|---|---|---|--|---|---|
| 01427203 EQUINUNK CREEK AT EQUINUNK, PA (LAT 41 51 21N LONG 075 13 31W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | -- | -- | -- | -- | -- | -- | -- | <.30 | -- | -- | -- | -- | -- |
| 09... | .20 | .19 | .072 | E.003 | .006 | <.020 | .006 | 1.7 | 47 | 35 | -- | <13 | M |
| AUG | | | | | | | | | | | | | |
| 23... | -- | -- | -- | -- | -- | -- | -- | <.30 | -- | -- | -- | -- | -- |
| 23... | .14 | -- | .055 | <.006 | E.004 | <.020 | .006 | .93 | 52 | 45 | <2.0 | 13 | M |
| 01427500 CALLICOON CREEK AT CALLICOON NY (LAT 41 45 39N LONG 075 02 55W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | .85 | .59 | .382 | .007 | .015 | <.018 | .034 | 2.4 | 84 | 64 | -- | <13 | 20 |
| AUG | | | | | | | | | | | | | |
| 23... | .55 | .51 | .353 | <.006 | .030 | E.017 | .034 | 1.7 | 96 | 84 | <2.0 | 14 | 20 |
| 01427702 CALKINS CR 1200 FT AB MOUTH AT MILANVILLE, PA (LAT 41 40 21N LONG 075 03 53W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | .33 | .29 | .120 | E.003 | .016 | E.010 | .023 | 2.2 | 56 | 42 | -- | <13 | 30 |
| AUG | | | | | | | | | | | | | |
| 22... | .27 | .23 | .133 | .014 | .032 | <.020 | .035 | 3.4 | 61 | 54 | <2.0 | E7 | M |
| 01428750 WEST BRANCH LACKAWAXEN RIVER NEAR ALDENVILLE PA (LAT 41 40 28N LONG 075 22 35W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | .44 | .45 | .283 | E.003 | .010 | <.018 | .015 | 1.8 | 58 | 44 | -- | <13 | 20 |
| AUG | | | | | | | | | | | | | |
| 22... | -- | -- | <.050 | <.006 | <.006 | <.020 | <.004 | -- | <10 | -- | -- | <13 | <10 |
| 22... | .37 | .32 | .171 | <.006 | .028 | E.011 | .034 | 1.7 | 56 | 49 | <2.0 | E8 | 20 |
| 01431250 MIDDLE CREEK AT HAWLEY, PA (LAT 41 28 48N LONG 075 12 03W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | -- | -- | <.050 | .018 | .025 | <.020 | .033 | 3.7 | 63 | 47 | -- | E7 | 100 |
| AUG | | | | | | | | | | | | | |
| 22... | -- | -- | E.028 | <.006 | .026 | .019 | .033 | 3.3 | 69 | 59 | <2.0 | E8 | 20 |
| 01431600 WALLENPAUPACK CREEK AT EAST STERLING, PA. (LAT 41 20 10N LONG 075 20 25W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | .36 | .31 | .201 | <.006 | E.005 | <.018 | .009 | 2.1 | 56 | 40 | -- | E6 | 40 |
| AUG | | | | | | | | | | | | | |
| 22... | .30 | -- | .164 | <.006 | <.006 | <.020 | .009 | 1.7 | 59 | 52 | <2.0 | <13 | 30 |
| 01432180 HALFWAY BROOK AT BARRYVILLE NY (LAT 41 28 38N LONG 074 54 39W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | .18 | .15 | .055 | .021 | .009 | <.020 | .015 | 2.2 | 78 | 61 | <2.0 | E7 | 30 |
| AUG | | | | | | | | | | | | | |
| 22... | -- | -- | <.050 | <.006 | <.006 | <.020 | <.004 | -- | <10 | -- | -- | <13 | <10 |
| 22... | .31 | -- | .135 | <.006 | .016 | E.011 | .027 | 1.5 | 102 | 95 | <2.0 | E10 | 40 |
| 01432512 SHOHOLA CREEK AT SHOHOLA, PA (LAT 41 27 53N LONG 074 55 02W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | -- | -- | E.040 | .008 | .011 | <.018 | .020 | 3.2 | 54 | 37 | <2.0 | <13 | 60 |
| AUG | | | | | | | | | | | | | |
| 22... | -- | -- | E.028 | <.006 | .008 | <.020 | .012 | 1.3 | 52 | 36 | <2.0 | E9 | 70 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPSIS SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155) | SEDI- MENT, SUS- PENDED (MG/L) (80154) | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674) | CHLOR- DIS- SOLVED (UG/L) (38933) | DCPA WATER FLTRD 0.7 U (UG/L) (82682) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|--|---|---|---|--|--|---|---|--|---|---|---|--|---|
| 01427203 EQUINUNK CREEK AT EQUINUNK, PA (LAT 41 51 21N LONG 075 13 31W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | -- | -- | -- | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| 09... | 4.8 | .27 | 4 | <.004 | <.002 | <.005 | E.002 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| AUG | | | | | | | | | | | | | |
| 23... | -- | -- | -- | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| 23... | 12.8 | .02 | 1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| 01427500 CALLICOON CREEK AT CALLICOON NY (LAT 41 45 39N LONG 075 02 55W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | 4.8 | -- | 4 | <.004 | <.002 | <.005 | E.006 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| AUG | | | | | | | | | | | | | |
| 23... | 8.3 | -- | 1 | <.004 | <.002 | <.005 | E.006 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| 01427702 CALKINS CR 1200 FT AB MOUTH AT MILANVILLE, PA (LAT 41 40 21N LONG 075 03 53W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | 4.8 | -- | <1 | <.004 | <.002 | <.005 | E.004 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| AUG | | | | | | | | | | | | | |
| 22... | 8.2 | .00 | 1 | <.004 | <.002 | <.005 | .009 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| 01428750 WEST BRANCH LACKAWAXEN RIVER NEAR ALDENVILLE PA (LAT 41 40 28N LONG 075 22 35W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | 7.8 | .13 | 3 | <.004 | <.002 | <.005 | E.004 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| AUG | | | | | | | | | | | | | |
| 22... | <3.0 | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 22... | 5.7 | -- | <1 | <.004 | <.002 | <.005 | E.006 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| 01431250 MIDDLE CREEK AT HAWLEY, PA (LAT 41 28 48N LONG 075 12 03W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | 19.3 | .11 | 1 | <.004 | <.002 | <.005 | E.005 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| AUG | | | | | | | | | | | | | |
| 22... | 4.9 | .02 | 2 | <.004 | <.002 | <.005 | E.003 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| 01431600 WALLENPAUPACK CREEK AT EAST STERLING, PA. (LAT 41 20 10N LONG 075 20 25W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | 20.4 | -- | 12 | <.004 | <.002 | <.005 | E.003 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| AUG | | | | | | | | | | | | | |
| 22... | 24.2 | -- | <1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| 01432180 HALFWAY BROOK AT BARRYVILLE NY (LAT 41 28 38N LONG 074 54 39W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | 13.3 | .05 | 1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| AUG | | | | | | | | | | | | | |
| 22... | <3.0 | -- | <1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 22... | 23.5 | .01 | 3 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| 01432512 SHOHOLA CREEK AT SHOHOLA, PA (LAT 41 27 53N LONG 074 55 02W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | 10.1 | .15 | 1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |
| AUG | | | | | | | | | | | | | |
| 22... | 8.5 | .07 | 2 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 | <.003 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

495

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) |
|--|--|---|--|---|--|---|---|--|--|---|---|---|---|
| 01427203 EQUINUNK CREEK AT EQUINUNK, PA (LAT 41 51 21N LONG 075 13 31W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| 09... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| AUG | | | | | | | | | | | | | |
| 23... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| 23... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| 01427500 CALLICOON CREEK AT CALLICOON NY (LAT 41 45 39N LONG 075 02 55W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| AUG | | | | | | | | | | | | | |
| 23... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| 01427702 CALKINS CR 1200 FT AB MOUTH AT MILANVILLE, PA (LAT 41 40 21N LONG 075 03 53W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| AUG | | | | | | | | | | | | | |
| 22... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| 01428750 WEST BRANCH LACKAWAXEN RIVER NEAR ALDENVILLE PA (LAT 41 40 28N LONG 075 22 35W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| AUG | | | | | | | | | | | | | |
| 22... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 22... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| 01431250 MIDDLE CREEK AT HAWLEY, PA (LAT 41 28 48N LONG 075 12 03W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.004 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| AUG | | | | | | | | | | | | | |
| 22... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| 01431600 WALLENPAUPACK CREEK AT EAST STERLING, PA. (LAT 41 20 10N LONG 075 20 25W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| AUG | | | | | | | | | | | | | |
| 22... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| 01432180 HALFWAY BROOK AT BARRYVILLE NY (LAT 41 28 38N LONG 074 54 39W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| AUG | | | | | | | | | | | | | |
| 22... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 22... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| 01432512 SHOHOLA CREEK AT SHOHOLA, PA (LAT 41 27 53N LONG 074 55 02W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |
| AUG | | | | | | | | | | | | | |
| 22... | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.016 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|--|--|---|---|
| 01427203 EQUINUNK CREEK AT EQUINUNK, PA (LAT 41 51 21N LONG 075 13 31W) | | | |
| MAY 2001 | | | |
| 09... | <.034 | <.005 | <.009 |
| 09... | <.034 | <.005 | <.009 |
| AUG | | | |
| 23... | <.034 | <.005 | <.009 |
| 23... | <.034 | <.005 | <.009 |
| 01427500 CALLICOON CREEK AT CALLICOON NY (LAT 41 45 39N LONG 075 02 55W) | | | |
| MAY 2001 | | | |
| 10... | <.034 | <.005 | <.009 |
| AUG | | | |
| 23... | <.034 | <.005 | <.009 |
| 01427702 CALKINS CR 1200 FT AB MOUTH AT MILANVILLE, PA (LAT 41 40 21N LONG 075 03 53W) | | | |
| MAY 2001 | | | |
| 10... | <.034 | <.005 | <.009 |
| AUG | | | |
| 22... | <.034 | <.005 | <.009 |
| 01428750 WEST BRANCH LACKAWAXEN RIVER NEAR ALDENVILLE PA (LAT 41 40 28N LONG 075 22 35W) | | | |
| MAY 2001 | | | |
| 09... | <.034 | <.005 | <.009 |
| AUG | | | |
| 22... | -- | -- | -- |
| 22... | <.034 | <.005 | <.009 |
| 01431250 MIDDLE CREEK AT HAWLEY, PA (LAT 41 28 48N LONG 075 12 03W) | | | |
| MAY 2001 | | | |
| 09... | <.034 | <.005 | <.009 |
| AUG | | | |
| 22... | <.034 | <.005 | <.009 |
| 01431600 WALLENPAUPACK CREEK AT EAST STERLING, PA. (LAT 41 20 10N LONG 075 20 25W) | | | |
| MAY 2001 | | | |
| 08... | <.034 | <.005 | <.009 |
| AUG | | | |
| 22... | <.034 | <.005 | <.009 |
| 01432180 HALFWAY BROOK AT BARRYVILLE NY (LAT 41 28 38N LONG 074 54 39W) | | | |
| MAY 2001 | | | |
| 09... | <.034 | <.005 | <.009 |
| AUG | | | |
| 22... | -- | -- | -- |
| 22... | <.034 | <.005 | <.009 |
| 01432512 SHOHOLA CREEK AT SHOHOLA, PA (LAT 41 27 53N LONG 074 55 02W) | | | |
| MAY 2001 | | | |
| 09... | <.034 | <.005 | <.009 |
| AUG | | | |
| 22... | <.034 | <.005 | <.009 |

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

497

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) |
|---|------|----------------|---|---|---|--|--|--|---|---|--|---|
| 01433510 MONGAUP RIVER AT MONGAUP NY (LAT 41 25 36N LONG 074 45 22W) | | | | | | | | | | | | |
| MAY 2001 09... | 0920 | ENVIRONMENTAL | -- | 757 | 107 | 12.0 | 6.9 | 106 | 14.0 | 9.9 | 18 | 5.56 |
| AUG 23... | 1239 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23... | 1240 | ENVIRONMENTAL | -- | 752 | 100 | 9.1 | 7.3 | 107 | 22.3 | 19.1 | 20 | 5.98 |
| 01435000 NEVERSINK RIVER NEAR CLARYVILLE NY (LAT 41 53 24N LONG 074 35 25W) | | | | | | | | | | | | |
| OCT 2000 16... | 1040 | ENVIRONMENTAL | 60 | 729 | 93 | 10.0 | 6.4 | 27 | 9.5 | 10.2 | 9 | 2.52 |
| MAY 2001 10... | 0929 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | .01 |
| 10... | 0930 | ENVIRONMENTAL | 104 | 723 | 109 | 11.9 | 7.0 | 35 | 21.0 | 9.1 | 9 | 2.60 |
| AUG 23... | 1600 | ENVIRONMENTAL | 26 | 719 | 106 | 9.8 | 7.5 | 34 | 19.5 | 16.3 | 9 | 2.65 |
| 01438302 VANDERMARK CREEK AT MOUTH AT MILFORD, PA (LAT 41 19 20N LONG 074 47 44W) | | | | | | | | | | | | |
| MAY 2001 08... | 1340 | ENVIRONMENTAL | 5.7 | 762 | 110 | 11.9 | 7.2 | 120 | 21.0 | 11.9 | 30 | 7.68 |
| AUG 21... | 1420 | ENVIRONMENTAL | <1.0 | 753 | 122 | 12.1 | 7.6 | 195 | 20.4 | 15.4 | 48 | 13.2 |
| 01438396 SAWKILL CREEK 2000 FT AB MOUTH AT MILFORD, PA (LAT 41 19 08N LONG 074 48 10W) | | | | | | | | | | | | |
| MAY 2001 08... | 0840 | ENVIRONMENTAL | 20 | 762 | 103 | 11.7 | 6.9 | 144 | 7.5 | 9.6 | 28 | 7.76 |
| AUG 21... | 0840 | ENVIRONMENTAL | 3.2 | 752 | 101 | 9.6 | 7.0 | 182 | 22.0 | 17.5 | 38 | 10.5 |
| 01438399 SHIMERS BROOK AT MILLVILLE ROAD NEAR MONTAGUE NJ (LAT 41 18 47N LONG 074 46 44W) | | | | | | | | | | | | |
| MAY 2001 08... | 1110 | ENVIRONMENTAL | 4.4 | 763 | 99 | 10.2 | 8.2 | 322 | 16.0 | 13.8 | 130 | 37.2 |
| AUG 21... | 1230 | ENVIRONMENTAL | 1.6 | 752 | 97 | 8.5 | 8.3 | 459 | 22.5 | 21.0 | 190 | 51.8 |
| 01438712 RAYMONDSKILL CR BL SWALE BROOK NR SILVER SPRING PA (LAT 41 18 19N LONG 074 51 05W) | | | | | | | | | | | | |
| MAY 2001 07... | 1750 | ENVIRONMENTAL | 17 | 755 | 100 | 9.5 | 6.9 | 118 | 17.0 | 17.3 | 21 | 5.56 |
| AUG 21... | 1710 | ENVIRONMENTAL | 5.2 | 743 | 97 | 8.0 | 7.3 | 110 | 21.3 | 23.5 | 24 | 6.27 |
| 01438890 DINGMANS CR BL FULMER FALLS NR DINGMANS FERRY, PA (LAT 41 13 52N LONG 074 54 37W) | | | | | | | | | | | | |
| MAY 2001 07... | 1430 | ENVIRONMENTAL | 7.4 | 757 | 99 | 10.0 | 7.3 | 82 | 19.5 | 14.6 | 17 | 4.44 |
| AUG 20... | 1730 | ENVIRONMENTAL | .63 | 742 | 93 | 8.2 | 7.0 | 98 | 24.0 | 20.1 | 24 | 6.20 |
| 01439400 TOMS CREEK AT EGYPT MILLS, PA (LAT 41 07 33N LONG 074 57 20W) | | | | | | | | | | | | |
| MAY 2001 07... | 1110 | ENVIRONMENTAL | 8.4 | 769 | 105 | 11.7 | 6.6 | 90 | 15.0 | 11.1 | 24 | 6.21 |
| AUG 20... | 1410 | ENVIRONMENTAL | 1.2 | 752 | 103 | 9.6 | 7.1 | 86 | 29.0 | 18.0 | 26 | 6.58 |

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPSIS SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086) | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453) | CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) |
|---|---|--|---|--|--|---|--|---|--|--|--|---|--|
| 01433510 MONGAUP RIVER AT MONGAUP NY (LAT 41 25 36N LONG 074 45 22W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | 1.11 | .97 | 11.4 | 5 | 7 | -- | 19.4 | <.2 | 2.8 | 7.1 | .16 | .19 | <.040 |
| AUG | | | | | | | | | | | | | |
| 23... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23... | 1.25 | .95 | 10.6 | 9 | 11 | -- | 18.7 | <.2 | 1.7 | 6.8 | .15 | .19 | <.040 |
| 01435000 NEVERSINK RIVER NEAR CLARYVILLE NY (LAT 41 53 24N LONG 074 35 25W) | | | | | | | | | | | | | |
| OCT 2000 | | | | | | | | | | | | | |
| 16... | .638 | .30 | 1.1 | 4 | 4 | -- | 1.5 | E.1 | 2.5 | 4.9 | E.07 | .09 | <.041 |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | <.008 | <.09 | <.1 | -- | -- | -- | <.1 | <.2 | <.1 | <.1 | <.10 | <.08 | <.041 |
| 10... | .631 | .30 | 1.5 | 3 | 4 | -- | 2.9 | <.2 | 2.0 | 4.7 | <.10 | E.07 | <.041 |
| AUG | | | | | | | | | | | | | |
| 23... | .674 | .40 | 1.8 | 4 | 5 | -- | 3.6 | <.2 | 2.4 | 4.8 | <.10 | E.06 | <.040 |
| 01438302 VANDERMARK CREEK AT MOUTH AT MILFORD, PA (LAT 41 19 20N LONG 074 47 44W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | 2.52 | .61 | 8.8 | 10 | 12 | -- | 18.3 | <.2 | 5.6 | 9.2 | E.09 | .09 | <.041 |
| AUG | | | | | | | | | | | | | |
| 21... | 3.70 | .81 | 14.3 | 16 | 20 | -- | 33.9 | <.2 | 6.8 | 11.4 | <.10 | E.08 | <.040 |
| 01438396 SAWKILL CREEK 2000 FT AB MOUTH AT MILFORD, PA (LAT 41 19 08N LONG 074 48 10W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | 2.08 | .58 | 14.9 | 12 | 14 | -- | 27.6 | <.2 | 3.9 | 8.9 | E.09 | E.08 | <.041 |
| AUG | | | | | | | | | | | | | |
| 21... | 2.93 | .79 | 17.3 | 16 | 20 | -- | 35.8 | <.2 | 5.6 | 9.7 | E.07 | .10 | <.040 |
| 01438399 SHIMERS BROOK AT MILLVILLE ROAD NEAR MONTAGUE NJ (LAT 41 18 47N LONG 074 46 44W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | 8.32 | .56 | 14.6 | 107 | 130 | -- | 26.8 | <.2 | 2.1 | 13.9 | .19 | .34 | <.040 |
| AUG | | | | | | | | | | | | | |
| 21... | 13.6 | .86 | 19.0 | 162 | 185 | 6 | 40.3 | <.2 | 3.5 | 12.6 | .16 | .22 | <.040 |
| 01438712 RAYMONDSKILL CR BL SWALE BROOK NR SILVER SPRING PA (LAT 41 18 19N LONG 074 51 05W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | 1.76 | .39 | 13.0 | 8 | 10 | -- | 23.8 | <.2 | 2.3 | 6.5 | .16 | .22 | <.041 |
| AUG | | | | | | | | | | | | | |
| 21... | 2.12 | .49 | 10.1 | 15 | 18 | -- | 19.7 | <.2 | 3.5 | 4.5 | .17 | .22 | <.040 |
| 01438890 DINGMANS CR BL FULMER FALLS NR DINGMANS FERRY, PA (LAT 41 13 52N LONG 074 54 37W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | 1.39 | .42 | 8.0 | 7 | 9 | -- | 13.3 | <.2 | 1.4 | 7.2 | .14 | .26 | <.041 |
| AUG | | | | | | | | | | | | | |
| 20... | 2.00 | .40 | 8.6 | 15 | 19 | -- | 14.9 | <.2 | 3.5 | 5.8 | .10 | .18 | <.040 |
| 01439400 TOMS CREEK AT EGYPT MILLS, PA (LAT 41 07 33N LONG 074 57 20W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | 2.15 | .32 | 6.2 | 11 | 13 | -- | 10.9 | <.2 | 5.3 | 9.5 | <.10 | E.06 | <.041 |
| AUG | | | | | | | | | | | | | |
| 20... | 2.43 | .38 | 5.3 | 15 | 18 | -- | 9.4 | <.2 | 6.8 | 9.2 | <.10 | E.04 | <.040 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

499

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN, TOTAL (MG/L AS N) (00600) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) |
|---|--|--|--|--|--|--|--|---|--|---|---|--|---|
| 01433510 MONGAUP RIVER AT MONGAUP NY (LAT 41 25 36N LONG 074 45 22W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | .50 | .47 | .311 | .009 | -- | .006 | <.020 | .019 | -- | -- | 3.1 | -- | 77 |
| AUG | | | | | | | | | | | | | |
| 23... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5.0 | -- | -- |
| 23... | .40 | .37 | .213 | <.006 | -- | E.005 | <.020 | .008 | -- | -- | 2.8 | -- | 67 |
| 01435000 NEVERSINK RIVER NEAR CLARYVILLE NY (LAT 41 53 24N LONG 074 35 25W) | | | | | | | | | | | | | |
| OCT 2000 | | | | | | | | | | | | | |
| 16... | .14 | -- | .052 | <.006 | -- | <.006 | <.018 | E.002 | -- | -- | 1.0 | <.2 | 20 |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | -- | -- | <.047 | <.006 | -- | <.006 | <.018 | <.004 | -- | -- | -- | -- | <10 |
| 10... | -- | -- | .206 | <.006 | <.022 | <.006 | <.018 | E.002 | .2 | <.1 | .99 | .2 | 26 |
| AUG | | | | | | | | | | | | | |
| 23... | -- | -- | .119 | <.006 | <.022 | <.006 | <.020 | .006 | .2 | <.1 | .65 | .2 | 23 |
| 01438302 VANDERMARK CREEK AT MOUTH AT MILFORD, PA (LAT 41 19 20N LONG 074 47 44W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | .86 | -- | .762 | .017 | -- | .016 | <.018 | .018 | -- | -- | 1.3 | -- | 72 |
| AUG | | | | | | | | | | | | | |
| 21... | -- | -- | 2.35 | <.006 | -- | .012 | E.010 | .020 | -- | -- | .73 | -- | 119 |
| 01438396 SAWKILL CREEK 2000 FT AB MOUTH AT MILFORD, PA (LAT 41 19 08N LONG 074 48 10W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | -- | -- | .253 | .006 | -- | .007 | <.018 | .009 | -- | -- | 1.8 | -- | 85 |
| AUG | | | | | | | | | | | | | |
| 21... | .72 | -- | .619 | <.006 | -- | .013 | E.010 | .018 | -- | -- | 1.2 | -- | 101 |
| 01438399 SHIMERS BROOK AT MILLVILLE ROAD NEAR MONTAGUE NJ (LAT 41 18 47N LONG 074 46 44W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | .48 | .33 | .137 | <.006 | -- | .010 | <.020 | .026 | -- | -- | 3.5 | -- | 188 |
| AUG | | | | | | | | | | | | | |
| 21... | .34 | .27 | .116 | <.006 | -- | .013 | E.012 | .019 | -- | -- | 3.5 | -- | 260 |
| 01438712 RAYMONDSKILL CR BL SWALE BROOK NR SILVER SPRING PA (LAT 41 18 19N LONG 074 51 05W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | -- | -- | E.031 | <.006 | -- | .007 | <.018 | .016 | -- | -- | 3.3 | -- | 72 |
| AUG | | | | | | | | | | | | | |
| 21... | -- | -- | E.038 | <.006 | -- | E.006 | <.020 | .017 | -- | -- | 3.0 | -- | 66 |
| 01438890 DINGMANS CR BL FULMER FALLS NR DINGMANS FERRY, PA (LAT 41 13 52N LONG 074 54 37W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | .34 | .23 | .084 | .006 | -- | .008 | <.018 | .025 | -- | -- | 3.0 | -- | 49 |
| AUG | | | | | | | | | | | | | |
| 20... | .36 | .29 | .184 | <.006 | -- | .011 | <.020 | .019 | -- | -- | 2.6 | -- | 59 |
| 01439400 TOMS CREEK AT EGYPT MILLS, PA (LAT 41 07 33N LONG 074 57 20W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | -- | -- | .136 | E.004 | -- | .006 | <.018 | .008 | -- | -- | 1.3 | -- | 50 |
| AUG | | | | | | | | | | | | | |
| 20... | -- | -- | .306 | <.006 | -- | .011 | <.020 | .013 | -- | -- | .76 | -- | 51 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BORON, DIS- SOLVED (UG/L) AS B) (01020) | IRON, DIS- SOLVED (UG/L) AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L) AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155) | SEDI- MENT, SUS- PENDED (MG/L) (80154) | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) |
|---|---|--|--|--|--|---|---|--|--|---|---|--|---|
| 01433510 MONGAUP RIVER AT MONGAUP NY (LAT 41 25 36N LONG 074 45 22W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | 53 | <2.0 | E8 | 30 | 14.0 | -- | 3 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| AUG | | | | | | | | | | | | | |
| 23... | -- | -- | -- | -- | -- | -- | -- | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 23... | 52 | <2.0 | <13 | M | <3.0 | -- | 2 | <.004 | <.002 | <.005 | .011 | <.010 | <.041 |
| 01435000 NEVERSINK RIVER NEAR CLARYVILLE NY (LAT 41 53 24N LONG 074 35 25W) | | | | | | | | | | | | | |
| OCT 2000 | | | | | | | | | | | | | |
| 16... | 16 | 2.0 | <13 | <10 | E2.3 | .16 | 1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | -- | -- | <13 | <10 | <3.2 | -- | <1 | -- | -- | -- | -- | -- | -- |
| 10... | 17 | -- | <13 | <10 | E1.8 | -- | <1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| AUG | | | | | | | | | | | | | |
| 23... | 19 | <2.0 | <13 | <10 | E1.9 | .11 | 2 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 01438302 VANDERMARK CREEK AT MOUTH AT MILFORD, PA (LAT 41 19 20N LONG 074 47 44W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | 62 | <2.0 | <13 | M | <3.2 | .02 | 1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| AUG | | | | | | | | | | | | | |
| 21... | 104 | <2.0 | 20 | <10 | <3.0 | -- | <1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 01438396 SAWKILL CREEK 2000 FT AB MOUTH AT MILFORD, PA (LAT 41 19 08N LONG 074 48 10W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | 74 | <2.0 | <13 | 20 | E1.9 | -- | <1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| AUG | | | | | | | | | | | | | |
| 21... | 95 | <2.0 | E12 | <10 | 3.3 | -- | <1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 01438399 SHIMERS BROOK AT MILLVILLE ROAD NEAR MONTAGUE NJ (LAT 41 18 47N LONG 074 46 44W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | 168 | 6.1 | <13 | 20 | 3.6 | .09 | 8 | <.004 | <.002 | <.005 | E.002 | <.010 | <.041 |
| AUG | | | | | | | | | | | | | |
| 21... | 239 | <2.0 | 15 | <10 | E2.9 | .07 | 16 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 01438712 RAYMONDSKILL CR BL SWALE BROOK NR SILVER SPRING PA (LAT 41 18 19N LONG 074 51 05W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | 58 | 2.3 | <13 | 100 | 27.0 | .07 | 2 | <.004 | <.002 | <.005 | E.002 | <.010 | <.041 |
| AUG | | | | | | | | | | | | | |
| 21... | 56 | <2.0 | E7 | 90 | 6.5 | .03 | 2 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 01438890 DINGMANS CR BL FULMER FALLS NR DINGMANS FERRY, PA (LAT 41 13 52N LONG 074 54 37W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | 37 | <2.0 | <13 | 60 | 16.2 | .15 | 8 | .164 | .023 | <.005 | .023 | <.010 | E.007 |
| AUG | | | | | | | | | | | | | |
| 20... | 51 | <2.0 | E9 | M | 33.6 | .00 | 3 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 01439400 TOMS CREEK AT EGYPT MILLS, PA (LAT 41 07 33N LONG 074 57 20W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | 48 | <2.0 | <13 | M | E2.4 | -- | <1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| AUG | | | | | | | | | | | | | |
| 20... | 50 | <2.0 | E7 | <10 | E2.2 | -- | <1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

501

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPIC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) |
|----------|---|--|---|---|--|---|--|---|--|---|---|--|--|
| | 01433510 MONGAUP RIVER AT MONGAUP NY (LAT 41 25 36N LONG 074 45 22W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 09... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 23... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| 23... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.004 | <.006 | <.002 |
| | 01435000 NEVERSINK RIVER NEAR CLARYVILLE NY (LAT 41 53 24N LONG 074 35 25W) | | | | | | | | | | | | |
| OCT 2000 | | | | | | | | | | | | | |
| 16... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 23... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| | 01438302 VANDERMARK CREEK AT MOUTH AT MILFORD, PA (LAT 41 19 20N LONG 074 47 44W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 21... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| | 01438396 SAWKILL CREEK 2000 FT AB MOUTH AT MILFORD, PA (LAT 41 19 08N LONG 074 48 10W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 21... | <.025 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| | 01438399 SHIMERS BROOK AT MILLVILLE ROAD NEAR MONTAGUE NJ (LAT 41 18 47N LONG 074 46 44W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 21... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| | 01438712 RAYMONDSKILL CR BL SWALE BROOK NR SILVER SPRING PA (LAT 41 18 19N LONG 074 51 05W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 21... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| | 01438890 DINGMANS CR BL FULMER FALLS NR DINGMANS FERRY, PA (LAT 41 13 52N LONG 074 54 37W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | E.045 | <.005 | <.003 | E.002 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | .021 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 20... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| | 01439400 TOMS CREEK AT EGYPT MILLS, PA (LAT 41 07 33N LONG 074 57 20W) | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 07... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 20... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| | NAPROP- AMIDE WATER FLTRD 0.7 U | P,P' DDE | PENDI- METH- ALIN WAT FLT 0.7 U | TEBU- THIURON WATER FLTRD 0.7 U | TER- BACIL WATER FLTRD 0.7 U | THIO- BENCARB WATER FLTRD 0.7 U | TRI- FLUR- ALIN WAT FLT 0.7 U |
|---|---|-------------------|---|---|--|---|---|
| DATE | GF, REC (UG/L) | DISSOLV (UG/L) | GF, REC (UG/L) | GF, REC (UG/L) | GF, REC (UG/L) | GF, REC (UG/L) | GF, REC (UG/L) |
| | (82684) | (34653) | (82683) | (82670) | (82665) | (82681) | (82661) |
| 01433510 MONGAUP RIVER AT MONGAUP NY (LAT 41 25 36N LONG 074 45 22W) | | | | | | | |
| MAY 2001 | | | | | | | |
| 09... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 23... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 23... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01435000 NEVERSINK RIVER NEAR CLARYVILLE NY (LAT 41 53 24N LONG 074 35 25W) | | | | | | | |
| OCT 2000 | | | | | | | |
| 16... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| MAY 2001 | | | | | | | |
| 10... | -- | -- | -- | -- | -- | -- | -- |
| 10... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 23... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01438302 VANDERMARK CREEK AT MOUTH AT MILFORD, PA (LAT 41 19 20N LONG 074 47 44W) | | | | | | | |
| MAY 2001 | | | | | | | |
| 08... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 21... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01438396 SAWKILL CREEK 2000 FT AB MOUTH AT MILFORD, PA (LAT 41 19 08N LONG 074 48 10W) | | | | | | | |
| MAY 2001 | | | | | | | |
| 08... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 21... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01438399 SHIMERS BROOK AT MILLVILLE ROAD NEAR MONTAGUE NJ (LAT 41 18 47N LONG 074 46 44W) | | | | | | | |
| MAY 2001 | | | | | | | |
| 08... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 21... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01438712 RAYMONDSKILL CR BL SWALE BROOK NR SILVER SPRING PA (LAT 41 18 19N LONG 074 51 05W) | | | | | | | |
| MAY 2001 | | | | | | | |
| 07... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 21... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01438890 DINGMANS CR BL FULMER FALLS NR DINGMANS FERRY, PA (LAT 41 13 52N LONG 074 54 37W) | | | | | | | |
| MAY 2001 | | | | | | | |
| 07... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 20... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01439400 TOMS CREEK AT EGYPT MILLS, PA (LAT 41 07 33N LONG 074 57 20W) | | | | | | | |
| MAY 2001 | | | | | | | |
| 07... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 20... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

503

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | TIME | SAMPLE TYPE | DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE AIR (DEG C) (00020) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) |
|--|------|----------------|---|---|---|--|--|--|---|---|--|---|
| 01439680 LITTLE BUSHKILL CREEK AT BUSHKILL, PA (LAT 41 05 52N LONG 075 00 15W) | | | | | | | | | | | | |
| MAY 2001 08... | 1640 | ENVIRONMENTAL | 22 | 762 | 115 | 11.9 | 6.9 | 51 | 21.0 | 13.7 | 14 | 3.48 |
| AUG 20... | 1050 | ENVIRONMENTAL | 3.9 | 752 | 105 | 9.5 | 6.9 | 61 | 31.0 | 19.7 | 18 | 4.31 |
| 01440000 FLAT BROOK NEAR FLATBROOKVILLE NJ (LAT 41 06 24N LONG 074 57 09W) | | | | | | | | | | | | |
| MAY 2001 10... | 1618 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | 1619 | FIELD BLANK | -- | -- | -- | -- | -- | -- | -- | -- | -- | E.01 |
| 10... | 1620 | ENVIRONMENTAL | 55 | 757 | 100 | 9.3 | 8.0 | 235 | 30.5 | 18.4 | 87 | 25.6 |
| AUG 23... | 1550 | ENVIRONMENTAL | 13 | 755 | 104 | 9.4 | 8.1 | 285 | 20.0 | 19.6 | 110 | 32.3 |
| 01440304 BRODHEAD CREEK NEAR MOUNTAINHOME, PA (LAT 41 09 49N LONG 075 14 24W) | | | | | | | | | | | | |
| MAY 2001 15... | 0950 | ENVIRONMENTAL | 28 | 737 | 101 | 11.0 | 6.9 | 73 | 17.0 | 10.3 | 19 | 5.22 |
| AUG 21... | 1110 | ENVIRONMENTAL | 11 | 737 | 104 | 9.7 | 7.3 | 87 | 24.0 | 17.4 | 21 | 5.78 |
| 01442550 MARSHALLS CREEK NEAR MARSHALLS CREEK, PA (LAT 41 04 09N LONG 075 08 24W) | | | | | | | | | | | | |
| MAY 2001 15... | 1150 | ENVIRONMENTAL | 6.2 | 740 | 100 | 10.6 | 7.2 | 82 | 18.0 | 11.2 | 25 | 7.59 |
| AUG 21... | 0910 | ENVIRONMENTAL | 1.6 | 743 | 96 | 8.9 | 7.2 | 92 | 21.0 | 17.8 | 29 | 8.48 |
| 01447120 LEHIGH RIVER NEAR GOULDSBORO, PA (LAT 41 14 13N LONG 075 30 04W) | | | | | | | | | | | | |
| MAY 2001 08... | 1050 | ENVIRONMENTAL | 22 | 720 | 106 | 10.0 | 6.9 | 74 | 20.0 | 15.4 | 16 | 4.91 |
| AUG 21... | 1600 | ENVIRONMENTAL | 6.9 | 714 | 102 | 8.6 | 7.3 | 75 | 21.0 | 20.2 | 19 | 5.96 |
| 01447530 TOBYHANNA CREEK AT WARNERTOWN, PA (LAT 41 09 42N LONG 075 27 21W) | | | | | | | | | | | | |
| MAY 2001 08... | 0850 | ENVIRONMENTAL | 26 | 722 | 108 | 10.8 | 7.1 | 135 | 12.0 | 12.7 | 19 | 5.88 |
| AUG 21... | 1740 | ENVIRONMENTAL | 9.1 | 713 | 101 | 8.6 | 7.3 | 127 | 22.5 | 20.0 | 22 | 6.78 |
| 01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON NJ (LAT 39 58 12N LONG 074 41 05W) | | | | | | | | | | | | |
| OCT 2000 03... | 1220 | ENVIRONMENTAL | 169 | 761 | 105 | 10.3 | 4.4 | 48 | 22.5 | 16.2 | 7 | 1.63 |
| MAY 2001 16... | 0920 | ENVIRONMENTAL | 80 | 757 | 90 | 8.7 | 5.9 | 57 | 14.5 | 16.6 | 9 | 2.23 |
| AUG 29... | 0940 | ENVIRONMENTAL | 52 | 761 | 83 | 7.1 | 6.3 | 53 | 29.5 | 23.2 | 9 | 2.07 |

E Estimated value.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086) | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN, TOTAL (MG/L AS N) (00600) |
|---|---|--|---|--|--|--|---|--|--|--|---|--|--|
| 01439680 LITTLE BUSHKILL CREEK AT BUSHKILL, PA (LAT 41 05 52N LONG 075 00 15W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | 1.25 | .27 | 3.5 | -- | -- | 6.0 | <.2 | 2.1 | 6.6 | .16 | .18 | <.041 | .24 |
| AUG | | | | | | | | | | | | | |
| 20... | 1.65 | .42 | 4.1 | 9 | 11 | 7.1 | <.2 | 3.9 | 5.8 | .12 | .23 | <.040 | .36 |
| 01440000 FLAT BROOK NEAR FLATBROOKVILLE NJ (LAT 41 06 24N LONG 074 57 09W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | <.008 | <.09 | <.1 | -- | -- | <.1 | <.2 | <.1 | <.1 | <.10 | <.08 | <.041 | -- |
| 10... | 5.52 | .50 | 10.5 | 73 | 89 | 18.3 | <.2 | 4.0 | 13.3 | .10 | .17 | <.041 | .29 |
| AUG | | | | | | | | | | | | | |
| 23... | 8.16 | .62 | 11.2 | 92 | 112 | 20.9 | <.2 | 3.4 | 19.3 | .10 | .10 | <.040 | -- |
| 01440304 BRODHEAD CREEK NEAR MOUNTAINHOME, PA (LAT 41 09 49N LONG 075 14 24W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 15... | 1.42 | .43 | 5.7 | 9 | 11 | 10 | <.2 | 3.5 | 6.4 | E.05 | .09 | <.041 | .35 |
| AUG | | | | | | | | | | | | | |
| 21... | 1.69 | .47 | 7.0 | 12 | 14 | 12.3 | <.2 | 3.4 | 6.4 | E.08 | E.08 | <.040 | -- |
| 01442550 MARSHALLS CREEK NEAR MARSHALLS CREEK, PA (LAT 41 04 09N LONG 075 08 24W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 15... | 1.57 | .38 | 5.1 | 11 | 13 | 8.2 | <.2 | 6.1 | 10.3 | <.10 | .23 | <.040 | .49 |
| AUG | | | | | | | | | | | | | |
| 21... | 1.84 | .38 | 5.4 | 16 | 20 | 9.9 | <.2 | 7.9 | 9.1 | E.07 | .15 | <.040 | .31 |
| 01447120 LEHIGH RIVER NEAR GOULDSBORO, PA (LAT 41 14 13N LONG 075 30 04W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | .840 | .47 | 6.0 | 5 | 7 | 11.2 | <.2 | .7 | 6.2 | E.10 | .21 | <.041 | .31 |
| AUG | | | | | | | | | | | | | |
| 21... | 1.06 | .31 | 6.0 | 9 | 10 | 11.8 | <.2 | 1.8 | 4.7 | .17 | .23 | <.040 | .31 |
| 01447530 TOBYHANNA CREEK AT WARNERTOWN, PA (LAT 41 09 42N LONG 075 27 21W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | 1.06 | .67 | 15.7 | 5 | 6 | 26.9 | <.2 | .6 | 9.4 | E.10 | .20 | <.041 | .44 |
| AUG | | | | | | | | | | | | | |
| 21... | 1.32 | .88 | 14.3 | 12 | 15 | 24.0 | <.2 | 1.2 | 8.0 | .21 | .26 | <.040 | .44 |
| 01467000 NORTH BRANCH RANOCAS CREEK AT PEMBERTON NJ (LAT 39 58 12N LONG 074 41 05W) | | | | | | | | | | | | | |
| OCT 2000 | | | | | | | | | | | | | |
| 03... | .661 | .73 | 3.3 | <1 | -- | 5.8 | <.1 | 4.0 | 6.4 | .27 | .35 | .026 | .40 |
| MAY 2001 | | | | | | | | | | | | | |
| 16... | .918 | 1.20 | 5.0 | 0 | M | 7.7 | <.2 | 3.5 | 8.3 | .23 | .44 | <.041 | .50 |
| AUG | | | | | | | | | | | | | |
| 29... | .898 | 1.05 | 4.7 | -- | -- | 7.4 | <.2 | 4.0 | 6.5 | .19 | .28 | <.040 | -- |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

505

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605) | NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694) | CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) |
|--|--|--|--|---|--|--|--|---|--|---|---|--|---|
| 01439680 LITTLE BUSHKILL CREEK AT BUSHKILL, PA (LAT 41 05 52N LONG 075 00 15W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | .21 | .057 | E.003 | -- | -- | .010 | <.018 | .015 | -- | -- | 3.9 | -- | 42 |
| AUG | | | | | | | | | | | | | |
| 20... | .25 | .127 | <.006 | -- | -- | .011 | <.020 | .015 | -- | -- | 3.0 | -- | 41 |
| 01440000 FLAT BROOK NEAR FLATBROOKVILLE NJ (LAT 41 06 24N LONG 074 57 09W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | <.047 | .006 | -- | -- | <.006 | <.018 | <.004 | -- | -- | -- | -- | <10 |
| 10... | .21 | .111 | .009 | -- | .036 | .006 | <.018 | .014 | .3 | M | 1.8 | E.3 | 140 |
| AUG | | | | | | | | | | | | | |
| 23... | -- | <.050 | <.006 | -- | -- | E.004 | <.020 | .006 | -- | -- | 1.4 | -- | 165 |
| 01440304 BRODHEAD CREEK NEAR MOUNTAINHOME, PA (LAT 41 09 49N LONG 075 14 24W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 15... | -- | .254 | .007 | -- | -- | .012 | E.013 | .012 | -- | -- | 1.3 | -- | 51 |
| AUG | | | | | | | | | | | | | |
| 21... | -- | .257 | <.006 | -- | -- | .012 | E.010 | .015 | -- | -- | .94 | -- | 49 |
| 01442550 MARSHALLS CREEK NEAR MARSHALLS CREEK, PA (LAT 41 04 09N LONG 075 08 24W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 15... | -- | .267 | .007 | -- | -- | .021 | .022 | .028 | -- | -- | 1.6 | -- | 60 |
| AUG | | | | | | | | | | | | | |
| 21... | -- | .158 | <.006 | -- | -- | .027 | E.017 | .041 | -- | -- | 2.0 | -- | 62 |
| 01447120 LEHIGH RIVER NEAR GOULDSBORO, PA (LAT 41 14 13N LONG 075 30 04W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | -- | .100 | <.006 | -- | -- | E.004 | <.018 | .012 | -- | -- | 3.4 | -- | 48 |
| AUG | | | | | | | | | | | | | |
| 21... | .25 | .084 | <.006 | -- | -- | <.006 | <.020 | .008 | -- | -- | 3.9 | -- | 50 |
| 01447530 TOBYHANNA CREEK AT WARNERTOWN, PA (LAT 41 09 42N LONG 075 27 21W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | -- | .246 | .014 | -- | -- | .007 | <.018 | .014 | -- | -- | 3.6 | -- | 76 |
| AUG | | | | | | | | | | | | | |
| 21... | .39 | .176 | <.006 | -- | -- | .007 | <.020 | .014 | -- | -- | 4.6 | -- | 76 |
| 01467000 NORTH BRANCH RANCOCAS CREEK AT PEMBERTON NJ (LAT 39 58 12N LONG 074 41 05W) | | | | | | | | | | | | | |
| OCT 2000 | | | | | | | | | | | | | |
| 03... | .33 | .051 | <.010 | .32 | -- | .010 | <.010 | .034 | -- | -- | 9.5 | .9 | 43 |
| MAY 2001 | | | | | | | | | | | | | |
| 16... | .29 | .059 | <.006 | -- | .106 | .009 | <.018 | .054 | 1.4 | <.1 | 7.7 | 1.4 | 43 |
| AUG | | | | | | | | | | | | | |
| 29... | -- | E.065 | <.006 | -- | .140 | .009 | <.020 | .043 | 1.1 | <.1 | 5.0 | 1.0 | 34 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPSIS SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BORON, DIS- SOLVED (UG/L) AS B) (01020) | IRON, DIS- SOLVED (UG/L) AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L) AS MN) (01056) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155) | SEDI- MENT, SUS- PENDED (MG/L) (80154) | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) |
|---|---|--|--|--|--|---|---|--|--|---|---|---|--|
| 01439680 LITTLE BUSHKILL CREEK AT BUSHKILL, PA (LAT 41 05 52N LONG 075 00 15W) | | | | | | | | | | | | | |
| MAY 2001 08... | 28 | 2.6 | <13 | 50 | 8.9 | .34 | 6 | <.004 | <.002 | <.005 | E.003 | <.010 | <.041 |
| AUG 20... | 33 | <2.0 | E6 | 30 | 14.6 | -- | <1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 01440000 FLAT BROOK NEAR FLATBROOKVILLE NJ (LAT 41 06 24N LONG 074 57 09W) | | | | | | | | | | | | | |
| MAY 2001 10... | -- | -- | -- | -- | -- | -- | -- | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 10... | -- | -- | <13 | <10 | <3.2 | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | 122 | <2.0 | E10 | 50 | 12.6 | .21 | 1 | <.004 | <.002 | <.005 | E.003 | <.010 | <.041 |
| AUG 23... | 151 | <2.0 | E13 | 20 | <3.0 | .05 | 1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 01440304 BRODHEAD CREEK NEAR MOUNTAINHOME, PA (LAT 41 09 49N LONG 075 14 24W) | | | | | | | | | | | | | |
| MAY 2001 15... | 39 | <2.0 | E9 | 10 | 5.8 | -- | <1 | <.004 | <.002 | <.005 | E.002 | <.010 | <.041 |
| AUG 21... | 45 | <2.0 | E12 | M | E2.0 | -- | <1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 01442550 MARSHALLS CREEK NEAR MARSHALLS CREEK, PA (LAT 41 04 09N LONG 075 08 24W) | | | | | | | | | | | | | |
| MAY 2001 15... | 47 | 2.5 | E7 | M | 4.2 | .05 | 3 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| AUG 21... | 53 | 2.4 | E11 | 10 | 5.9 | .01 | 3 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 01447120 LEHIGH RIVER NEAR GOULDSBORO, PA (LAT 41 14 13N LONG 075 30 04W) | | | | | | | | | | | | | |
| MAY 2001 08... | 34 | -- | E10 | 80 | 27.5 | .12 | 2 | <.004 | <.002 | <.005 | .009 | <.010 | <.041 |
| AUG 21... | 37 | <2.0 | E12 | 110 | 15.0 | .02 | 1 | <.004 | <.002 | <.005 | E.002 | <.010 | <.041 |
| 01447530 TOBYHANNA CREEK AT WARNERTOWN, PA (LAT 41 09 42N LONG 075 27 21W) | | | | | | | | | | | | | |
| MAY 2001 08... | 65 | -- | E10 | 80 | 16.4 | .26 | 4 | <.004 | <.002 | <.005 | E.004 | <.010 | <.041 |
| AUG 21... | 65 | <2.0 | 16 | 70 | 14.1 | .02 | 1 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| 01467000 NORTH BRANCH RANOCAS CREEK AT PEMBERTON NJ (LAT 39 58 12N LONG 074 41 05W) | | | | | | | | | | | | | |
| OCT 2000 03... | -- | 2.6 | E12 | 780 | 16.5 | 1.7 | 4 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 |
| MAY 2001 16... | 30 | 4.1 | 13 | 480 | 23.2 | .43 | 2 | <.004 | <.002 | <.005 | E.003 | <.010 | E.007 |
| AUG 29... | | 5.0 | 19 | 560 | 18.6 | .51 | 4 | <.004 | <.002 | <.005 | <.007 | <.010 | E.012 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPTIC SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) |
|---|--|--|---|---|--|---|--|---|--|---|---|--|--|
| 01439680 LITTLE BUSHKILL CREEK AT BUSHKILL, PA (LAT 41 05 52N LONG 075 00 15W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 20... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| 01440000 FLAT BROOK NEAR FLATBROOKVILLE NJ (LAT 41 06 24N LONG 074 57 09W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 10... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 23... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| 01440304 BRODHEAD CREEK NEAR MOUNTAINHOME, PA (LAT 41 09 49N LONG 075 14 24W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 15... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 21... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| 01442550 MARSHALLS CREEK NEAR MARSHALLS CREEK, PA (LAT 41 04 09N LONG 075 08 24W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 15... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 21... | <.020 | <.005 | <.003 | <.005 | <.005 | <.004 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| 01447120 LEHIGH RIVER NEAR GOULDSBORO, PA (LAT 41 14 13N LONG 075 30 04W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.003 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 21... | <.020 | <.005 | <.003 | <.005 | <.005 | <.004 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| 01447530 TOBYHANNA CREEK AT WARNERTOWN, PA (LAT 41 09 42N LONG 075 27 21W) | | | | | | | | | | | | | |
| MAY 2001 | | | | | | | | | | | | | |
| 08... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 21... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| 01467000 NORTH BRANCH RANOCAS CREEK AT PEMBERTON NJ (LAT 39 58 12N LONG 074 41 05W) | | | | | | | | | | | | | |
| OCT 2000 | | | | | | | | | | | | | |
| 03... | <.020 | E.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |
| MAY 2001 | | | | | | | | | | | | | |
| 16... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | E.003 | <.006 | <.002 |
| AUG | | | | | | | | | | | | | |
| 29... | <.020 | <.005 | <.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 | <.013 | <.006 | <.002 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SURFACE-WATER SYNOPSIS SAMPLING,--Continued
MAY 7 THROUGH MAY 16, AND AUGUST 20 THROUGH AUGUST 29 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE | NAPROP- AMIDE WATER FLTRD 0.7 U (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U (UG/L) (82683) | TEBU- THIURON WATER FLTRD 0.7 U (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82661) |
|----------|--|---|--|--|---|--|--|
| 01439680 | LITTLE BUSHKILL CREEK AT BUSHKILL, PA (LAT 41 05 52N LONG 075 00 15W) | | | | | | |
| MAY 2001 | | | | | | | |
| 08... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 20... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01440000 | FLAT BROOK NEAR FLATBROOKVILLE NJ (LAT 41 06 24N LONG 074 57 09W) | | | | | | |
| MAY 2001 | | | | | | | |
| 10... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 10... | -- | -- | -- | -- | -- | -- | -- |
| 10... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 23... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01440304 | BRODHEAD CREEK NEAR MOUNTAINHOME, PA (LAT 41 09 49N LONG 075 14 24W) | | | | | | |
| MAY 2001 | | | | | | | |
| 15... | <.007 | E.001 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 21... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01442550 | MARSHALLS CREEK NEAR MARSHALLS CREEK, PA (LAT 41 04 09N LONG 075 08 24W) | | | | | | |
| MAY 2001 | | | | | | | |
| 15... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 21... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01447120 | LEHIGH RIVER NEAR GOULDSBORO, PA (LAT 41 14 13N LONG 075 30 04W) | | | | | | |
| MAY 2001 | | | | | | | |
| 08... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 21... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01447530 | TOBYHANNA CREEK AT WARNERTOWN, PA (LAT 41 09 42N LONG 075 27 21W) | | | | | | |
| MAY 2001 | | | | | | | |
| 08... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 21... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |
| 01467000 | NORTH BRANCH RANOCAS CREEK AT PEMBERTON NJ (LAT 39 58 12N LONG 074 41 05W) | | | | | | |
| OCT 2000 | | | | | | | |
| 03... | .007 | <.003 | <.010 | E.006 | E.041 | <.005 | <.009 |
| MAY 2001 | | | | | | | |
| 16... | <.007 | <.003 | <.010 | E.006 | <.034 | <.005 | <.009 |
| AUG | | | | | | | |
| 29... | <.007 | <.003 | <.010 | <.016 | <.034 | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

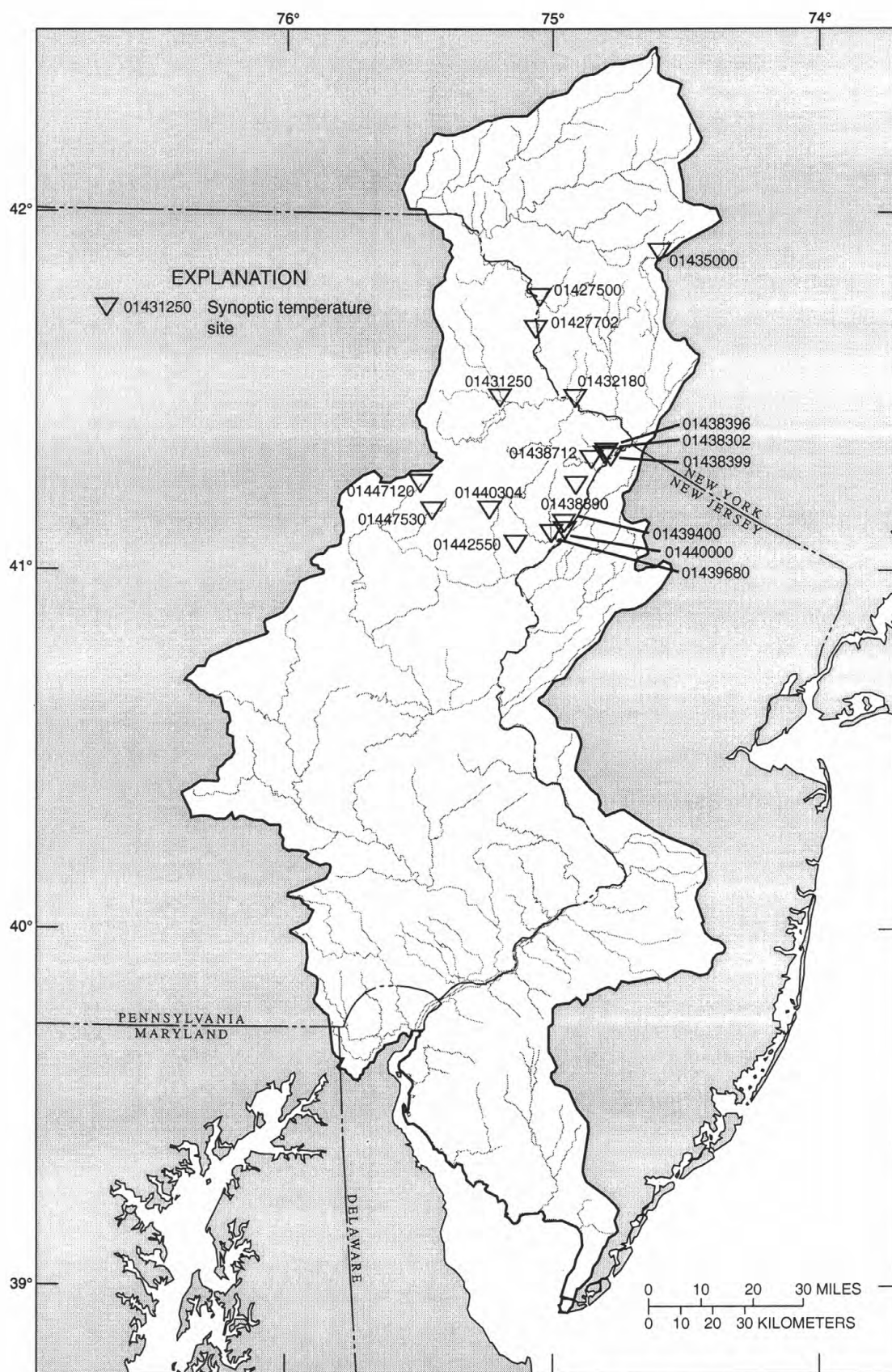


Figure 60. Location of sites in the Delaware River Basin National Water-Quality Assessment Program, water temperature synoptic study, water year 2001.

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, CONTINUOUS WATER-TEMPERATURE DATA

Continuous water-temperature data were collected at the Delaware River Basin National Water-Quality Assessment (DELR NAWQA) synoptic sites from August 1 through September 19, 2001. These data were collected to coincide with ecological data that were being collected during that time frame at most of these sites. Each site was instrumented with an, in situ, submersible, water-temperature logger that was programmed to record every 30 minutes. Additional water-quality data collected as part of the DELR NAWQA synoptic study are listed in "Water Quality at Miscellaneous Surface-Water Sites."

01427500 CALLICOON CREEK AT CALLICOON, NY (LAT 41 45 39N LONG 07502 55W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 22.5 | 18.0 | 20.5 |
| 2 | --- | --- | --- | --- | --- | --- | 25.5 | 18.5 | 21.5 | 21.0 | 15.0 | 17.5 |
| 3 | --- | --- | --- | --- | --- | --- | 23.5 | 20.0 | 21.5 | 21.5 | 14.0 | 17.5 |
| 4 | --- | --- | --- | --- | --- | --- | 24.5 | 20.0 | 22.0 | 20.0 | 16.0 | 17.5 |
| 5 | --- | --- | --- | --- | --- | --- | 25.5 | 20.0 | 22.5 | 21.0 | 15.0 | 17.5 |
| 6 | --- | --- | --- | --- | --- | --- | 26.5 | 19.5 | 22.5 | 20.5 | 13.5 | 16.5 |
| 7 | --- | --- | --- | --- | --- | --- | 27.0 | 20.5 | 23.0 | 21.0 | 14.0 | 17.0 |
| 8 | --- | --- | --- | --- | --- | --- | 26.0 | 21.0 | 23.0 | 21.5 | 15.0 | 18.0 |
| 9 | --- | --- | --- | --- | --- | --- | 27.5 | 20.5 | 23.0 | 23.0 | 17.0 | 19.0 |
| 10 | --- | --- | --- | --- | --- | --- | 23.5 | 21.5 | 22.5 | 20.5 | 18.0 | 19.0 |
| 11 | --- | --- | --- | --- | --- | --- | 22.5 | 20.0 | 21.5 | 21.5 | 16.5 | 18.5 |
| 12 | --- | --- | --- | --- | --- | --- | 21.5 | 20.0 | 21.0 | 21.0 | 14.5 | 17.0 |
| 13 | --- | --- | --- | --- | --- | --- | 23.0 | 20.5 | 21.5 | 20.5 | 14.5 | 17.0 |
| 14 | --- | --- | --- | --- | --- | --- | 23.0 | 19.0 | 21.0 | 18.0 | 14.0 | 16.0 |
| 15 | --- | --- | --- | --- | --- | --- | 24.0 | 18.0 | 21.0 | 17.5 | 11.5 | 14.0 |
| 16 | --- | --- | --- | --- | --- | --- | 23.5 | 18.5 | 21.0 | 18.0 | 11.5 | 14.0 |
| 17 | --- | --- | --- | --- | --- | --- | 23.5 | 20.0 | 21.5 | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | 22.0 | 18.5 | 20.0 | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | 23.5 | 18.5 | 20.5 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 24.5 | 20.0 | 21.5 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 22.0 | 18.5 | 20.5 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 24.0 | 17.5 | 20.0 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 19.5 | 17.0 | 18.0 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 23.0 | 17.0 | 19.5 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 23.5 | 16.0 | 19.0 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 22.5 | 17.0 | 19.5 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 21.5 | 19.0 | 20.0 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 22.0 | 17.0 | 19.0 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | 23.5 | 18.0 | 20.0 | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | 20.5 | 16.5 | 18.5 | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | 23.5 | 18.5 | 20.5 | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 27.5 | 16.0 | 20.9 | --- | --- | --- |

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, CONTINUOUS WATER-TEMPERATURE DATA,--Continued

01427702 CALKINS CREEK 1200 FEET ABOVE MOUTH AT MILANVILLE, PA (LAT 41 40 22N LONG 075 03 53W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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

01431250 MIDDLE CREEK AT HAWLEY, PA (LAT 41 28 49N LONG 075 12 03W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 22.5 | 19.5 | 21.0 |
| 2 | --- | --- | --- | --- | --- | --- | 26.5 | 20.5 | 23.5 | 22.0 | 17.5 | 19.5 |
| 3 | --- | --- | --- | --- | --- | --- | 27.0 | 22.0 | 24.5 | 21.5 | 16.0 | 18.5 |
| 4 | --- | --- | --- | --- | --- | --- | 26.0 | 22.5 | 24.0 | 19.5 | 17.0 | 18.5 |
| 5 | --- | --- | --- | --- | --- | --- | 27.5 | 22.5 | 25.0 | 20.5 | 16.5 | 18.5 |
| 6 | --- | --- | --- | --- | --- | --- | 28.0 | 22.5 | 25.5 | 20.5 | 14.5 | 18.0 |
| 7 | --- | --- | --- | --- | --- | --- | 28.5 | 23.5 | 26.0 | 21.5 | 15.0 | 18.5 |
| 8 | --- | --- | --- | --- | --- | --- | 29.5 | 23.5 | 26.5 | 22.0 | 16.5 | 19.5 |
| 9 | --- | --- | --- | --- | --- | --- | 29.5 | 23.0 | 26.5 | 22.5 | 17.5 | 20.0 |
| 10 | --- | --- | --- | --- | --- | --- | 27.0 | 25.0 | 26.0 | 22.0 | 19.5 | 20.5 |
| 11 | --- | --- | --- | --- | --- | --- | 25.0 | 22.0 | 23.5 | 21.0 | 17.0 | 19.0 |
| 12 | --- | --- | --- | --- | --- | --- | 24.0 | 22.0 | 23.0 | 20.5 | 15.5 | 18.5 |
| 13 | --- | --- | --- | --- | --- | --- | 26.0 | 22.5 | 24.0 | 21.0 | 15.5 | 18.5 |
| 14 | --- | --- | --- | --- | --- | --- | 25.5 | 21.5 | 23.5 | 19.0 | 15.5 | 17.5 |
| 15 | --- | --- | --- | --- | --- | --- | 25.0 | 20.0 | 22.5 | 17.5 | 13.0 | 15.5 |
| 16 | --- | --- | --- | --- | --- | --- | 25.0 | 20.0 | 22.5 | 18.0 | 12.5 | 15.5 |
| 17 | --- | --- | --- | --- | --- | --- | 24.5 | 22.0 | 23.0 | 18.0 | 12.5 | 15.5 |
| 18 | --- | --- | --- | --- | --- | --- | 24.0 | 19.5 | 22.0 | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | 24.0 | 19.5 | 22.0 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 25.0 | 21.5 | 23.0 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 23.5 | 19.5 | 22.0 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 23.5 | 18.5 | 21.5 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 21.0 | 18.5 | 20.0 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 23.0 | 18.5 | 21.0 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 23.0 | 17.5 | 20.5 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 23.0 | 18.0 | 21.0 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 22.0 | 20.5 | 21.0 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 23.5 | 18.5 | 21.0 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | 23.5 | 19.0 | 21.0 | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | 22.0 | 17.5 | 19.5 | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | 23.5 | 19.0 | 21.5 | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 29.5 | 17.5 | 22.9 | --- | --- | --- |

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, CONTINUOUS WATER-TEMPERATURE DATA,--Continued

01432180 HALFWAY BROOK AT BARRYVILLE, NY (LAT 41 28 38N LONG 074 54 39W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20.5 | 17.0 | 19.0 |
| 2 | --- | --- | --- | --- | --- | --- | 21.5 | 17.5 | 19.0 | 18.0 | 14.5 | 16.0 |
| 3 | --- | --- | --- | --- | --- | --- | 22.0 | 18.5 | 20.0 | 18.0 | 13.5 | 15.5 |
| 4 | --- | --- | --- | --- | --- | --- | 22.0 | 19.5 | 20.5 | 16.5 | 14.5 | 15.5 |
| 5 | --- | --- | --- | --- | --- | --- | 23.0 | 19.5 | 20.5 | 17.5 | 14.5 | 15.5 |
| 6 | --- | --- | --- | --- | --- | --- | 23.5 | 19.5 | 21.0 | 17.0 | 13.0 | 15.0 |
| 7 | --- | --- | --- | --- | --- | --- | 24.0 | 20.0 | 21.5 | 17.5 | 13.0 | 15.5 |
| 8 | --- | --- | --- | --- | --- | --- | 24.0 | 20.5 | 22.0 | 18.5 | 14.0 | 16.5 |
| 9 | --- | --- | --- | --- | --- | --- | 24.5 | 20.5 | 22.0 | 19.0 | 15.5 | 17.0 |
| 10 | --- | --- | --- | --- | --- | --- | 23.5 | 21.0 | 22.0 | 18.5 | 17.0 | 17.5 |
| 11 | --- | --- | --- | --- | --- | --- | 22.0 | 20.0 | 20.5 | 18.5 | 15.5 | 17.0 |
| 12 | --- | --- | --- | --- | --- | --- | 20.5 | 19.5 | 20.0 | 17.5 | 14.0 | 15.5 |
| 13 | --- | --- | --- | --- | --- | --- | 22.0 | 19.5 | 20.5 | 17.5 | 14.0 | 15.5 |
| 14 | --- | --- | --- | --- | --- | --- | 21.5 | 19.0 | 20.0 | 16.5 | 13.5 | 15.0 |
| 15 | --- | --- | --- | --- | --- | --- | 21.5 | 18.0 | 19.5 | 14.5 | 11.5 | 13.0 |
| 16 | --- | --- | --- | --- | --- | --- | 21.5 | 17.5 | 19.5 | 14.5 | 11.0 | 13.0 |
| 17 | --- | --- | --- | --- | --- | --- | 21.0 | 19.0 | 19.5 | 15.0 | 11.5 | 13.0 |
| 18 | --- | --- | --- | --- | --- | --- | 20.5 | 17.5 | 19.0 | 14.5 | 11.5 | 13.0 |
| 19 | --- | --- | --- | --- | --- | --- | 21.0 | 17.5 | 19.0 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 21.5 | 18.5 | 20.0 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 20.0 | 17.5 | 19.0 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 20.5 | 16.5 | 18.5 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 18.0 | 16.0 | 17.0 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 20.0 | 16.5 | 18.0 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 20.0 | 16.0 | 18.0 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 20.0 | 16.0 | 18.0 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 18.5 | 17.5 | 18.0 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 20.5 | 17.5 | 18.5 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | 20.0 | 17.0 | 18.0 | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | 18.0 | 15.5 | 17.0 | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | 20.5 | 17.0 | 18.5 | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 24.5 | 15.5 | 19.5 | --- | --- | --- |

01435000 NEVERSINK RIVER NEAR CLARYVILLE, NY (LAT 41 53 24N LONG 074 35 25W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20.5 | 15.5 | 17.5 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 19.5 | 13.0 | 15.5 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20.0 | 12.5 | 15.5 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 18.0 | 14.5 | 16.0 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20.0 | 14.0 | 16.0 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 19.5 | 12.5 | 15.5 |
| 7 | --- | --- | --- | --- | --- | --- | 22.0 | 16.5 | 19.0 | 20.5 | 13.0 | 16.0 |
| 8 | --- | --- | --- | --- | --- | --- | 23.0 | 16.5 | 19.0 | 20.5 | 13.5 | 16.5 |
| 9 | --- | --- | --- | --- | --- | --- | 24.0 | 16.5 | 19.5 | 20.0 | 14.5 | 17.0 |
| 10 | --- | --- | --- | --- | --- | --- | 20.5 | 17.5 | 19.0 | 17.5 | 15.5 | 16.5 |
| 11 | --- | --- | --- | --- | --- | --- | 20.0 | 16.0 | 18.0 | 19.5 | 13.5 | 16.0 |
| 12 | --- | --- | --- | --- | --- | --- | 18.0 | 16.5 | 17.0 | 19.5 | 13.0 | 15.5 |
| 13 | --- | --- | --- | --- | --- | --- | 20.0 | 16.5 | 18.0 | 19.0 | 13.0 | 15.5 |
| 14 | --- | --- | --- | --- | --- | --- | 20.0 | 16.0 | 17.5 | 16.0 | 13.5 | 14.5 |
| 15 | --- | --- | --- | --- | --- | --- | 21.0 | 14.5 | 17.0 | 17.5 | 11.0 | 13.5 |
| 16 | --- | --- | --- | --- | --- | --- | 20.0 | 15.5 | 17.5 | 18.0 | 11.0 | 14.0 |
| 17 | --- | --- | --- | --- | --- | --- | 20.5 | 16.5 | 17.5 | 18.0 | 11.5 | 14.0 |
| 18 | --- | --- | --- | --- | --- | --- | 19.5 | 15.5 | 17.0 | 17.5 | 12.0 | 14.5 |
| 19 | --- | --- | --- | --- | --- | --- | 20.5 | 15.5 | 17.5 | 17.0 | 12.5 | 14.5 |
| 20 | --- | --- | --- | --- | --- | --- | 20.0 | 16.5 | 17.5 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 19.0 | 15.0 | 17.0 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 21.0 | 14.5 | 17.0 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 16.5 | 14.5 | 16.0 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 21.0 | 15.0 | 17.5 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 21.0 | 14.0 | 17.0 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 20.0 | 15.0 | 17.0 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 19.0 | 16.0 | 17.0 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 20.0 | 14.5 | 16.5 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | 20.0 | 14.5 | 16.5 | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | 17.0 | 14.0 | 15.5 | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | 21.0 | 15.5 | 17.5 | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 24.0 | 14.0 | 17.5 | --- | --- | --- |

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, CONTINUOUS WATER-TEMPERATURE DATA,--Continued

01438302 VANDERMARK CREEK AT MOUTH AT MILFORD, PA (LAT 41 19 20N LONG 074 47 44W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | 18.0 | 14.5 | 16.0 | --- | --- | --- |
| 2 | --- | --- | --- | --- | --- | --- | 19.0 | 15.5 | 17.0 | --- | --- | --- |
| 3 | --- | --- | --- | --- | --- | --- | 19.0 | 16.5 | 17.5 | --- | --- | --- |
| 4 | --- | --- | --- | --- | --- | --- | 18.0 | 16.5 | 17.5 | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | --- | 19.0 | 16.5 | 17.5 | --- | --- | --- |
| 6 | --- | --- | --- | --- | --- | --- | 20.0 | 17.0 | 18.0 | --- | --- | --- |
| 7 | --- | --- | --- | --- | --- | --- | 21.0 | 17.5 | 19.0 | --- | --- | --- |
| 8 | --- | --- | --- | --- | --- | --- | 21.0 | 18.0 | 19.5 | --- | --- | --- |
| 9 | --- | --- | --- | --- | --- | --- | 21.5 | 18.0 | 19.5 | --- | --- | --- |
| 10 | --- | --- | --- | --- | --- | --- | 20.5 | 19.0 | 20.0 | --- | --- | --- |
| 11 | --- | --- | --- | --- | --- | --- | 19.5 | 17.5 | 18.0 | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | 18.0 | 17.0 | 17.5 | --- | --- | --- |
| 13 | --- | --- | --- | --- | --- | --- | 19.0 | 17.5 | 18.0 | --- | --- | --- |
| 14 | --- | --- | --- | --- | --- | --- | 19.0 | 17.5 | 18.0 | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | 18.5 | 16.5 | 17.5 | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | 18.5 | 16.0 | 17.0 | --- | --- | --- |
| 17 | --- | --- | --- | --- | --- | --- | 18.5 | 17.0 | 17.5 | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | 18.0 | 15.5 | 17.0 | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | 18.0 | 16.0 | 17.0 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 19.0 | 17.0 | 17.5 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 17.5 | 16.0 | 17.0 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 18.0 | 15.5 | 16.5 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 16.5 | 15.0 | 15.5 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 17.5 | 15.0 | 16.0 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 17.5 | 14.0 | 15.5 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 17.5 | 14.0 | 16.0 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 17.0 | 16.0 | 16.5 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 18.0 | 15.5 | 16.5 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | 17.5 | 15.0 | 16.0 | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | 16.5 | 14.5 | 15.5 | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 21.5 | 14.0 | 17.5 | --- | --- | --- |

01438396 SAWKILL CREEK 2000 FEET ABOVE MOUTH AT MILFORD, PA (LAT 41 19 08N LONG 074 48 10W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | 20.5 | 16.5 | 18.5 | --- | --- | --- |
| 2 | --- | --- | --- | --- | --- | --- | 21.5 | 17.5 | 19.5 | --- | --- | --- |
| 3 | --- | --- | --- | --- | --- | --- | 21.5 | 18.5 | 20.0 | --- | --- | --- |
| 4 | --- | --- | --- | --- | --- | --- | 21.0 | 19.0 | 20.0 | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | --- | 22.0 | 18.5 | 20.0 | --- | --- | --- |
| 6 | --- | --- | --- | --- | --- | --- | 22.0 | 19.0 | 20.5 | --- | --- | --- |
| 7 | --- | --- | --- | --- | --- | --- | 23.0 | 19.0 | 21.0 | --- | --- | --- |
| 8 | --- | --- | --- | --- | --- | --- | 23.5 | 20.0 | 21.5 | --- | --- | --- |
| 9 | --- | --- | --- | --- | --- | --- | 23.5 | 19.5 | 21.5 | --- | --- | --- |
| 10 | --- | --- | --- | --- | --- | --- | 22.0 | 20.5 | 21.5 | --- | --- | --- |
| 11 | --- | --- | --- | --- | --- | --- | 21.0 | 19.5 | 20.0 | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | 20.0 | 19.0 | 19.5 | --- | --- | --- |
| 13 | --- | --- | --- | --- | --- | --- | 21.5 | 19.0 | 20.0 | --- | --- | --- |
| 14 | --- | --- | --- | --- | --- | --- | 21.5 | 19.0 | 20.0 | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | 21.0 | 18.0 | 19.5 | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | 20.5 | 17.5 | 19.0 | --- | --- | --- |
| 17 | --- | --- | --- | --- | --- | --- | 20.5 | 18.5 | 19.0 | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | 20.0 | 17.0 | 18.5 | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | 20.0 | 17.5 | 18.5 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 20.5 | 18.5 | 19.5 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 19.5 | 17.5 | 18.5 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 19.5 | 17.0 | 18.5 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 18.5 | 16.5 | 17.5 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 19.0 | 17.0 | 18.0 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 19.0 | 15.5 | 17.5 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 19.0 | 15.5 | 17.5 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 18.5 | 17.0 | 18.0 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 19.5 | 17.0 | 18.0 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | 19.0 | 17.0 | 18.0 | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 23.5 | 15.5 | 19.3 | --- | --- | --- |

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, CONTINUOUS WATER-TEMPERATURE DATA,--Continued

01438399 SHIMERS BROOK AT MILLVILLE ROAD NEAR MONTAGUE, NJ (LAT 41 18 47N LONG 074 46 44W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | 22.0 | 19.0 | 20.5 | --- | --- | --- |
| 2 | --- | --- | --- | --- | --- | --- | 22.5 | 20.0 | 21.5 | --- | --- | --- |
| 3 | --- | --- | --- | --- | --- | --- | 23.0 | 21.5 | 22.0 | --- | --- | --- |
| 4 | --- | --- | --- | --- | --- | --- | 23.0 | 22.0 | 22.5 | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | --- | 23.5 | 21.5 | 22.5 | --- | --- | --- |
| 6 | --- | --- | --- | --- | --- | --- | 24.5 | 22.0 | 23.5 | --- | --- | --- |
| 7 | --- | --- | --- | --- | --- | --- | 25.0 | 23.0 | 24.5 | --- | --- | --- |
| 8 | --- | --- | --- | --- | --- | --- | 25.0 | 23.0 | 24.5 | --- | --- | --- |
| 9 | --- | --- | --- | --- | --- | --- | 26.0 | 23.0 | 24.5 | --- | --- | --- |
| 10 | --- | --- | --- | --- | --- | --- | 25.0 | 24.5 | 25.0 | --- | --- | --- |
| 11 | --- | --- | --- | --- | --- | --- | 25.0 | 22.0 | 23.0 | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | 22.5 | 21.5 | 22.0 | --- | --- | --- |
| 13 | --- | --- | --- | --- | --- | --- | 23.5 | 22.5 | 23.0 | --- | --- | --- |
| 14 | --- | --- | --- | --- | --- | --- | 24.5 | 22.0 | 23.0 | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | 24.5 | 21.0 | 23.0 | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | 23.5 | 20.5 | 22.0 | --- | --- | --- |
| 17 | --- | --- | --- | --- | --- | --- | 22.0 | 21.0 | 21.5 | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | 21.5 | 19.5 | 20.5 | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | 22.0 | 20.0 | 21.0 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 23.0 | 21.5 | 22.0 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 22.0 | 20.5 | 21.5 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 21.5 | 19.5 | 20.5 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 20.5 | 18.5 | 19.5 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 20.5 | 19.0 | 20.0 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 20.5 | 18.0 | 19.0 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 20.5 | 18.0 | 19.5 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 21.0 | 20.0 | 20.5 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 21.5 | 19.5 | 20.5 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | 21.0 | 19.0 | 20.0 | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 26.0 | 18.0 | 21.8 | --- | --- | --- |

01438712 RAYMONDS CREEK BELOW SWALE BROOK NEAR SILVER SPRING, PA (LAT 41 18 19N LONG 074 51 05W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, CONTINUOUS WATER-TEMPERATURE DATA,--Continued

01438890 DINGMANS CREEK BELOW FULMER FALLS NEAR DINGMANS FERRY, PA (LAT 41 13 52N LONG 074 54 37W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | 19.5 | 16.5 | 18.0 | --- | --- | --- |
| 2 | --- | --- | --- | --- | --- | --- | 19.5 | 17.0 | 18.5 | --- | --- | --- |
| 3 | --- | --- | --- | --- | --- | --- | 20.5 | 18.5 | 19.5 | --- | --- | --- |
| 4 | --- | --- | --- | --- | --- | --- | 20.5 | 19.0 | 20.0 | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | --- | 21.5 | 19.0 | 20.5 | --- | --- | --- |
| 6 | --- | --- | --- | --- | --- | --- | 22.0 | 20.0 | 21.0 | --- | --- | --- |
| 7 | --- | --- | --- | --- | --- | --- | 23.0 | 20.5 | 21.5 | --- | --- | --- |
| 8 | --- | --- | --- | --- | --- | --- | 23.0 | 21.0 | 22.0 | --- | --- | --- |
| 9 | --- | --- | --- | --- | --- | --- | 22.5 | 20.5 | 21.5 | --- | --- | --- |
| 10 | --- | --- | --- | --- | --- | --- | 22.0 | 21.0 | 21.5 | --- | --- | --- |
| 11 | --- | --- | --- | --- | --- | --- | 21.0 | 19.5 | 20.0 | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | 21.0 | 19.5 | 20.0 | --- | --- | --- |
| 13 | --- | --- | --- | --- | --- | --- | 21.5 | 20.5 | 21.0 | --- | --- | --- |
| 14 | --- | --- | --- | --- | --- | --- | 21.5 | 20.0 | 21.0 | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | 20.5 | 18.5 | 19.5 | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | 20.0 | 18.0 | 19.0 | --- | --- | --- |
| 17 | --- | --- | --- | --- | --- | --- | 20.0 | 19.0 | 19.5 | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | 20.0 | 18.0 | 19.0 | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | 19.5 | 18.0 | 18.5 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 20.5 | 19.0 | 19.5 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 19.5 | 17.5 | 18.5 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 19.0 | 17.0 | 18.0 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 18.0 | 16.5 | 17.0 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 18.5 | 17.0 | 17.5 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 18.0 | 15.5 | 17.0 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 18.0 | 15.5 | 17.0 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 18.5 | 17.5 | 18.0 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 19.0 | 17.0 | 18.0 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 23.0 | 15.5 | 19.4 | --- | --- | --- |

01439400 TOMS CREEK AT EGYPT MILLS, PA (LAT 41 07 33N LONG 074 57 20W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | 16.5 | 15.0 | 16.0 | --- | --- | --- |
| 2 | --- | --- | --- | --- | --- | --- | 17.5 | 15.5 | 16.5 | --- | --- | --- |
| 3 | --- | --- | --- | --- | --- | --- | 18.0 | 16.5 | 17.0 | --- | --- | --- |
| 4 | --- | --- | --- | --- | --- | --- | 17.5 | 16.5 | 17.0 | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | --- | 17.5 | 16.0 | 17.0 | --- | --- | --- |
| 6 | --- | --- | --- | --- | --- | --- | 18.0 | 16.5 | 17.5 | --- | --- | --- |
| 7 | --- | --- | --- | --- | --- | --- | 19.0 | 17.0 | 18.0 | --- | --- | --- |
| 8 | --- | --- | --- | --- | --- | --- | 18.5 | 17.5 | 18.0 | --- | --- | --- |
| 9 | --- | --- | --- | --- | --- | --- | 19.0 | 17.5 | 18.0 | --- | --- | --- |
| 10 | --- | --- | --- | --- | --- | --- | 19.0 | 18.0 | 18.5 | --- | --- | --- |
| 11 | --- | --- | --- | --- | --- | --- | 18.0 | 17.0 | 17.5 | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | 17.0 | 16.5 | 17.0 | --- | --- | --- |
| 13 | --- | --- | --- | --- | --- | --- | 17.5 | 17.0 | 17.0 | --- | --- | --- |
| 14 | --- | --- | --- | --- | --- | --- | 17.5 | 16.5 | 17.0 | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | 17.5 | 16.0 | 17.0 | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | 17.5 | 16.0 | 16.5 | --- | --- | --- |
| 17 | --- | --- | --- | --- | --- | --- | 18.0 | 17.0 | 17.0 | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | 17.0 | 16.0 | 16.5 | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | 17.0 | 16.0 | 16.5 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 18.0 | 17.0 | 17.5 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 17.5 | 16.5 | 17.0 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 17.0 | 16.0 | 16.5 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 16.5 | 15.5 | 16.0 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 16.5 | 15.5 | 16.0 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 16.5 | 15.0 | 16.0 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 16.5 | 15.0 | 16.0 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 17.0 | 16.0 | 16.5 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 17.5 | 16.0 | 17.0 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 19.0 | 15.0 | 16.9 | --- | --- | --- |

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, CONTINUOUS WATER-TEMPERATURE DATA,--Continued

01439680 LITTLE BUSHKILL CREEK AT BUSHKILL, PA (LAT 41 05 52N LONG 075 00 15W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | 19.0 | 16.0 | 17.5 | --- | --- | --- |
| 2 | --- | --- | --- | --- | --- | --- | 20.0 | 17.0 | 18.5 | --- | --- | --- |
| 3 | --- | --- | --- | --- | --- | --- | 20.0 | 18.0 | 19.0 | --- | --- | --- |
| 4 | --- | --- | --- | --- | --- | --- | 20.0 | 18.5 | 19.5 | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | --- | 21.0 | 18.5 | 19.5 | --- | --- | --- |
| 6 | --- | --- | --- | --- | --- | --- | 21.5 | 19.0 | 20.5 | --- | --- | --- |
| 7 | --- | --- | --- | --- | --- | --- | 22.5 | 19.5 | 21.0 | --- | --- | --- |
| 8 | --- | --- | --- | --- | --- | --- | 22.5 | 20.5 | 21.5 | --- | --- | --- |
| 9 | --- | --- | --- | --- | --- | --- | 23.0 | 20.5 | 21.5 | --- | --- | --- |
| 10 | --- | --- | --- | --- | --- | --- | 22.5 | 21.5 | 22.0 | --- | --- | --- |
| 11 | --- | --- | --- | --- | --- | --- | 21.5 | 19.5 | 20.5 | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | 20.5 | 19.5 | 20.0 | --- | --- | --- |
| 13 | --- | --- | --- | --- | --- | --- | 21.0 | 20.5 | 20.5 | --- | --- | --- |
| 14 | --- | --- | --- | --- | --- | --- | 21.0 | 19.5 | 20.0 | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | 20.5 | 18.5 | 19.5 | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | 20.0 | 17.5 | 19.0 | --- | --- | --- |
| 17 | --- | --- | --- | --- | --- | --- | 20.5 | 19.0 | 19.5 | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | 19.5 | 17.5 | 18.5 | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | 19.5 | 18.0 | 18.5 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 21.0 | 19.0 | 19.5 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 19.5 | 18.0 | 18.5 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 19.5 | 17.0 | 18.0 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 17.5 | 16.5 | 17.0 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 19.0 | 17.0 | 18.0 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 19.0 | 16.0 | 17.5 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 18.5 | 15.5 | 17.0 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 18.5 | 17.5 | 18.0 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 23.0 | 15.5 | 19.3 | --- | --- | --- |

01440000 FLAT BROOK AT FLATBROOKVILLE, NJ (Lat 41 06 24N long 74 57 09W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|------|------|--------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.0 | 19.0 | 21.0 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20.5 | 16.5 | 18.0 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20.0 | 16.0 | 17.5 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 19.0 | 17.0 | 18.0 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20.5 | 17.0 | 18.0 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 19.5 | 15.5 | 17.0 |
| 7 | --- | --- | --- | --- | --- | --- | 26.5 | 22.0 | 24.0 | 20.0 | 15.5 | 17.5 |
| 8 | --- | --- | --- | --- | --- | --- | 27.0 | 23.0 | 24.5 | 21.0 | 16.5 | 18.0 |
| 9 | --- | --- | --- | --- | --- | --- | 27.5 | 22.5 | 24.5 | 21.0 | 17.5 | 19.0 |
| 10 | --- | --- | --- | --- | --- | --- | 25.0 | 23.5 | 24.0 | 20.5 | 19.0 | 19.5 |
| 11 | --- | --- | --- | --- | --- | --- | 23.5 | 21.5 | 22.5 | 21.0 | 17.5 | 19.0 |
| 12 | --- | --- | --- | --- | --- | --- | 22.0 | 21.0 | 21.5 | 20.0 | 16.5 | 18.0 |
| 13 | --- | --- | --- | --- | --- | --- | 23.5 | 21.0 | 22.0 | 20.0 | 16.0 | 18.0 |
| 14 | --- | --- | --- | --- | --- | --- | 24.0 | 21.0 | 22.0 | 18.5 | 15.5 | 17.0 |
| 15 | --- | --- | --- | --- | --- | --- | 24.0 | 20.0 | 21.5 | 17.0 | 13.5 | 15.0 |
| 16 | --- | --- | --- | --- | --- | --- | 23.5 | 19.5 | 21.5 | 16.5 | 13.0 | 14.5 |
| 17 | --- | --- | --- | --- | --- | --- | 23.0 | 21.0 | 21.5 | 17.0 | 13.5 | 14.5 |
| 18 | --- | --- | --- | --- | --- | --- | 22.5 | 19.5 | 21.0 | 16.5 | 14.0 | 15.0 |
| 19 | --- | --- | --- | --- | --- | --- | 22.5 | 19.5 | 21.0 | 17.0 | 14.0 | 15.5 |
| 20 | --- | --- | --- | 23.5 | 18.5 | 20.5 | 24.0 | 20.5 | 22.0 | --- | --- | --- |
| 21 | --- | --- | --- | 24.0 | 18.0 | 20.5 | 22.5 | 20.0 | 21.0 | --- | --- | --- |
| 22 | --- | --- | --- | 23.5 | 18.5 | 20.5 | 23.0 | 19.0 | 20.5 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 20.5 | 18.5 | 19.5 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 22.5 | 18.5 | 20.0 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 21.5 | 18.0 | 19.5 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 21.5 | 17.5 | 19.0 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 21.0 | 19.5 | 20.0 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 23.0 | 19.5 | 20.5 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | 23.0 | 19.5 | 20.5 | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | 20.5 | 18.0 | 19.5 | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | 22.5 | 19.5 | 20.5 | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 27.5 | 17.5 | 21.5 | --- | --- | --- |

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, CONTINUOUS WATER-TEMPERATURE DATA,--Continued

01440304 BRODHEAD CREEK NEAR MOUNTAINHOME, PA (LAT 41 09 49N LONG 075 14 24W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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

01442550 MARSHALLS CREEK NEAR MARSHALLS CREEK, PA (LAT 41 04 09N LONG 075 08 24W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | 19.0 | 16.5 | 17.5 | --- | --- | --- |
| 2 | --- | --- | --- | --- | --- | --- | 19.5 | 17.0 | 18.5 | --- | --- | --- |
| 3 | --- | --- | --- | --- | --- | --- | 20.0 | 18.5 | 19.0 | --- | --- | --- |
| 4 | --- | --- | --- | --- | --- | --- | 19.5 | 19.0 | 19.0 | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | --- | 20.5 | 18.0 | 19.5 | --- | --- | --- |
| 6 | --- | --- | --- | --- | --- | --- | 21.0 | 19.0 | 20.0 | --- | --- | --- |
| 7 | --- | --- | --- | --- | --- | --- | 22.0 | 19.5 | 21.0 | --- | --- | --- |
| 8 | --- | --- | --- | --- | --- | --- | 22.5 | 20.5 | 21.5 | --- | --- | --- |
| 9 | --- | --- | --- | --- | --- | --- | 22.5 | 20.5 | 21.5 | --- | --- | --- |
| 10 | --- | --- | --- | --- | --- | --- | 22.0 | 21.0 | 22.0 | --- | --- | --- |
| 11 | --- | --- | --- | --- | --- | --- | 21.0 | 19.5 | 20.0 | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | 20.0 | 19.5 | 19.5 | --- | --- | --- |
| 13 | --- | --- | --- | --- | --- | --- | 20.5 | 19.5 | 20.0 | --- | --- | --- |
| 14 | --- | --- | --- | --- | --- | --- | 20.0 | 19.0 | 19.5 | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | 20.0 | 18.0 | 19.0 | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | 19.5 | 17.5 | 19.0 | --- | --- | --- |
| 17 | --- | --- | --- | --- | --- | --- | 20.0 | 19.0 | 19.5 | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | 19.5 | 17.5 | 18.5 | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | 19.5 | 18.0 | 18.5 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 20.5 | 19.0 | 19.5 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 19.5 | 18.0 | 18.5 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 19.0 | 17.0 | 18.0 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 18.0 | 17.0 | 17.5 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 18.5 | 17.0 | 17.5 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 18.5 | 16.5 | 17.5 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 18.5 | 16.0 | 17.5 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 18.5 | 17.5 | 18.0 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 22.5 | 16.0 | 19.2 | --- | --- | --- |

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, CONTINUOUS WATER-TEMPERATURE DATA,--Continued

01447120 LEHIGH RIVER NEAR GOULDSBORO, PA (LAT 41 14 13N LONG 075 30 04W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 21.5 | 18.0 | 20.0 |
| 2 | --- | --- | --- | --- | --- | --- | 23.0 | 18.0 | 21.0 | 18.5 | 14.5 | 16.5 |
| 3 | --- | --- | --- | --- | --- | --- | 22.5 | 19.5 | 21.0 | 19.0 | 14.5 | 17.0 |
| 4 | --- | --- | --- | --- | --- | --- | 25.0 | 20.0 | 22.5 | 19.0 | 17.0 | 18.0 |
| 5 | --- | --- | --- | --- | --- | --- | 26.5 | 22.5 | 24.0 | 19.0 | 16.5 | 17.5 |
| 6 | --- | --- | --- | --- | --- | --- | 26.5 | 22.5 | 24.5 | 18.0 | 14.0 | 16.0 |
| 7 | --- | --- | --- | --- | --- | --- | 27.0 | 22.5 | 24.5 | 19.0 | 14.0 | 16.5 |
| 8 | --- | --- | --- | --- | --- | --- | 27.5 | 23.5 | 25.5 | 19.5 | 15.5 | 18.0 |
| 9 | --- | --- | --- | --- | --- | --- | 27.5 | 22.5 | 25.0 | 20.5 | 17.5 | 19.0 |
| 10 | --- | --- | --- | --- | --- | --- | 25.5 | 23.5 | 24.5 | 19.5 | 18.0 | 19.0 |
| 11 | --- | --- | --- | --- | --- | --- | 23.5 | 21.0 | 22.0 | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | 23.5 | 21.0 | 22.5 | --- | --- | --- |
| 13 | --- | --- | --- | --- | --- | --- | 24.0 | 22.0 | 23.0 | --- | --- | --- |
| 14 | --- | --- | --- | --- | --- | --- | 24.0 | 21.0 | 22.5 | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | 23.5 | 19.5 | 21.5 | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | 23.5 | 19.5 | 21.5 | --- | --- | --- |
| 17 | --- | --- | --- | --- | --- | --- | 23.0 | 21.0 | 22.0 | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | 22.0 | 18.5 | 20.5 | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | 22.5 | 18.5 | 20.5 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 23.0 | 20.5 | 21.5 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 21.0 | 18.0 | 19.5 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 21.5 | 17.0 | 19.5 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 20.0 | 17.5 | 18.5 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 21.0 | 18.5 | 19.5 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 21.5 | 17.0 | 19.0 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 21.5 | 17.5 | 19.5 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 20.5 | 19.5 | 20.0 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 21.5 | 18.0 | 19.5 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | 21.0 | 18.0 | 19.5 | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | 19.5 | 17.0 | 18.5 | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | 22.5 | 19.0 | 20.5 | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 27.5 | 17.0 | 21.5 | --- | --- | --- |

01447530 TOBYHANNA CREEK AT WARNERTOWN, PA (LAT 41 09 42N LONG 075 27 21W)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 21.0 | 18.5 | 20.0 |
| 2 | --- | --- | --- | --- | --- | --- | 23.0 | 18.0 | 20.5 | 18.5 | 15.5 | 17.0 |
| 3 | --- | --- | --- | --- | --- | --- | 23.5 | 20.0 | 21.5 | 19.0 | 15.0 | 17.0 |
| 4 | --- | --- | --- | --- | --- | --- | 22.5 | 19.5 | 21.0 | 19.0 | 17.0 | 18.0 |
| 5 | --- | --- | --- | --- | --- | --- | 24.5 | 20.0 | 22.0 | 19.0 | 16.0 | 17.5 |
| 6 | --- | --- | --- | --- | --- | --- | 25.0 | 21.5 | 23.5 | 18.0 | 14.0 | 16.5 |
| 7 | --- | --- | --- | --- | --- | --- | 26.0 | 22.0 | 24.0 | 19.0 | 14.5 | 17.0 |
| 8 | --- | --- | --- | --- | --- | --- | 26.5 | 22.5 | 24.5 | 20.0 | 15.5 | 18.0 |
| 9 | --- | --- | --- | --- | --- | --- | 26.5 | 22.5 | 24.5 | 20.5 | 17.5 | 19.0 |
| 10 | --- | --- | --- | --- | --- | --- | 25.5 | 24.0 | 24.5 | 20.0 | 18.0 | 19.0 |
| 11 | --- | --- | --- | --- | --- | --- | 24.0 | 20.0 | 21.5 | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | 22.5 | 20.0 | 21.0 | --- | --- | --- |
| 13 | --- | --- | --- | --- | --- | --- | 23.0 | 21.5 | 22.0 | --- | --- | --- |
| 14 | --- | --- | --- | --- | --- | --- | 23.0 | 20.5 | 22.0 | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | 23.0 | 19.5 | 21.0 | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | 22.5 | 19.5 | 21.0 | --- | --- | --- |
| 17 | --- | --- | --- | --- | --- | --- | 22.5 | 20.5 | 21.5 | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | 21.5 | 18.5 | 20.0 | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | 21.5 | 19.0 | 20.5 | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | 23.0 | 20.5 | 21.5 | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | 21.5 | 19.0 | 20.0 | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | 21.0 | 17.0 | 19.0 | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | 19.5 | 18.0 | 18.5 | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | 20.5 | 17.5 | 19.0 | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | 20.5 | 17.0 | 19.0 | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | 20.5 | 17.5 | 19.0 | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | 20.0 | 19.0 | 19.5 | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | 21.0 | 18.0 | 19.5 | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | 20.5 | 18.0 | 19.5 | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | 19.0 | 17.5 | 18.5 | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | 21.5 | 19.0 | 20.0 | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 26.5 | 17.0 | 21.1 | --- | --- | --- |

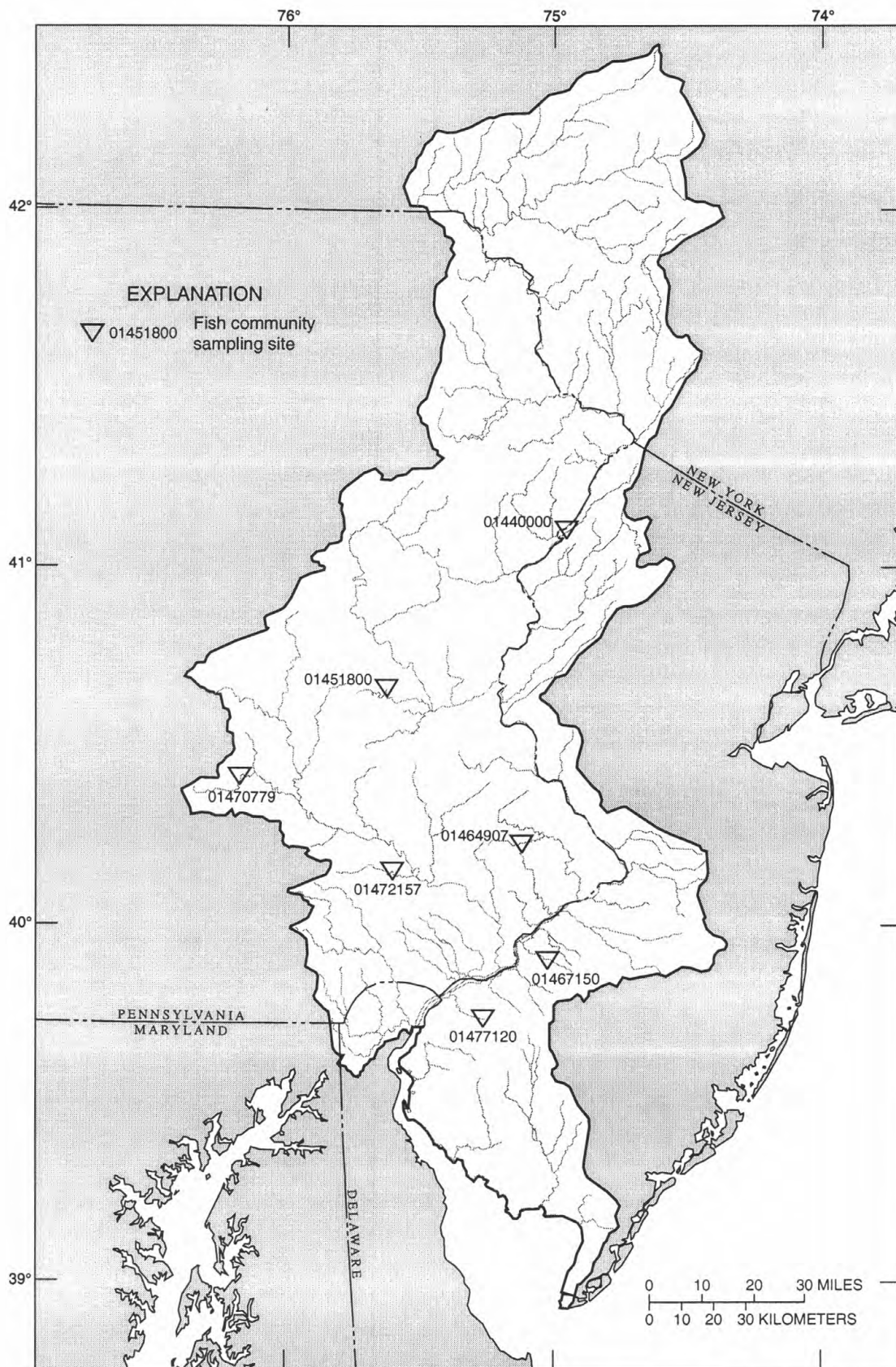


Figure 61. Location of sites in the Delaware River Basin National Water-Quality Assessment Program, fish-community survey, water year 2001.

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, FISH COMMUNITY SURVEY

Fish-community surveys were conducted at 7 stream sites in the Delaware River basin during 2001. Sites were located in New Jersey and Pennsylvania. Fish were collected from each site by electrofishing with pulsed-DC current in a representative reach 153 to 310 meters long. One electrofishing pass was conducted at each reach except at station 01467150, at which two passes were conducted. One-quarter inch mesh was used for the dip nets. Fish were identified, measured, weighed, and checked for anomalies such as parasites, lesions, and skeletal deformities. Most individuals were returned to the stream after processing. More details regarding collection methods can be found in Meador and others, 1993, Methods for sampling fish communities as part of the National Water-Quality Assessment program: U.S. Geological Survey Open-File Report 93-104, 40 p. Additional surface-water and/or water-quality data for these sites can be found in the continuous record section of this report. Family names are in uppercase, scientific names are in italics, and common names follow. Minimum and maximum total lengths (in mm) are in parenthesis below abundance.

List of stations and collection dates

| Station ID | Station name | Collection Date |
|------------|---|-----------------|
| 01440000 | FLAT BROOK NEAR FLATBROOKVILLE, NJ | 07-19-01 |
| 01451800 | JORDAN CREEK NEAR SCHNECKSVILLE, PA | 07-18-01 |
| 01464907 | LITTLE NESHAMINY CREEK AT VALLEY ROAD, NEAR NESHAMINY, PA | 07-24-01 |
| 01467150 | COOPER RIVER AT HADDONFIELD, NJ | 07-11-01 |
| 01470779 | TULPEHOCKEN CREEK NEAR BERNVILLE, PA | 07-17-01 |
| 01472157 | FRENCH CREEK NEAR PHOENIXVILLE, PA | 07-12-01 |
| 01477120 | RACCOON CREEK NEAR SWEDESBORO, NJ | 07-10-01 |

Fish species, numbers, minimum and maximum total lengths (in mm), collected during 2001

| FAMILY scientific name common name | 01440000 | 01451800 | 01464907 | 01467150 | 01470779 | 01472157 | 01477120 |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| PETROMYZONTIDAE | | | | | | | |
| <i>Lampetra appendix</i> American brook lamprey | 0 | 0 | 0 | 0 | 0 | 0 | 46 (78-177) |
| <i>Petromyzon marinus</i> sea lamprey | 13 (85-140) | 0 | 0 | 0 | 0 | 0 | 16 (142-177) |
| ANGUILLIDAE | | | | | | | |
| <i>Anguilla rostrata</i> American eel | 170 (40-475) | 19 (160-586) | 40 (130-570) | 51 (108-655) | 0 | 5 (375-860) | 41 (111-540) |
| CLUPEIDAE | | | | | | | |
| <i>Alosa aestivalis</i> blueback herring | 0 | 0 | 0 | 7 (55-66) | 0 | 0 | 0 |
| <i>Alosa pseudoharengus</i> alewife | 0 | 0 | 0 | 1 (66) | 0 | 0 | 1 (47) |
| CYPRINIDAE | | | | | | | |
| <i>Cyprinella analostana</i> satinfin shiner | 0 | 7 (51-83) | 29 (43-82) | 0 | 0 | 9 (30-94) | 12 (58-93) |
| <i>C. spiloptera</i> spotfin shiner | 0 | 0 | 42 (48-104) | 0 | 13 (75-102) | 0 | 0 |
| <i>Cyprinus carpio</i> common carp | 0 | 0 | 0 | 2 (324-366) | 30 (304-638) | 0 | 0 |
| <i>Exoglossum maxillingua</i> cutlips minnow | 221 (45-115) | 348 (55-128) | 0 | 0 | 37 (49-130) | 154 (51-129) | 0 |
| <i>Hybognathus regius</i> eastern silvery minnow | 0 | 0 | 0 | 15 (47-140) | 0 | 0 | 52 (90-137) |
| <i>Luxilus cornutus</i> common shiner | 0 | 65 (28-121) | 1 (84) | 0 | 2 (70-76) | 51 (54-133) | 31 (70-106) |
| <i>Notemigonus crysoleucas</i> golden shiner | 0 | 0 | 0 | 0 | 0 | 0 | 6 (82-112) |
| <i>Notropis amoenus</i> comely shiner | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>N. hudsonius</i> spottail shiner | 0 | 0 | 24 (47-56) | 153 (31-111) | 29 (35-104) | 4 (75-102) | 69 (67-127) |
| <i>N. procne</i> swallowtail shiner | 0 | 0 | 166 (46-75) | 0 | 0 | 4 (50-66) | 11 (45-68) |
| <i>Pimephales notatus</i> bluntnose minnow | 0 | 62 (47-73) | 0 | 0 | 11 (57-82) | 0 | 0 |
| <i>P. promelas</i> fathead minnow | 0 | 0 | 0 | 0 | 1 (73) | 0 | 0 |

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES
DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, FISH COMMUNITY SURVEY

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| FAMILY scientific name common name | 01440000 | 01451800 | 01464907 | 01467150 | 01470779 | 01472157 | 01477120 |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|
| <i>Rhinichthys atratulus</i> blacknose dace | 889 (29-79) | 520 (30-73) | 3 (40-47) | 0 | 144 (36-86) | 85 (50-67) | 0 |
| <i>R. cataractae</i> longnose dace | 106 (56-115) | 331 (40-101) | 0 | 0 | 74 (55-115) | 67 (32-118) | 0 |
| <i>Semotilus atromaculatus</i> creek chub | 0 | 2 (32-32) | 0 | 0 | 1 (78) | 1 (76) | 0 |
| <i>Semotilus corporalis</i> fallfish | 3 (41-47) | 0 | 0 | 2 (50-50) | 2 (71-72) | 89 (37-290) | 46 (80-253) |
| CATOSTOMIDAE | | | | | | | |
| <i>Catostomus commersoni</i> white sucker | 97 (29-51) | 551 (30-355) | 256 (52-300) | 59 (44-314) | 245 (40-385) | 94 (35-341) | 82 (37-363) |
| <i>Erimyzon oblongus</i> creek chubsucker | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>Hypentelium nigricans</i> northern hog sucker | 7 (72-92) | 0 | 0 | 0 | 0 | 0 | 0 |
| ICTALURIDAE | | | | | | | |
| <i>Ameiurus catus</i> white catfish | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>A. natalis</i> yellow bullhead | 0 | 0 | 21 (117-260) | 0 | 0 | 3 (149-171) | 0 |
| <i>A. nebulosus</i> brown bullhead | 0 | 0 | 1 (83) | 1 (39) | 0 | 3 (134-162) | 0 |
| <i>Ictalurus punctatus</i> channel catfish | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>Noturus insignis</i> marginated madtom | 11 (65-118) | 181 (55-140) | 0 | 0 | 0 | 13 (72-135) | 0 |
| ESOCIDAE | | | | | | | |
| <i>Esox americanus</i> redfin pickerel | 0 | 1 (155) | 1 (88) | 0 | 0 | 0 | 3 (77-121) |
| <i>Esox niger</i> chain pickerel | 0 | 0 | 0 | 1 (120) | 0 | 0 | 0 |
| UMBRIDAE | | | | | | | |
| <i>Umbra pygmaea</i> eastern mudminnow | 0 | 0 | 0 | 0 | 0 | 0 | 8 (45-74) |
| SALMONIDAE | | | | | | | |
| <i>Oncorhynchus mykiss</i> rainbow trout | 0 | 5 (288-373) | 0 | 0 | 0 | 7 (227-280) | 0 |
| <i>Salmo trutta</i> brown trout | 1 (74) | 4 (181-221) | 0 | 0 | 3 (274-335) | 51 (212-299) | 0 |
| APHREDODERIDAE | | | | | | | |
| <i>Aphredoderus sayanus</i> pirate perch | 0 | 0 | 0 | 0 | 0 | 0 | 2 (71-74) |
| CYPRINODONTIDAE | | | | | | | |
| <i>Fundulus diaphanus</i> banded killifish | 0 | 11 (56-82) | 48 (55-101) | 0 | 0 | 0 | 0 |
| PERCICHTHYIDAE | | | | | | | |
| <i>Morone americana</i> white perch | 0 | 0 | 0 | 12 (105-186) | 0 | 0 | 1 (166) |

WATER QUALITY AT MISCELLANEOUS SURFACE-WATER SITES
DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, FISH COMMUNITY SURVEY

| FAMILY scientific name common name | 01440000 | 01451800 | 01464907 | 01467150 | 01470779 | 01472157 | 01477120 |
|---|----------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|
| <i>Morone saxatilis</i> striped bass | 0 | 0 | 0 | 0 | 0 | 0 | 2 (178-244) |
| CENTRARCHIDAE | | | | | | | |
| <i>Ambloplites rupestris</i> rock bass | 0 | 45 (60-168) | 40 (76-195) | 0 | 17 (103-183) | 140 (46-192) | 0 |
| <i>Lepomis auritus</i> redbreast sunfish | 0 | 24 (49-160) | 186 (19-173) | 0 | 0 | 18 (66-125) | 11 (66-141) |
| <i>L. cyaneus</i> green sunfish | 0 | 1 (62) | 24 (35-131) | 16 (45-126) | 6 (60-145) | 19 (48-164) | 0 |
| <i>L. gibbosus</i> pumpkinseed | 0 | 2 (97-99) | 14 (74-133) | 85 (55-165) | 2 (60-145) | 1 (72) | 63 (49-122) |
| <i>L. macrochirus</i> bluegill | 0 | 2 (81-178) | 7 (59-87) | 166 (46-134) | 38 (85-145) | 7 (55-91) | 9 (46-131) |
| <i>Micropterus dolomieu</i> smallmouth bass | 1 (57) | 2 (210-282) | 2 (30-283) | 0 | 0 | 23 (30-300) | 0 |
| <i>M. salmoides</i> largemouth bass | 0 | 0 | 3 (61-233) | 32 (27-441) | 3 (61-157) | 35 (44-69) | 5 (42-145) |
| <i>Pomoxis nigromaculatus</i> black crappie | 0 | 0 | 2 (43-173) | 0 | 1 (168) | 0 | 0 |
| PERCIDAE | | | | | | | |
| <i>Etheostoma olmstedii</i> tessellated darter | 117 (43-71) | 38 (35-79) | 170 (39-76) | 207 (31-73) | 50 (31-69) | 64 (35-75) | 50 (32-78) |
| <i>Perca flavescens</i> yellow perch | 0 | 0 | 0 | 3 (56-71) | 0 | 0 | 0 |
| <i>Percina peltata</i> shield darter | 59 (35-92) | 0 | 0 | 0 | 0 | 31 (66-90) | 0 |

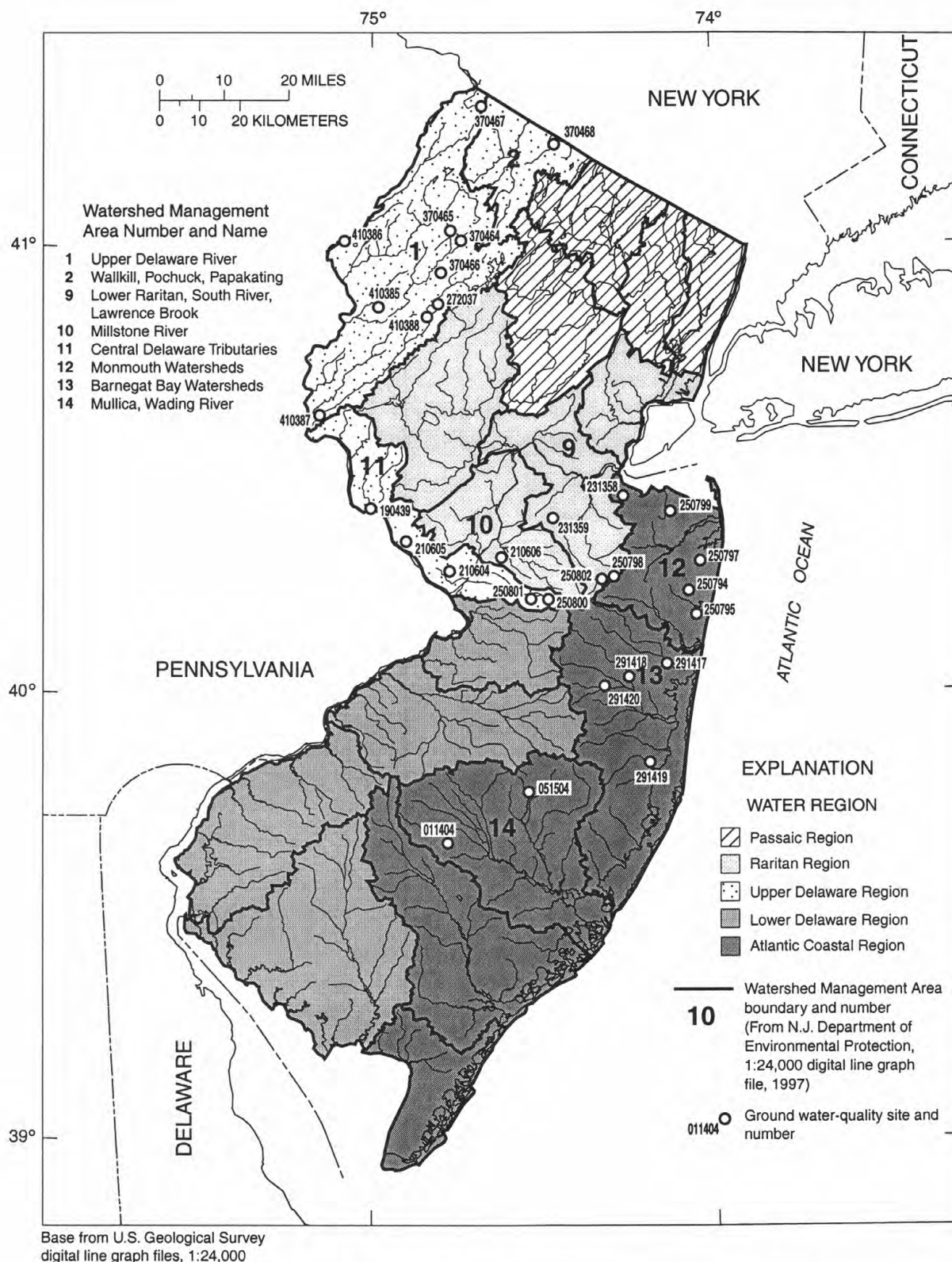


Figure 62. Location of sites in the Ambient Ground-Water-Quality Network, water year 2001.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK

WATERSHED MANAGEMENT AREA 1

| STATION IDENTIFICATION NUMBER | NJ-WRD WELL NUMBER | LOCAL IDENTIFIER | LATITUDE | LONGITUDE | ALTITUDE OF LAND SURFACE (FT.) | WELL DEPTH | SCREEN INTERVAL (FT.) | AQUIFER UNIT |
|-------------------------------------|--------------------------|---------------------------|----------|-----------|---|---------------|-----------------------------|-----------------|
| 403719075091801 | 410387 | NJDEP POHATCONG MW82 | 403719 | 0750918 | 190 | 12 | 7 - 12 | 112SFDF |
| 405035074502201 | 410388 | NJDEP COH HATCHERY MW85 | 405035 | 0745022 | 520 | 12 | 2 - 12 | 112SFDF |
| *405154074585701 | 410385 | NJDEP JENNY JUMP SP MW88 | 405154 | 0745857 | 420 | 37 | 17 - 37 | 112SFDF |
| *405220074482201 | 272037 | NJDEP STEPHENS SP MW84 | 405220 | 0744822 | 615 | 57.5 | 43 - 58 | 112SFDF |
| 405631074475001 | 370466 | NJDEP ALLAMUCHY SP MW90 | 405631 | 0744750 | 560 | 13.8 | 9 - 14 | 112SFDF |
| *410049075045801 | 410386 | NJDEP WORTHINGTON SP MW92 | 410049 | 0750458 | 320 | 36 | 31 - 36 | 112SFDF |
| *410053074441301 | 370464 | NJDEP ANDOVER MW86 | 410053 | 0744413 | 600 | 38 | 33 - 38 | 112SFDF |
| *410213074460901 | 370465 | NJDEP AUGUSTA MW97 | 410213 | 0744609 | 621 | 31.5 | 27 - 32 | 112SFDF |
| 411853074403601 | 370467 | NJDEP HIGH POINT SP MW100 | 411853 | 0744036 | 1340 | 50 | 40 - 50 | 350HGFL |

* - Field data and samples for laboratory analyses provided by the New Jersey Department of Environmental Protection.

Aquifer units:

121SFDF - Stratified drift

350HGFL - High Falls Formation

REMARKS.--For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Explanation of the records, Quality-control data" in the "Introduction".

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | SAMPLE TYPE | FLOW RATE (G/M) (00059) | PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) |
|-------------------------------|-----------------|--------|----------|------|----------------|----------------------------------|--|--|---|---|
| NJDEP MW82 | 403719075091801 | | 09-24-01 | 1110 | ENVIRONMENTAL | -- | 75 | 9.9 | 755 | 53 |
| NJDEP MW85 | 405035074502201 | | 09-27-01 | 1210 | ENVIRONMENTAL | .10 | 100 | 180 | 745 | 62 |
| NJDEP MW88 | 405154074585701 | | 09-24-01 | 1000 | ENVIRONMENTAL | .50 | 60 | 6.0 | 752 | 45 |
| NJDEP MW84 | 405220074482201 | | 09-25-01 | 1045 | ENVIRONMENTAL | 3.0 | 95 | 19 | 739 | 51 |
| NJDEP MW90 | 405631074475001 | | 09-17-01 | 1255 | AMBIENT BLANK | -- | -- | -- | -- | -- |
| | | | 09-17-01 | 1300 | ENVIRONMENTAL | .94 | 38 | .2 | 758 | 50 |
| NJDEP MW92 | 410049075045801 | | 09-19-01 | 1030 | ENVIRONMENTAL | .50 | 45 | 2.6 | 760 | 37 |
| NJDEP MW86 | 410053074441301 | | 09-17-01 | 1030 | ENVIRONMENTAL | .50 | 45 | .5 | 752 | 39 |
| NJDEP MW97 | 410213074460901 | | 09-18-01 | 1015 | ENVIRONMENTAL | .50 | 45 | .9 | 749 | 47 |
| NJDEP MW100 | 411853074403601 | | 09-26-01 | 1200 | ENVIRONMENTAL | .09 | 93 | 12 | 723 | 41 |

| LOCAL IDENT- I- FIER | DATE | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086) |
|-------------------------------|----------|--|--|--|---|--|---|---|--|---|--|
| NJDEP MW82 | 09-24-01 | 4.5 | 6.9 | 342 | 23.0 | 140 | 39.8 | 10.5 | 1.69 | 15.3 | 118 |
| NJDEP MW85 | 09-27-01 | 6.9 | 7.2 | 538 | 9.5 | 240 | 49.7 | 28.2 | 1.37 | 12.7 | 214 |
| NJDEP MW88 | 09-24-01 | 4.8 | 7.4 | 207 | 12.0 | 100 | 22.7 | 10.5 | .57 | 2.4 | 81 |
| NJDEP MW84 | 09-25-01 | 5.5 | 7.8 | 384 | 11.0 | 190 | 40.2 | 21.3 | 2.09 | 6.3 | 163 |
| NJDEP MW90 | 09-17-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-17-01 | 5.2 | 7.4 | 429 | 13.5 | 190 | 48.5 | 17.9 | 2.79 | 6.7 | 142 |
| NJDEP MW92 | 09-19-01 | 3.9 | 7.0 | 244 | 13.0 | 110 | 32.3 | 6.94 | .94 | 3.2 | 77 |
| NJDEP MW86 | 09-17-01 | 4.2 | 7.1 | 819 | 11.0 | 450 | 96.3 | 50.2 | 1.22 | 3.3 | 431 |
| NJDEP MW97 | 09-18-01 | 5.1 | 7.5 | 414 | 11.0 | 200 | 60.7 | 12.1 | .74 | 4.2 | 163 |
| NJDEP MW100 | 09-26-01 | 4.4 | 5.8 | 32 | 10.0 | 12 | 1.86 | 1.79 | .77 | .6 | 7 |

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- IFIER | DATE | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) |
|--------------------------|----------|--|--|---|--|--|---|--|--|--|--|
| NJDEP MW82 | 09-24-01 | 144 | 15.6 | <.2 | 9.7 | 17.9 | 194 | 199 | .056 | .14 | 3.86 |
| NJDEP MW85 | 09-27-01 | 264 | 29.9 | E.1 | 15.6 | 17.3 | 272 | 289 | <.040 | <.10 | .897 |
| NJDEP MW88 | 09-24-01 | 99 | 1.5 | E.1 | 11.8 | 14.5 | 118 | 113 | <.040 | <.10 | E.027 |
| NJDEP MW84 | 09-25-01 | 199 | 18.8 | <.2 | 13.2 | 14.6 | 242 | 215 | <.040 | .17 | .111 |
| NJDEP MW90 | 09-17-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-17-01 | 173 | 13.2 | <.2 | 6.2 | 16.0 | 229 | 243 | <.040 | E.07 | 10.5 |
| NJDEP MW92 | 09-19-01 | 94 | 15.1 | E.1 | 2.7 | 10.1 | 128 | 119 | <.040 | <.10 | .233 |
| NJDEP MW86 | 09-17-01 | 526 | 7.9 | <.2 | 10.7 | 7.1 | 387 | | <.040 | <.10 | .065 |
| NJDEP MW97 | 09-18-01 | 199 | 8.3 | <.2 | 9.7 | 18.3 | 213 | 228 | <.040 | <.10 | 3.67 |
| NJDEP MW100 | 09-26-01 | 8 | .9 | E.1 | 6.1 | 5.6 | 22 | 22 | <.040 | <.10 | E.037 |

| LOCAL IDENT- IFIER | DATE | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106) | ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095) | ARSENIC DIS- SOLVED (UG/L AS AS) (01000) | BARIUM, DIS- SOLVED (UG/L AS BA) (01005) | BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010) | BORON, DIS- SOLVED (UG/L AS B) (01020) |
|--------------------------|----------|--|--|--|---|--|--|---|---|---|---|
| NJDEP MW82 | 09-24-01 | .010 | 4.0 | <.020 | .70 | 1 | .06 | <.2 | 24.0 | <.06 | 35 |
| NJDEP MW85 | 09-27-01 | <.006 | -- | <.020 | .82 | 1 | E.03 | <.2 | 29.1 | <.06 | 13 |
| NJDEP MW88 | 09-24-01 | <.006 | -- | <.020 | .52 | 4 | <.05 | E.2 | 4.2 | <.06 | 12 |
| NJDEP MW84 | 09-25-01 | <.006 | .28 | <.020 | 1.5 | 16 | .13 | E.1 | 11.5 | <.06 | 9 |
| NJDEP MW90 | 09-17-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-17-01 | .006 | -- | <.020 | .55 | 2 | <.05 | E.1 | 6.4 | <.06 | 68 |
| NJDEP MW92 | 09-19-01 | E.003 | -- | E.011 | .56 | 2 | .06 | .2 | 59.9 | <.06 | E6 |
| NJDEP MW86 | 09-17-01 | <.006 | -- | <.020 | .67 | <1 | E.03 | E.1 | 13.8 | <.06 | E6 |
| NJDEP MW97 | 09-18-01 | <.006 | -- | <.020 | .41 | 1 | E.04 | E.1 | 2.4 | <.06 | 11 |
| NJDEP MW100 | 09-26-01 | <.006 | -- | <.020 | 1.4 | 6 | .12 | <.2 | 1.1 | <.06 | <7 |

| LOCAL IDENT- IFIER | DATE | CADMIUM DIS- SOLVED (UG/L AS CD) (01025) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | MERCURY DIS- SOLVED (UG/L AS HG) (71890) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145) | SILVER, DIS- SOLVED (UG/L AS AG) (01075) |
|--------------------------|----------|---|--|---|---|---|---|---|---|--|---|
| NJDEP MW82 | 09-24-01 | .04 | <.8 | 1.0 | 10 | E.08 | 208 | <.01 | 18.7 | .4 | <1.0 |
| NJDEP MW85 | 09-27-01 | .05 | <.8 | .7 | M | .15 | 518 | <.01 | 3.87 | E.2 | <1.0 |
| NJDEP MW88 | 09-24-01 | <.04 | <.8 | .3 | <10 | <.08 | 3.8 | <.01 | <.06 | <.3 | <1.0 |
| NJDEP MW84 | 09-25-01 | .59 | 4.1 | 2.1 | <10 | .44 | 2.7 | <.01 | .41 | <.3 | <1.0 |
| NJDEP MW90 | 09-17-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-17-01 | <.04 | <.8 | .8 | <10 | <.08 | 1.0 | <.01 | <.06 | <.3 | <1.0 |
| NJDEP MW92 | 09-19-01 | E.02 | <.8 | .5 | 20 | <.08 | 199 | <.01 | E.03 | <.3 | <1.0 |
| NJDEP MW86 | 09-17-01 | <.04 | <.8 | 3.4 | <10 | E.04 | 16.3 | <.01 | <.20 | .3 | <1.0 |
| NJDEP MW97 | 09-18-01 | <.04 | <.8 | .3 | <10 | <.08 | <.1 | <.01 | <.06 | E.3 | <1.0 |
| NJDEP MW100 | 09-26-01 | 3.99 | <.8 | 2.3 | <10 | 2.95 | 7.9 | <.01 | 3.25 | <.3 | <1.0 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material is verified but not quantified.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES
 AMBIENT GROUND-WATER-QUALITY NETWORK--Continued
 WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- IFIER | DATE | THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) |
|--------------------------|----------|--|---|---|--|---|--|---|--|---|---|
| NJDEP MW82 | 09-24-01 | <.04 | 2 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW85 | 09-27-01 | <.04 | <1 | .24 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW88 | 09-24-01 | <.04 | <1 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW84 | 09-25-01 | <.04 | 23 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW90 | 09-17-01 | -- | -- | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| | 09-17-01 | <.04 | <1 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW92 | 09-19-01 | <.04 | 1 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW86 | 09-17-01 | <.04 | <1 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW97 | 09-18-01 | <.04 | <1 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW100 | 09-26-01 | E.02 | 27 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |

| LOCAL IDENT- IFIER | DATE | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) |
|--------------------------|----------|---|---------------------------------------|--|---|--|---|---|---|---|---|
| NJDEP MW82 | 09-24-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP HACKETTSTOWN | 09-27-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | .24 | <.10 | <.2 |
| NJDEP MW88 | 09-24-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW84 | 09-25-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW90 | 09-17-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| | 09-17-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW92 | 09-19-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW86 | 09-17-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW97 | 09-18-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW100 | 09-26-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |

| LOCAL IDENT- IFIER | DATE | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) |
|--------------------------|----------|---|--|---|---|---|---|--|---|--|--|
| NJDEP MW82 | 09-24-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW85 | 09-27-01 | <.2 | <.2 | <.10 | <.2 | <.10 | .29 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW88 | 09-24-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW84 | 09-25-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW90 | 09-17-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| | 09-17-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | .2 | <.2 | <.20 | <.10 |
| NJDEP MW92 | 09-19-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW86 | 09-17-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW97 | 09-18-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW100 | 09-26-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |

E Estimated value.

< Actual value is known to be less than the value shown.

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987) | ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126) | BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989) | GROSS BETA, DIS- SOLVED AS (PCI/L) CS-137) (03515) |
|-------------------------------|----------|---------------------------------------|--|---------------------------------------|--|---|--|---|--|---|---|
| NJDEP MW82 | 09-24-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 1.2 | 1.07 | 2.1 | 1.42 |
| NJDEP MW85 | 09-27-01 | <.10 | 13.8 | <.10 | 1.24 | <.20 | <.2 | 1.7 | .49 | 3.0 | 1.47 |
| NJDEP MW88 | 09-24-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | .73 | .10 | 1.3 | .96 |
| NJDEP MW84 | 09-25-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 1.2 | .43 | 1.8 | .76 |
| NJDEP MW90 | 09-17-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | -- | -- | -- | -- |
| | 09-17-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 1.3 | .000 | 2.5 | 3.94 |
| NJDEP MW92 | 09-19-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | .80 | .78 | 1.4 | 3.20 |
| NJDEP MW86 | 09-17-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 2.9 | 1.97 | 4.4 | <4.15 |
| NJDEP MW97 | 09-18-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 1.5 | 2.08 | 2.4 | <4.15 |
| NJDEP MW100 | 09-26-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | .53 | .98 | 1.0 | 2.20 |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) |
|-------------------------------|-----------------|--------|----------|------|---|---|---|---|---|--|--|
| NJDEP MW82 | 403719075091801 | | 09-24-01 | 1110 | <.004 | <.002 | <.005 | .037 | <.010 | <.041 | <.020 |
| NJDEP MW85 | 405035074502201 | | 09-27-01 | 1210 | <.004 | <.002 | <.005 | .020 | <.010 | <.041 | <.020 |
| NJDEP MW88 | 405154074585701 | | 09-24-01 | 1000 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW84 | 405220074482201 | | 09-25-01 | 1045 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW90 | 405631074475001 | | 09-17-01 | 1300 | <.004 | <.002 | <.005 | .355 | <.010 | <.041 | <.020 |
| NJDEP MW92 | 410049075045801 | | 09-19-01 | 1030 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW86 | 410053074441301 | | 09-17-01 | 1030 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW97 | 410213074460901 | | 09-18-01 | 1015 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW100 | 411853074403601 | | 09-26-01 | 1200 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |

| LOCAL IDENT- I- FIER | DATE | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) |
|-------------------------------|----------|--|--|---|--|---|--|---|--|---|--|
| NJDEP MW82 | 09-24-01 | <.005 | <.018 | <.003 | E.077 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW85 | 09-27-01 | <.005 | <.018 | <.003 | E.027 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW88 | 09-24-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW84 | 09-25-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW90 | 09-17-01 | <.005 | <.018 | <.003 | E.318 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW92 | 09-19-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW86 | 09-17-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW97 | 09-18-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW100 | 09-26-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES
 AMBIENT GROUND-WATER-QUALITY NETWORK--Continued
 WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | METHYL- AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) |
|-------------------------------|----------|--|---|--|--|---|---|---|---|---|--|
| NJDEP MW82 | 09-24-01 | <.050 | E.011 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW85 | 09-27-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | E.014 | <.011 | <.016 |
| NJDEP MW88 | 09-24-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW84 | 09-25-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW90 | 09-17-01 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW92 | 09-19-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW86 | 09-17-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW97 | 09-18-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW100 | 09-26-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |

| LOCAL IDENT- I- FIER | DATE | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-------------------------------|----------|--|---|---|
| NJDEP MW82 | 09-24-01 | <.034 | <.005 | <.009 |
| NJDEP MW85 | 09-27-01 | <.034 | <.005 | <.009 |
| NJDEP MW88 | 09-24-01 | <.034 | <.005 | <.009 |
| NJDEP MW84 | 09-25-01 | <.034 | <.005 | E.006 |
| NJDEP MW90 | 09-17-01 | <.034 | <.005 | <.009 |
| NJDEP MW92 | 09-19-01 | <.034 | <.005 | <.009 |
| NJDEP MW86 | 09-17-01 | <.130 | <.005 | <.009 |
| NJDEP MW97 | 09-18-01 | <.034 | <.005 | <.009 |
| NJDEP MW100 | 09-26-01 | <.034 | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

AMBIENT GROUND-WATER-QUALITY NETWORK

WATERSHED MANAGEMENT AREA 2

| STATION IDENTIFICATION NUMBER | NJ-WRD WELL NUMBER | LOCAL IDENTIFIER | LATITUDE | LONGITUDE | ALTITUDE OF LAND SURFACE (FT.) | WELL DEPTH | SCREEN INTERVAL (FT.) | AQUIFER UNIT |
|-------------------------------|--------------------|-------------------------|----------|-----------|--------------------------------|------------|-----------------------|--------------|
| 411348074273901 | 370468 | NJDEP WAWAYANDA SP MW99 | 411348 | 0742739 | 420 | 13.5 | 9 - 14 | 112SFDF |

Aquifer units:
112SFDF - Stratified drift

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENTIFIER | STATION | NUMBER | DATE | TIME | FLOW RATE (G/M) (00059) | PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004) | TURBIDITY FIELD UNFLTRD (NTU) (61028) | BARO-METRIC PRES-SURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301) | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STANDARD UNITS) (00400) |
|------------------|-----------------|--|---|--|---|--|---|--|---|---|---|
| NJDEP MW99 | 411348074273901 | 09-24-01 | 1220 | .25 | 50 | 15 | 749 | 11 | 1.1 | 7.5 | |
| LOCAL IDENTIFIER | DATE | SPECIFIC CONDUCTANCE (US/CM) (00095) | TEMPERATURE (DEG C) (00010) | HARDNESS (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTASSIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | ALKALINITY TOT IT FIELD (MG/L AS CACO3) (39086) | BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453) | CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940) |
| NJDEP MW99 | 09-24-01 | 797 | 14.0 | 350 | 78.3 | 37.0 | 1.45 | 33.9 | 290 | 353 | 72.9 |
| LOCAL IDENTIFIER | DATE | FLUORIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301) | NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITROGEN, MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) | NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671) |
| NJDEP MW99 | 09-24-01 | E.1 | 11.9 | 25.9 | 394 | -- | <.040 | <.10 | 1.85 | E.003 | <.020 |
| LOCAL IDENTIFIER | DATE | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106) | ANTIMONY, DIS-SOLVED (UG/L AS SB) (01095) | ARSENIC, DIS-SOLVED (UG/L AS AS) (01000) | BARIUM, DIS-SOLVED (UG/L AS BA) (01005) | BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010) | BORON, DIS-SOLVED (UG/L AS B) (01020) | CADMIUM, DIS-SOLVED (UG/L AS CD) (01025) | CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030) | COPPER, DIS-SOLVED (UG/L AS CU) (01040) |
| NJDEP MW99 | 09-24-01 | .48 | 2 | .06 | .3 | 28.4 | <.06 | 16 | E.04 | 1.2 | .4 |
| LOCAL IDENTIFIER | DATE | IRON, DIS-SOLVED (UG/L AS FE) (01046) | LEAD, DIS-SOLVED (UG/L AS PB) (01049) | MANGANESE, DIS-SOLVED (UG/L AS MN) (01056) | MERCURY, DIS-SOLVED (UG/L AS HG) (71890) | NICKEL, DIS-SOLVED (UG/L AS NI) (01065) | SELENIUM, DIS-SOLVED (UG/L AS SE) (01145) | SILVER, DIS-SOLVED (UG/L AS AG) (01075) | THALLIUM, DIS-SOLVED (UG/L AS TL) (01057) | ZINC, DIS-SOLVED (UG/L AS ZN) (01090) | 1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506) |
| NJDEP MW99 | 09-24-01 | 10 | .09 | 74.3 | <.01 | <.06 | E.3 | <1.0 | <.04 | <1 | <.10 |
| LOCAL IDENTIFIER | DATE | 1,1-DICHLOROETHANE TOTAL (UG/L) (34496) | 1,1-DICHLOROETHANE TOTAL (UG/L) (34501) | 1,2-DICHLOROETHANE TOTAL (UG/L) (32103) | 1,2-DICHLOROETHANE TOTAL (UG/L) (34541) | TRANS-1,2-DICHLOROETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DICHLORO-WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DICHLORO-WATER UNFLTRD REC (UG/L) (34571) | BENZENE O-DICHLORO-WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMOFORM TOTAL (UG/L) (32104) |
| NJDEP MW99 | 09-24-01 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 |
| LOCAL IDENTIFIER | DATE | CARBON TETRACHLORIDE TOTAL (UG/L) (32102) | CHLOROBENZENE TOTAL (UG/L) (34301) | CHLORO-DIBROMOMETHANE TOTAL (UG/L) (32105) | CHLOROFORM TOTAL (UG/L) (32106) | CIS-1,2-DICHLOROETHENE WATER TOTAL (UG/L) (77093) | BROMODICHLOROMETHANE TOTAL (UG/L) (32101) | DI-CHLORO-DIFLUOROMETHANE TOTAL (UG/L) (34668) | DI-ISOPROPYL ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT-BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) |
| NJDEP MW99 | 09-24-01 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) |
|-------------------------------|----------|---|---|---|--|--|--|--|---------------------------------------|--|---------------------------------------|
| NJDEP MW99 | 09-24-01 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 |

| LOCAL IDENT- I- FIER | DATE | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987) | ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126) | BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989) | GROSS BETA, DIS- SOLVED (PCI/L) AS CS-137 (03515) |
|-------------------------------|----------|--|---|--|---|--|---|--|
| NJDEP MW99 | 09-24-01 | <.10 | <.20 | <.2 | 2.7 | -0.13 | 4.9 | .33 |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | ACETO- | ALA- | ALPHA | ATRA- | BEN- | CAR- | CARBO- |
|-------------------------------|-----------------|---------|----------|---------|---------|---------|-------|-------|---------|-------|--------|
| | | | | | CHLOR, | CHLOR, | | ZINE, | FLUR- | BARYL | FURAN |
| | | | | | WATER, | WATER, | | BHC | ALIN | WATER | WATER |
| | | | | | FLTRD | DISS, | | DIS- | WAT FLD | FLTRD | FLTRD |
| REC | REC, | SOLVED | REC | GF, REC | GF, REC | GF, REC | | | | | |
| (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | (UG/L) | | | | | |
| (49260) | (46342) | (34253) | (39632) | (82673) | (82680) | (82674) | | | | | |
| NJDEP MW99 | 411348074273901 | | 09-24-01 | 1220 | <.004 | <.002 | <.005 | .038 | <.010 | <.041 | <.020 |

| LOCAL IDENT- I- FIER | DATE | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) |
|-------------------------------|----------|--|--|---|--|---|--|---|--|---|--|
| NJDEP MW99 | 09-24-01 | <.005 | <.018 | <.003 | E.076 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |

| LOCAL IDENT- I- FIER | DATE | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) |
|-------------------------------|----------|---|---|--|--|---|---|---|---|---|---|
| NJDEP MW99 | 09-24-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |

| LOCAL IDENT- I- FIER | DATE | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-------------------------------|----------|--|---|---|
| NJDEP MW99 | 09-24-01 | <.034 | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

531

AMBIENT GROUND-WATER-QUALITY NETWORK

WATERSHED MANAGEMENT AREA 9

| STATION IDENTIFICATION NUMBER | NJ-WRD WELL NUMBER | LOCAL IDENTIFIER | LATITUDE | LONGITUDE | ALTITUDE OF LAND SURFACE (FT.) | WELL DEPTH | SCREEN INTERVAL (FT.) | AQUIFER UNIT |
|-------------------------------|--------------------|--------------------------|----------|-----------|--------------------------------|------------|-----------------------|--------------|
| *401508074193501 | 250802 | NJDEP MANALAPAN MW104 | 401508 | 0741935 | 160 | 35.1 | 30 - 35 | 211RDEK |
| *401531074172801 | 250798 | NJDEP FREEHOLD MW69 | 401531 | 0741728 | 150 | 22 | 17 - 22 | 211RDEK |
| 402323074280901 | 231359 | NJDEP PIGEON SWAMP MW102 | 402323 | 0742809 | 100 | 14.5 | 10 - 15 | 111HPPM |

* - Field data and samples for laboratory analyses provided by the New Jersey Department of Environmental Protection.

Aquifer units:

211RDEK - Red Bank Sand

111HPPM - Undifferentiated Holocene, Pleistocene, Pliocene, and Miocene

REMARKS.--For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Explanation of the records, Quality-control data" in the "Introduction".

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENTIFIER | STATION NUMBER | DATE | TIME | SAMPLE TYPE | FLOW RATE (G/M) (00059) | PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004) | TURBIDITY FIELD UNFLTDR (NTU) (61028) | BAROMETRIC PRESURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PERCENT SATURATION) (00301) |
|------------------|-----------------|----------|------|---------------|-------------------------|---|---------------------------------------|------------------------------------|---|
| NJDEP MW104 | 401508074193501 | 09-26-01 | 1030 | ENVIRONMENTAL | 3.0 | 75 | 3.9 | 760 | 41 |
| NJDEP MW69 | 401531074172801 | 08-22-01 | 0900 | AMBIENT BLANK | -- | -- | -- | -- | -- |
| | | 08-22-01 | 0930 | ENVIRONMENTAL | .50 | 35 | .5 | 763 | 6 |
| NJDEP MW102 | 402323074280901 | 09-26-01 | 1120 | ENVIRONMENTAL | .60 | 75 | .8 | 760 | -- |

| LOCAL IDENTIFIER | DATE | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER FIELD (STANDARD UNITS) (00400) | SPECIFIC CONDUCTANCE (US/CM) (00095) | TEMPERATURE WATER (DEG C) (00010) | HARDNESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNESIUM DIS-SOLVED (MG/L AS MG) (00925) | POTASSIUM DIS-SOLVED (MG/L AS K) (00935) | SODIUM DIS-SOLVED (MG/L AS NA) (00930) | ALKALINITY WAT DIS TOT IT (MG/L AS CACO3) (39086) |
|------------------|----------|-----------------------------------|---|--------------------------------------|-----------------------------------|--|---|---|--|--|---|
| NJDEP MW104 | 09-26-01 | 4.2 | 4.9 | 1050 | 13.5 | 73 | 3.42 | 15.6 | 3.69 | 164 | 2 |
| NJDEP MW69 | 08-22-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 08-22-01 | .6 | 4.9 | 499 | 15.0 | 51 | 5.79 | 8.85 | 3.15 | 61.8 | 1 |
| NJDEP MW102 | 09-26-01 | <.2 | 5.9 | 325 | 15.0 | 41 | 6.82 | 5.87 | 2.21 | 3.7 | 96 |

| LOCAL IDENTIFIER | DATE | BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453) | CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUORIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301) | NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623) | NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) |
|------------------|----------|---|---|--|---|--|---|--|--|--|--|
| NJDEP MW104 | 09-26-01 | 2 | 273 | <.2 | 8.9 | 53.8 | 550 | 528 | <.040 | <.10 | .948 |
| NJDEP MW69 | 08-22-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 08-22-01 | 6 | 127 | <.2 | 13.8 | 3.1 | 245 | 250 | 2.70 | 2.9 | 4.41 |
| NJDEP MW102 | 09-26-01 | -- | 4.2 | <.2 | 8.7 | 58.4 | 170 | -- | 1.12 | 1.3 | <.050 |

| LOCAL IDENTIFIER | DATE | NITRITATE DIS-SOLVED (MG/L AS N) (00613) | NITROGEN DIS-SOLVED (MG/L AS N) (00602) | PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106) | ANTIMONY, DIS-SOLVED (UG/L AS SB) (01095) | ARSENIC DIS-SOLVED (UG/L AS AS) (01000) | BARIUM, DIS-SOLVED (UG/L AS BA) (01005) | BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010) | BORON, DIS-SOLVED (UG/L AS B) (01020) |
|------------------|----------|--|---|--|--|---|---|---|---|--|---------------------------------------|
| NJDEP MW104 | 09-26-01 | <.006 | -- | <.020 | <.30 | 87 | <.05 | <.2 | 70.4 | .16 | 22 |
| NJDEP MW69 | 08-22-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 08-22-01 | E.003 | 7.3 | <.020 | .35 | 54 | .05 | <.2 | 35.1 | .15 | 24 |
| NJDEP MW102 | 09-26-01 | E.003 | -- | <.020 | 3.9 | 3 | E.03 | 2.2 | 41.2 | <.06 | E10 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | CADMIUM DIS- SOLVED (UG/L AS CD) (01025) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | MERCURY DIS- SOLVED (UG/L AS HG) (71890) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145) | SILVER, DIS- SOLVED (UG/L AS AG) (01075) |
|-------------------------------|----------|---|--|---|---|---|---|---|---|---|---|
| NJDEP MW104 | 09-26-01 | 2.46 | E.7 | .8 | <10 | E.07 | 115 | <.01 | 25.2 | E.3 | <1.0 |
| NJDEP MW69 | 08-22-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 08-22-01 | .90 | .9 | 1.0 | <10 | <.08 | 224 | <.01 | 64.6 | E.2 | <1.0 |
| NJDEP MW102 | 09-26-01 | E.02 | E.5 | .7 | 59100 | .18 | 2570 | <.01 | 1.83 | <.3 | <1.0 |
| LOCAL IDENT- I- FIER | DATE | THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYLENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHYLENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) |
| NJDEP MW104 | 09-26-01 | E.04 | 52 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW69 | 08-22-01 | -- | -- | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| | 08-22-01 | E.03 | 147 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW102 | 09-26-01 | .10 | 16 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| LOCAL IDENT- I- FIER | DATE | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHYLENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) |
| NJDEP MW104 | 09-26-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW69 | 08-22-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| | 08-22-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | .21 | <.10 | <.10 | <.2 |
| NJDEP MW102 | 09-26-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| LOCAL IDENT- I- FIER | DATE | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) |
| NJDEP MW104 | 09-26-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW69 | 08-22-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| | 08-22-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | 3.4 | <.2 | <.20 | <.10 |
| NJDEP MW102 | 09-26-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| LOCAL IDENT- I- FIER | DATE | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987) | ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126) | BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989) | GROSS BETA, DIS- SOLVED AS (PCI/L) (03515) |
| NJDEP MW104 | 09-26-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 2.7 | 2.42 | 5.2 | 7.46 |
| NJDEP MW69 | 08-22-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | -- | -- | -- | -- |
| | 08-22-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 2.1 | 3.11 | 2.3 | 4.87 |
| NJDEP MW102 | 09-26-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | .85 | .74 | 2.1 | 4.22 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

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AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674) |
|-------------------------------|-----------------|--------|----------|------|--|--|---|---|--|---|---|
| NJDEP MW104 | 401508074193501 | | 09-26-01 | 1030 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW69 | 401531074172801 | | 08-22-01 | 0930 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW102 | 402323074280901 | | 09-26-01 | 1120 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |

| LOCAL IDENT- I- FIER | DATE | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) |
|-------------------------------|----------|--|--|---|--|---|--|---|--|---|--|
| NJDEP MW104 | 09-26-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW69 | 08-22-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW102 | 09-26-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |

| LOCAL IDENT- I- FIER | DATE | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) |
|-------------------------------|----------|---|---|--|--|---|---|---|---|---|---|
| NJDEP MW104 | 09-26-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW69 | 08-22-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW102 | 09-26-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |

| LOCAL IDENT- I- FIER | DATE | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-------------------------------|----------|--|---|---|
| NJDEP MW104 | 09-26-01 | <.034 | <.005 | <.009 |
| NJDEP MW69 | 08-22-01 | <.034 | <.005 | <.009 |
| NJDEP MW102 | 09-26-01 | <.034 | <.005 | <.009 |

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK

WATERSHED MANAGEMENT AREA 10

| STATION IDENTIFICATION NUMBER | NJ-WRD WELL NUMBER | LOCAL IDENTIFIER | LATITUDE | LONGITUDE | ALTITUDE OF LAND SURFACE (FT.) | WELL DEPTH | SCREEN INTERVAL (FT.) | AQUIFER UNIT |
|-------------------------------|--------------------|------------------------|----------|-----------|--------------------------------|------------|-----------------------|--------------|
| 401809074371701 | 210606 | NJDEP CANOE BK DR MW75 | 401809 | 0743717 | 101 | 18 | 13 - 18 | 111HPPM |

Aquifer units:

111HPPM - Undifferentiated Holocene, Pleistocene, Pliocene, and Miocene

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENTIFIER | STATION NUMBER | DATE | TIME | PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) | TURBIDITY FIELD UNFLTRD (NTU) | BAROMETRIC PRESSURE (MM HG) | OXYGEN, DIS-SOLVED (PER CENT SATURATION) | PH | WATER WHOLE FIELD CONDUCTANCE (US/CM) | SPECIFIC | |
|------------------|-----------------|--------------------------------------|--------------------------------------|---|--|--|--|---|---|--|--|
| | | | | (72004) | (61028) | (00025) | (00301) | (00300) | (00400) | (00095) | |
| NJDEP MW75 | 401809074371701 | 08-07-01 | 0920 | 56 | .3 | 762 | 56 | 5.4 | 5.3 | 244 | |
| LOCAL IDENTIFIER | DATE | TEMPERATURE WATER (DEG C) | HARDNESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNESIUM, DIS-SOLVED (MG/L AS MG) | POTASSIUM, DIS-SOLVED (MG/L AS K) | SODIUM, DIS-SOLVED (MG/L AS NA) | ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) | BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) | CHLORIDE, DIS-SOLVED (MG/L AS CL) | FLUORIDE, DIS-SOLVED (MG/L AS F) |
| | | (00010) | (00900) | (00915) | (00925) | (00935) | (00930) | (39086) | (00453) | (00940) | (00950) |
| NJDEP MW75 | 08-07-01 | 17.5 | 53 | 12.0 | 5.61 | 3.75 | 18.6 | 9 | 11 | 39.9 | <.2 |
| LOCAL IDENTIFIER | DATE | SILICA, DIS-SOLVED (MG/L AS SIO2) | SULFATE DIS-SOLVED (MG/L AS SO4) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) | NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) | NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) | PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) |
| | | (00955) | (00945) | (70300) | (70301) | (00608) | (00623) | (00631) | (00613) | (00671) | (00681) |
| NJDEP MW75 | 08-07-01 | 10.1 | 29.5 | 124 | 132 | E.031 | E.06 | 1.65 | <.006 | <.020 | .65 |
| LOCAL IDENTIFIER | DATE | ALUMINUM, DIS-SOLVED (UG/L AS AL) | ANTIMONY, DIS-SOLVED (UG/L AS SB) | ARSENIC DIS-SOLVED (UG/L AS AS) | BARIUM, DIS-SOLVED (UG/L AS BA) | BERYLLIUM, DIS-SOLVED (UG/L AS BE) | BORON, DIS-SOLVED (UG/L AS B) | CADMIUM DIS-SOLVED (UG/L AS CD) | CHROMIUM, DIS-SOLVED (UG/L AS CR) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, DIS-SOLVED (UG/L AS FE) |
| | | (01106) | (01095) | (01000) | (01005) | (01010) | (01020) | (01025) | (01030) | (01040) | (01046) |
| NJDEP MW75 | 08-07-01 | 86 | E.03 | <.2 | 105 | .18 | 34 | .16 | <.8 | 1.6 | <10 |
| LOCAL IDENTIFIER | DATE | LEAD, DIS-SOLVED (UG/L AS PB) | MANGANESE, DIS-SOLVED (UG/L AS MN) | MERCURY DIS-SOLVED (UG/L AS HG) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELENIUM, DIS-SOLVED (UG/L AS SE) | SILVER, DIS-SOLVED (UG/L AS AG) | THALLIUM, DIS-SOLVED (UG/L AS TL) | ZINC, DIS-SOLVED (UG/L AS ZN) | 1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) | 1,1-DI-CHLORO-ETHANE TOTAL (UG/L) |
| | | (01049) | (01056) | (71890) | (01065) | (01145) | (01075) | (01057) | (01090) | (34506) | (34496) |
| NJDEP MW75 | 08-07-01 | .37 | 281 | .02 | 2.18 | .9 | <1.0 | .04 | 5 | <.10 | <.10 |
| LOCAL IDENTIFIER | DATE | 1,1-DI-CHLORO-ETHYLENE TOTAL (UG/L) | 1,2-DI-CHLORO-ETHANE TOTAL (UG/L) | 1,2-DI-CHLORO-PROPANE TOTAL (UG/L) | TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) | BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) | BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) | BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) | BENZENE TOTAL (UG/L) | BROMOFORM TOTAL (UG/L) | CARBON TETRA-CHLORIDE TOTAL (UG/L) |
| | | (34501) | (32103) | (34541) | (34546) | (34566) | (34571) | (34536) | (34030) | (32104) | (32102) |
| NJDEP MW75 | 08-07-01 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 | <.10 | <.10 | <.20 | <.20 |
| LOCAL IDENTIFIER | DATE | CHLORO-DI-BROMO-METHANE TOTAL (UG/L) | CHLORO-DI-BROMO-METHANE TOTAL (UG/L) | CHLORO-ETHENE FORM TOTAL (UG/L) | CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) | BROMO-DI-CHLORO-METHANE TOTAL (UG/L) | DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) | DI-ISO-PROPYL-ETHER, WATER UNFLTRD RECOVER (UG/L) | ETHER, ETHYL WATER UNFLTRD RECOVER (UG/L) | ETHER, TERT-BUTYL ETHYL UNFLTRD RECOVER (UG/L) | ETHER, TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L) |
| | | (34301) | (32105) | (32106) | (77093) | (32101) | (34668) | (81577) | (81576) | (50004) | (50005) |
| NJDEP MW75 | 08-07-01 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 | <.2 | <.2 | <.10 | <.2 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WHOLE TOTAL (UG/L) (77135) | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) |
|-------------------------------|----------|---|---|--|--|--|---|---------------------------------------|--|---------------------------------------|--|
| NJDEP MW75 | 08-07-01 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 | <.10 | <.1 | <.10 | <.10 |

| LOCAL IDENT- I- FIER | DATE | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987) | ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126) | BETA, 2 SIGMA WATER, DISS, AS CS-137 (75989) | GROSS BETA, DIS- SOLVED (PCI/L) AS CS-137 (03515) |
|-------------------------------|----------|---|--|---|--|--|--|
| NJDEP MW75 | 08-07-01 | <.20 | <.2 | .85 | .96 | 1.6 | 5.09 |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) |
|-------------------------------|-----------------|----------|------|------|---|---|---|---|--|---|---|
| NJDEP MW75 | 401809074371701 | 08-07-01 | 0920 | | <.004 | <.002 | <.005 | .007 | <.010 | <.041 | <.020 |

| LOCAL IDENT- I- FIER | DATE | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) |
|-------------------------------|----------|--|--|---|--|---|--|---|--|---|--|
| NJDEP MW75 | 08-07-01 | <.005 | <.018 | <.003 | E.002 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |

| LOCAL IDENT- I- FIER | DATE | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (82670) |
|-------------------------------|----------|---|---|--|--|---|---|---|---|---|---|
| NJDEP MW75 | 08-07-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |

| LOCAL IDENT- I- FIER | DATE | TER- BACIL WATER FLTRD 0.7 U GF, REC (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (82661) |
|-------------------------------|----------|--|---|---|
| NJDEP MW75 | 08-07-01 | <.034 | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK

WATERSHED MANAGEMENT AREA 11

| STATION IDENTIFICATION NUMBER | NJ-WRD WELL NUMBER | LOCAL IDENTIFIER | LATITUDE | LONGITUDE | ALTITUDE OF LAND SURFACE (FT.) | WELL DEPTH | SCREEN INTERVAL (FT.) | AQUIFER UNIT |
|-------------------------------------|--------------------------|----------------------------|----------|-----------|---|---------------|-----------------------------|-----------------|
| *401229074290001 | 250800 | NJDEP U.FREEHOLD MW72 | 401229 | 0742900 | 152 | 18.5 | 14 - 19 | 211MLRW |
| 401233074320401 | 250801 | NJDEP ASSUNPINK WMA MW73 | 401233 | 0743204 | 105 | 26 | 21 - 26 | 211EGLS |
| *401619074462401 | 210604 | NJDEP COLLEGE OF NJ MW74 | 401619 | 0744624 | 100 | 19.5 | 15 - 20 | 231SCKN |
| 402018074540301 | 210605 | NJDEP HOWEL FARM MW77 | 402018 | 0745403 | 80 | 13.5 | 9 - 14 | 227PSSC |
| 402431075020801 | 190439 | NJDEP BULLS ISLAND SP MW78 | 402431 | 0750208 | 103 | 39 | 34 - 39 | 111ALVM |

* - Field data and samples for laboratory analyses provided by the New Jersey Department of Environmental Protection.

Aquifer units:

211MLRW - Wenonah-Mount Laurel aquifer system
 211EGLS - Englishtown aquifer system
 231SCKN - Stockton Formation
 227PSSC - Passaic Formation
 111ALVM - Holocene Alluvium

REMARKS.--For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Explanation of the records, Quality-control data" in the "Introduction".

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | SAMPLE TYPE | FLOW RATE (G/M) (00059) | PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | |
|-------------------------------|----------------------|--|--|---|--|--|---|---|---|--|--|
| | | | | | | | | | | | |
| NJDEP MW72 | 401229074290001 | | 08-08-01 | 0915 | ENVIRONMENTAL | .50 | 30 | .5 | 759 | 49 | |
| NJDEP MW73 | 401233074320401 | | 09-06-01 | 1110 | ENVIRONMENTAL | .80 | 56 | 5.1 | 765 | 84 | |
| NJDEP MW74 | 401619074462401 | | 09-20-01 09-20-01 | 0914 0915 | AMBIENT BLANK ENVIRONMENTAL | -- .50 | -- 60 | -- 7.6 | -- 761 | -- 35 | |
| NJDEP MW77 | 402018074540301 | | 09-06-01 | 1210 | ENVIRONMENTAL | -- | 85 | 7.0 | 763 | 39 | |
| NJDEP MW78 | 402431075020801 | | 09-19-01 09-19-01 | 0940 1040 | FIELD BLANK ENVIRONMENTAL | -- .43 | -- 40 | -- 1.8 | -- 763 | -- 49 | |
| LOCAL IDENT- I- FIER | DATE | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086) |
| | | | | | | | | | | | |
| NJDEP MW72 | 08-08-01 | 5.2 | 4.3 | 173 | 12.5 | 53 | 9.16 | 7.43 | 2.59 | 1.5 | -- |
| NJDEP MW73 | 09-06-01 | 9.0 | 5.2 | 165 | 12.5 | 55 | 16.7 | 3.20 | 4.81 | 1.7 | 1 |
| NJDEP MW74 | 09-20-01 09-20-01 | -- 3.6 | -- 6.2 | -- 373 | -- 14.5 | -- 130 | -- 36.1 | -- 10.5 | -- 1.61 | -- 20.2 | -- 130 |
| NJDEP MW77 | 09-06-01 | 3.8 | 6.8 | 315 | 17.0 | 110 | 30.4 | 8.79 | 1.97 | 13.8 | 95 |
| NJDEP MW78 | 09-19-01 09-19-01 | -- 5.3 | -- 6.2 | -- 202 | -- 12.0 | -- 73 | .06 17.6 | E.005 7.00 | -- 1.81 | <.1 8.7 | -- 56 |
| LOCAL IDENT- I- FIER | DATE | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA, DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) |
| | | | | | | | | | | | |
| NJDEP MW72 | 08-08-01 | -- | 7.6 | E.2 | 7.3 | 46.2 | 87 | -- | E.034 | <.10 | 3.86 |
| NJDEP MW73 | 09-06-01 | 6 | 6.1 | <.2 | 6.3 | 26.0 | 113 | 68 | E.011 | E.05 | E3.78 |
| NJDEP MW74 | 09-20-01 09-20-01 | -- 159 | -- 26.0 | -- <.2 | -- 24.9 | -- 9.3 | -- 208 | -- 211 | -- <.040 | -- <.10 | -- E.033 |
| NJDEP MW77 | 09-06-01 | 116 | 18.3 | <.2 | 16.6 | 21.2 | 188 | 168 | E.020 | E.07 | E3.02 |
| NJDEP MW78 | 09-19-01 09-19-01 | -- 68 | -- 11.2 | -- <.2 | <.1 11.5 | -- 15.6 | -- 117 | -- 117 | -- .145 | -- .19 | -- 1.98 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

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AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106) | ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095) | ARSENIC DIS- SOLVED (UG/L AS AS) (01000) | BARIUM, DIS- SOLVED (UG/L AS BA) (01005) | BERYL- LITUM, DIS- SOLVED (UG/L AS BE) (01010) | BORON, DIS- SOLVED (UG/L AS B) (01020) |
|-------------------------------|----------|--|--|--|---|--|--|---|---|--|---|
| NJDEP MW72 | 08-08-01 | E.003 | -- | E.009 | .44 | 1140 | <.05 | <.2 | 50.8 | .29 | 20 |
| NJDEP MW73 | 09-06-01 | E.001 | -- | E.006 | .43 | 32 | <.05 | <.2 | 111 | <.06 | 19 |
| NJDEP MW74 | 09-20-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-20-01 | E.004 | -- | <.020 | 1.0 | 5 | <.05 | .3 | 965 | .08 | 26 |
| NJDEP MW77 | 09-06-01 | <.006 | -- | E.021 | .67 | 1 | <.05 | .4 | 48.8 | <.06 | 20 |
| NJDEP MW78 | 09-19-01 | -- | -- | -- | -- | <1 | <.05 | <.2 | <1.0 | <.06 | <7 |
| | 09-19-01 | .012 | 2.2 | <.020 | .48 | <1 | <.05 | E.1 | 23.7 | <.06 | 16 |

| LOCAL IDENT- I- FIER | DATE | CADMIUM DIS- SOLVED (UG/L AS CD) (01025) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | MERCURY DIS- SOLVED (UG/L AS HG) (71890) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145) | SILVER, DIS- SOLVED (UG/L AS AG) (01075) |
|-------------------------------|----------|---|--|---|---|---|---|---|---|--|---|
| NJDEP MW72 | 08-08-01 | .10 | .9 | 36.8 | <10 | 3.76 | 52.6 | <.01 | 7.50 | E.3 | <1.0 |
| NJDEP MW73 | 09-06-01 | .29 | <.8 | 1.4 | <10 | 5.04 | 63.7 | <.01 | 2.71 | <.3 | <1.0 |
| NJDEP MW74 | 09-20-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-20-01 | .05 | <.8 | .3 | 2030 | <.08 | 759 | <.01 | 7.41 | <.3 | <1.0 |
| NJDEP MW77 | 09-06-01 | .17 | <.8 | .9 | M | .25 | 159 | <.01 | .25 | <.3 | <1.0 |
| NJDEP MW78 | 09-19-01 | .12 | <.8 | .4 | <10 | .14 | <.1 | <.01 | E.05 | <.3 | <1.0 |
| | 09-19-01 | .25 | <.8 | 1.0 | 20 | .57 | 1110 | <.01 | 5.69 | .5 | <1.0 |

| LOCAL IDENT- I- FIER | DATE | THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) |
|-------------------------------|----------|--|---|---|--|---|--|---|--|---|---|
| NJDEP MW72 | 08-08-01 | E.02 | 25 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW73 | 09-06-01 | <.04 | 3 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW74 | 09-20-01 | -- | -- | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| | 09-20-01 | <.04 | 2 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW77 | 09-06-01 | <.04 | 2 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW78 | 09-19-01 | <.04 | 3 | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-19-01 | <.04 | 2 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |

| LOCAL IDENT- I- FIER | DATE | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) |
|-------------------------------|----------|---|---------------------------------------|--|---|--|---|---|---|---|---|
| NJDEP MW72 | 08-08-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW73 | 09-06-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW74 | 09-20-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| | 09-20-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW77 | 09-06-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW78 | 09-19-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-19-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER, UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL WATER, UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL WATER, UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER, UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER, UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) |
|-------------------------------|----------|---|---|--|---|---|--|--|--|---|--|
| NJDEP MW72 | 08-08-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW73 | 09-06-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW74 | 09-20-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW77 | 09-06-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW78 | 09-19-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NJDEP MW78 | 09-19-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |

| LOCAL IDENT- I- FIER | DATE | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987) | ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126) | BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989) | GROSS BETA, DIS- SOLVED AS CS-137 (PCI/L) (03515) |
|-------------------------------|----------|---------------------------------------|--|---------------------------------------|--|---|--|---|--|---|--|
| NJDEP MW72 | 08-08-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 1.5 | 7.20 | 1.3 | 8.38 |
| NJDEP MW73 | 09-06-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | .62 | .33 | 1.1 | 5.69 |
| NJDEP MW74 | 09-20-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | -- | -- | -- | -- |
| NJDEP MW77 | 09-06-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 1.5 | 4.12 | 2.3 | 4.63 |
| NJDEP MW78 | 09-19-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NJDEP MW78 | 09-19-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | .46 | .77 | 1.2 | 3.23 |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U (UG/L) (82674) |
|-------------------------------|-----------------|--------|----------|------|---|---|---|---|--|---|---|
| NJDEP MW72 | 401229074290001 | | 08-08-01 | 0915 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW73 | 401233074320401 | | 09-06-01 | 1110 | <.004 | <.002 | <.005 | E.007 | <.010 | <.041 | <.020 |
| NJDEP MW74 | 401619074462401 | | 09-20-01 | 0915 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW77 | 402018074540301 | | 09-06-01 | 1210 | <.004 | <.002 | <.005 | .053 | <.010 | <.041 | <.020 |
| NJDEP MW78 | 402431075020801 | | 09-19-01 | 1040 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |

| LOCAL IDENT- I- FIER | DATE | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRI- N, DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) |
|-------------------------------|----------|--|--|---|--|---|--|---|--|---|--|
| NJDEP MW72 | 08-08-01 | E.002 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW73 | 09-06-01 | <.005 | <.018 | <.003 | E.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW74 | 09-20-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW77 | 09-06-01 | <.005 | <.018 | <.003 | E.033 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW78 | 09-19-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

| LOCAL IDENT- I- FIER | DATE | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P, P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) |
|-------------------------------|----------|---|---|--|--|---|--|---|---|---|---|
| NJDEP MW72 | 08-08-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW73 | 09-06-01 | <.050 | 3.97 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW74 | 09-20-01 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW77 | 09-06-01 | <.050 | E.003 | <.006 | <.002 | <.007 | <.003 | <.010 | E.004 | <.011 | <.016 |
| NJDEP MW78 | 09-19-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |

| LOCAL IDENT- I- FIER | DATE | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-------------------------------|----------|--|---|---|
| NJDEP MW72 | 08-08-01 | <.034 | <.005 | <.009 |
| NJDEP MW73 | 09-06-01 | <.034 | <.005 | <.009 |
| NJDEP MW74 | 09-20-01 | <.034 | <.005 | <.009 |
| NJDEP MW77 | 09-06-01 | <.034 | <.005 | <.009 |
| NJDEP MW78 | 09-19-01 | <.034 | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK

WATERSHED MANAGEMENT AREA 12

| STATION IDENTIFICATION NUMBER | NJ-WRD WELL NUMBER | LOCAL IDENTIFIER | LATITUDE | LONGITUDE | ALTITUDE OF LAND SURFACE (FT.) | WELL DEPTH | SCREEN INTERVAL (FT.) | AQUIFER UNIT |
|-------------------------------------|--------------------------|----------------------------|----------|-----------|---|---------------|-----------------------------|-----------------|
| 401021074030601 | 250795 | NJDEP WALL TWP MW67 | 401021 | 0740306 | 47 | 27.5 | 23 - 28 | 121CKKD |
| 401335074042701 | 250794 | NJDEP NEPTUNE TWP MW68 | 401335 | 0740427 | 82 | 29.5 | 25 - 30 | 121CKKD |
| *401732074022101 | 250797 | NJDEP EATONTOWN MW71 | 401732 | 0740221 | 39 | 38.5 | 34 - 39 | 125VNCN |
| *402412074073001 | 250799 | NJDEP MIDDLETOWN MW70 | 402412 | 0740730 | 65 | 23.8 | 19 - 24 | 211MRSL |
| 402623074154701 | 231358 | NJDEP CHEESEQUAKE SP MW103 | 402623 | 0741547 | 50 | 55 | 50 - 55 | 211MRPAU |

* - Field data and samples for laboratory analyses provided by the New Jersey Department of Environmental Protection.

Aquifer units:

121CKKD - Kirkwood-Cohansey aquifer system

125VNCN - Vincentown aquifer system

211MRSL - Marshelltown Formation

211MRPAU - Upper Potomac-Raritan-Magothy aquifer system

REMARKS.--For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Explanation of the records, Quality-control data" in the "Introduction".

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | STATION NUMBER | DATE | TIME | SAMPLE TYPE | FLOW RATE (G/M) (00059) | PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BARO- METRIC PRES- SURE (MM HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) |
|-------------------------------|-----------------|----------|------|-----------------|----------------------------------|--|--|---|---|
| NJDEP MW67 | 401021074030601 | 07-27-01 | 0840 | EQUIPMENT BLANK | -- | -- | -- | -- | -- |
| | | 07-30-01 | 1549 | AMBIENT BLANK | -- | -- | -- | -- | -- |
| | | 07-30-01 | 1550 | ENVIRONMENTAL | -- | 40 | 2.4 | 758 | 19 |
| NJDEP MW68 | 401335074042701 | 07-31-01 | 1010 | ENVIRONMENTAL | -- | 70 | 7.7 | 761 | 15 |
| NJDEP MW71 | 401732074022101 | 08-07-01 | 0915 | ENVIRONMENTAL | .50 | 50 | 3.3 | 763 | 36 |
| NJDEP MW70 | 402412074073001 | 09-06-01 | 1000 | AMBIENT BLANK | -- | -- | -- | -- | -- |
| | | 09-06-01 | 1100 | ENVIRONMENTAL | -- | -- | 7.8 | 769 | 16 |
| NJDEP MW103 | 402623074154701 | 09-25-01 | 1240 | ENVIRONMENTAL | .13 | 70 | 170 | 753 | |

| LOCAL IDENT- I- FIER | DATE | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ALKA- LITY WAT DIS TOT IT FIELD CACO3 (39086) |
|-------------------------------|----------|--|---|--|---|--|---|---|--|---|---|
| NJDEP MW67 | 07-27-01 | -- | -- | -- | -- | -- | E.01 | <.008 | -- | <.1 | -- |
| | 07-30-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-30-01 | 1.6 | 5.2 | 282 | 25.0 | 62 | 13.9 | 6.72 | 3.25 | 23.4 | 11 |
| NJDEP MW68 | 07-31-01 | 1.4 | 4.9 | 240 | 18.5 | 45 | 6.02 | 7.19 | 3.07 | 11.9 | 2 |
| NJDEP MW71 | 08-07-01 | 3.6 | 7.8 | 245 | 15.5 | 110 | 41.0 | 2.26 | 1.50 | 3.3 | 92 |
| NJDEP MW70 | 09-06-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-06-01 | 1.6 | 4.2 | 322 | 15.0 | 69 | 16.0 | 7.02 | 5.34 | 17.6 | -- |
| NJDEP MW103 | 09-25-01 | -- | 6.0 | 308 | 15.0 | 97 | 34.0 | 2.85 | 2.03 | 7.0 | 53 |

| LOCAL IDENT- I- FIER | DATE | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA, DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) |
|-------------------------------|----------|--|--|---|--|--|---|---|---|--|--|
| NJDEP MW67 | 07-27-01 | -- | -- | -- | <.1 | -- | -- | -- | -- | -- | -- |
| | 07-30-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-30-01 | 13 | 43.5 | <.2 | 5.4 | 24.6 | 163 | 154 | .063 | .18 | 5.92 |
| NJDEP MW68 | 07-31-01 | 3 | 23.0 | <.2 | 13.7 | 67.2 | 161 | 148 | <.040 | <.10 | E.031 |
| NJDEP MW71 | 08-07-01 | 112 | 8.2 | <.2 | 11.8 | 1.9 | 133 | 130 | <.040 | <.10 | 1.17 |
| NJDEP MW70 | 09-06-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-06-01 | -- | 19.2 | E.1 | 18.7 | 106 | 205 | -- | E.027 | E.07 | E.029 |
| NJDEP MW103 | 09-25-01 | 65 | 12.2 | <.2 | 8.2 | 46.7 | 152 | | .055 | .15 | .779 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106) | ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095) | ARSENIC DIS- SOLVED (UG/L AS AS) (01000) | BARIUM, DIS- SOLVED (UG/L AS BA) (01005) | BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010) | BORON, DIS- SOLVED (UG/L AS B) (01020) |
|-------------------------------|----------|---|--|--|---|---|---|---|---|---|---|
| NJDEP MW67 | 07-27-01 | -- | -- | -- | -- | <1 | <.05 | <.2 | <1.0 | <.06 | <7 |
| | 07-30-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-30-01 | <.006 | 6.1 | <.020 | 1.2 | 51 | <.05 | <.2 | 65.8 | .12 | 114 |
| NJDEP MW68 | 07-31-01 | <.006 | -- | <.020 | 1.1 | 70 | <.05 | E.1 | 35.9 | 1.12 | 7 |
| NJDEP MW71 | 08-07-01 | <.006 | -- | E.009 | E.20 | <1 | <.05 | <.2 | 1.4 | <.06 | 17 |
| NJDEP MW70 | 09-06-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-06-01 | <.006 | -- | .020 | .60 | 242 | <.05 | <.2 | 72.2 | .47 | 34 |
| NJDEP MW103 | 09-25-01 | E.004 | .93 | <.020 | 3.0 | 24 | E.04 | 1.4 | 39.6 | <.06 | 14 |
| LOCAL IDENT- I- FIER | DATE | CADMIUM DIS- SOLVED (UG/L AS CD) (01025) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | MERCURY DIS- SOLVED (UG/L AS HG) (71890) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145) | SILVER, DIS- SOLVED (UG/L AS AG) (01075) |
| NJDEP MW67 | 07-27-01 | <.04 | <.8 | E.2 | <10 | <.08 | <.1 | <.01 | <.06 | E.3 | <1.0 |
| | 07-30-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-30-01 | .13 | <.8 | .7 | 70 | .15 | 49.1 | <.01 | 1.40 | .5 | <1.0 |
| NJDEP MW68 | 07-31-01 | .09 | E.6 | .5 | 14800 | .24 | 158 | <.01 | 1.41 | <.3 | <1.0 |
| NJDEP MW71 | 08-07-01 | <.04 | 5.5 | E.2 | <10 | <.08 | .3 | <.01 | <.06 | <.3 | <1.0 |
| NJDEP MW70 | 09-06-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 09-06-01 | 1.78 | <.8 | 191 | 8430 | 13.9 | 517 | <.01 | 23.1 | <.3 | <1.0 |
| NJDEP MW103 | 09-25-01 | -- | -- | 3.0 | 2560 | -- | 121 | <.01 | -- | E.2 | <1.0 |
| LOCAL IDENT- I- FIER | DATE | THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) |
| NJDEP MW67 | 07-27-01 | <.04 | <1 | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-30-01 | -- | -- | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| | 07-30-01 | E.02 | 3 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW68 | 07-31-01 | <.04 | 13 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW71 | 08-07-01 | <.04 | <1 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW70 | 09-06-01 | -- | -- | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| | 09-06-01 | <.04 | 247 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW103 | 09-25-01 | <.04 | 37 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| LOCAL IDENT- I- FIER | DATE | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32106) | CIS-1,2- DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) |
| NJDEP MW67 | 07-27-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-30-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| | 07-30-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW68 | 07-31-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW71 | 08-07-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | .36 | <.10 | <.10 | <.2 |
| NJDEP MW70 | 09-06-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | 1.66 | <.10 | <.10 | <.2 |
| | 09-06-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | 1.72 | <.10 | <.10 | <.2 |
| NJDEP MW103 | 09-25-01 | <.10 | <.10 | <.20 | <.20 | <.10 | .2 | 2.72 | <.10 | .64 | <.2 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) |
|-------------------------------|----------|---|--|---|---|---|---|--|--|--|--|
| NJDEP MW67 | 07-27-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-30-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| | 07-30-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | E.1 | <.2 | <.20 | <.10 |
| NJDEP MW68 | 07-31-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW71 | 08-07-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW70 | 09-06-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | 1.1 | <.2 | <.20 | <.10 |
| | 09-06-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | 1.1 | <.2 | <.20 | <.10 |
| NJDEP MW103 | 09-25-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | E.1 | <.20 | <.10 |

| LOCAL IDENT- I- FIER | DATE | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987) | ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126) | BETA, 2 SIGMA WATER, DISS AS CS-137 (PCI/L) (75989) | GROSS BETA, DIS- SOLVED AS (PCI/L) CS-137 (03515) |
|-------------------------------|----------|---------------------------------------|--|---------------------------------------|--|---|--|---|--|--|--|
| NJDEP MW67 | 07-27-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-30-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | -- | -- | -- | -- |
| | 07-30-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 1.4 | 8.05 | 1.3 | 9.21 |
| NJDEP MW68 | 07-31-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | .85 | 3.13 | 1.1 | 6.36 |
| NJDEP MW71 | 08-07-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 1.1 | .11 | 1.2 | 2.31 |
| NJDEP MW70 | 09-06-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | -- | -- | -- | -- |
| | 09-06-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 1.5 | 5.28 | 1.9 | 8.60 |
| NJDEP MW103 | 09-25-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 1.3 | 2.10 | 2.2 | 3.33 |

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) |
|-------------------------------|-----------------|--------|----------|------|--|--|---|---|---|--|--|
| NJDEP MW67 | 401021074030601 | | 07-30-01 | 1550 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW68 | 401335074042701 | | 07-31-01 | 1010 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW71 | 401732074022101 | | 08-07-01 | 0915 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW70 | 402412074073001 | | 09-06-01 | 1100 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW103 | 402623074154701 | | 09-25-01 | 1240 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |

| LOCAL IDENT- I- FIER | DATE | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN, DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) |
|-------------------------------|----------|--|--|---|--|---|---|---|--|---|--|
| NJDEP MW67 | 07-30-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW68 | 07-31-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW71 | 08-07-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW70 | 09-06-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.030 |
| NJDEP MW103 | 09-25-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) |
|-------------------------------|----------|---|---|--|--|---|---|---|---|---|---|
| | | | | | | | | | | | |
| NJDEP MW67 | 07-30-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW68 | 07-31-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW71 | 08-07-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW70 | 09-06-01 | <.050 | .014 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW103 | 09-25-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |

| LOCAL IDENT- I- FIER | DATE | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-------------------------------|----------|--|---|---|
| | | | | |
| NJDEP MW67 | 07-30-01 | <.034 | <.005 | <.009 |
| NJDEP MW68 | 07-31-01 | <.034 | <.005 | <.009 |
| NJDEP MW71 | 08-07-01 | <.034 | <.005 | <.009 |
| NJDEP MW70 | 09-06-01 | <.034 | <.005 | <.009 |
| NJDEP MW103 | 09-25-01 | <.034 | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK

WATERSHED MANAGEMENT AREA 13

| STATION IDENTIFICATION NUMBER | NJ-WRD WELL NUMBER | LOCAL IDENTIFIER | LATITUDE | LONGITUDE | ALTITUDE OF LAND SURFACE (FT.) | WELL DEPTH | SCREEN INTERVAL (FT.) | AQUIFER UNIT |
|-------------------------------------|--------------------------|-------------------------|----------|-----------|---|---------------|-----------------------------|-----------------|
| *395034074112101 | 291419 | NJDEP FORKED RIVER MW61 | 395034 | 0741121 | 19 | 20 | 15 - 20 | 121CKKD |
| *400052074191201 | 291420 | NJDEP LAKEHURST MW66 | 400052 | 0741912 | 72 | 25 | 20 - 25 | 121CKKD |
| 400204074145401 | 291418 | NJDEP DOVER TWP MW63 | 400204 | 0741454 | 63 | 24 | 19 - 24 | 121CKKD |
| 400346074081701 | 291417 | NJDEP BRICK TWP MW64 | 400346 | 0740817 | 13 | 18.5 | 14 - 19 | 121CKKD |

* - Field data and samples for laboratory analyses provided by the New Jersey Department of Environmental Protection.

Aquifer units:

121CKKD - Kirkwood-Cohansey aquifer system

REMARKS.--For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Explanation of the records, Quality-control data" in the "Introduction".

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | SAMPLE TYPE | FLOW RATE (G/M) (00059) | PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004) | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) |
|-------------------------------|-----------------|--------|----------|------|----------------|----------------------------------|--|--|---|---|
| NJDEP MW61 | 395034074112101 | | 08-01-01 | 0945 | ENVIRONMENTAL | .50 | 50 | 1.1 | 773 | 14 |
| NJDEP MW66 | 400052074191201 | | 08-02-01 | 0730 | FIELD BLANK | -- | -- | -- | -- | -- |
| | | | 08-02-01 | 0900 | ENVIRONMENTAL | .50 | 45 | .7 | 770 | 47 |
| NJDEP MW63 | 400204074145401 | | 08-06-01 | 1010 | ENVIRONMENTAL | -- | 30 | 2.8 | 763 | 106 |
| NJDEP MW64 | 400346074081701 | | 08-02-01 | 1140 | ENVIRONMENTAL | -- | 60 | 3.2 | 768 | 40 |

| LOCAL IDENT- I- FIER | DATE | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086) |
|-------------------------------|----------|--|--|--|---|--|---|---|--|---|--|
| NJDEP MW61 | 08-01-01 | 1.4 | 5.5 | 129 | 15.5 | 28 | 8.88 | 1.34 | .93 | 12.0 | 6 |
| NJDEP MW66 | 08-02-01 | -- | -- | -- | -- | -- | <.01 | <.008 | -- | <.1 | -- |
| | 08-02-01 | 4.7 | 5.6 | 210 | 15.5 | 41 | 13.2 | 1.88 | 1.94 | 18.7 | 1 |
| NJDEP MW63 | 08-06-01 | 10.0 | 5.5 | 563 | 18.0 | 67 | 18.6 | 5.04 | 1.44 | 76.2 | 10 |
| NJDEP MW64 | 08-02-01 | 3.6 | 4.5 | 1580 | 21.0 | 57 | 19.6 | 1.92 | 1.74 | 235 | -- |

| LOCAL IDENT- I- FIER | DATE | BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) |
|-------------------------------|----------|--|--|---|--|--|---|---|--|--|--|
| NJDEP MW61 | 08-01-01 | 7 | 19.9 | <.2 | 5.1 | 8.6 | 80 | 73 | <.040 | .12 | 2.75 |
| NJDEP MW66 | 08-02-01 | -- | -- | -- | <.1 | -- | -- | -- | -- | -- | -- |
| | 08-02-01 | 6 | -- | -- | -- | -- | -- | -- | <.040 | E.10 | 3.27 |
| NJDEP MW63 | 08-06-01 | 12 | 150 | <.2 | 4.9 | 9.2 | 285 | 274 | <.040 | <.10 | .560 |
| NJDEP MW64 | 08-02-01 | -- | 449 | <.2 | 3.6 | 23.0 | 816 | 750 | <.040 | .13 | 3.14 |

| LOCAL IDENT- I- FIER | DATE | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106) | ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095) | ARSENIC DIS- SOLVED (UG/L AS AS) (01000) | BARIUM, DIS- SOLVED (UG/L AS BA) (01005) | BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010) | BORON, DIS- SOLVED (UG/L AS B) (01020) |
|-------------------------------|----------|--|--|--|---|--|--|---|---|---|---|
| NJDEP MW61 | 08-01-01 | <.006 | 2.9 | <.020 | 1.7 | 24 | .05 | <.2 | 30.5 | <.06 | 15 |
| NJDEP MW66 | 08-02-01 | -- | -- | -- | -- | <1 | <.05 | <.2 | <1.0 | <.06 | <7 |
| | 08-02-01 | <.006 | -- | <.020 | 1.5 | 36 | <.05 | <.2 | 4.0 | <.06 | 17 |
| NJDEP MW63 | 08-06-01 | <.006 | -- | <.020 | .42 | 8 | <.05 | <.2 | 68.9 | <.06 | 18 |
| NJDEP MW64 | 08-02-01 | E.004 | 3.3 | <.020 | 1.5 | 987 | E.03 | <.2 | 44.9 | E.06 | 23 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | CADMIUM DIS- SOLVED (UG/L AS CD) (01025) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | MERCURY DIS- SOLVED (UG/L AS HG) (71890) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145) | SILVER, DIS- SOLVED (UG/L AS AG) (01075) |
|-------------------------------|----------|---|--|---|---|---|---|---|---|---|---|
| NJDEP MW61 | 08-01-01 | .22 | <.8 | 3.0 | <10 | E.08 | 14.2 | <.01 | .79 | .4 | <1.0 |
| NJDEP MW66 | 08-02-01 | <.04 | <.8 | <.2 | <10 | .09 | .2 | <.01 | <.06 | <.3 | <1.0 |
| NJDEP MW63 | 08-06-01 | .04 | 1.0 | 3.9 | 20 | .10 | 28.2 | <.01 | 3.60 | <.3 | <1.0 |
| NJDEP MW64 | 08-02-01 | .36 | 2.9 | 17.7 | 70 | .29 | 38.9 | <.01 | 5.53 | E.3 | <1.0 |
| LOCAL IDENT- I- FIER | DATE | THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) |
| NJDEP MW61 | 08-01-01 | <.04 | 32 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW66 | 08-02-01 | <.04 | <1 | -- | -- | -- | -- | -- | -- | -- | -- |
| NJDEP MW63 | 08-06-01 | E.02 | 7 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW64 | 08-02-01 | <.04 | 38 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| LOCAL IDENT- I- FIER | DATE | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) |
| NJDEP MW61 | 08-01-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | .42 | <.10 | <.10 | <.2 |
| NJDEP MW66 | 08-02-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NJDEP MW63 | 08-06-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | .22 | <.10 | <.10 | <.2 |
| NJDEP MW64 | 08-02-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| LOCAL IDENT- I- FIER | DATE | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) |
| NJDEP MW61 | 08-01-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW66 | 08-02-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NJDEP MW63 | 08-06-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | E.2 | <.2 | <.20 | <.10 |
| NJDEP MW64 | 08-02-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| LOCAL IDENT- I- FIER | DATE | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987) | ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126) | BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989) | GROSS BETA, DIS- SOLVED AS CS-137 (PCI/L) (03515) |
| NJDEP MW61 | 08-01-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | .73 | 2.46 | .95 | 3.65 |
| NJDEP MW66 | 08-02-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NJDEP MW63 | 08-06-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 2.4 | 8.99 | 3.5 | 5.35 |
| NJDEP MW64 | 08-02-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 5.8 | 53.5 | 8.5 | 32.2 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673) | CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674) |
|-------------------------------|-----------------|--------|----------|------|--|--|---|---|--|---|---|
| NJDEP MW61 | 395034074112101 | | 08-01-01 | 0945 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW66 | 400052074191201 | | 08-02-01 | 0900 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW63 | 400204074145401 | | 08-06-01 | 1010 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW64 | 400346074081701 | | 08-02-01 | 1140 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |

| LOCAL IDENT- I- FIER | DATE | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) |
|-------------------------------|----------|--|--|---|--|---|--|---|--|---|--|
| NJDEP MW61 | 08-01-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW66 | 08-02-01 | <.005 | <.018 | <.003 | <.006 | <.005 | .491 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW63 | 08-06-01 | <.005 | .046 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW64 | 08-02-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |

| LOCAL IDENT- I- FIER | DATE | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) |
|-------------------------------|----------|---|---|--|--|---|---|---|---|---|---|
| NJDEP MW61 | 08-01-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW66 | 08-02-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | .130 | <.011 | <.016 |
| NJDEP MW63 | 08-06-01 | <.050 | .018 | <.006 | <.002 | <.007 | <.003 | <.010 | .021 | <.011 | <.016 |
| NJDEP MW64 | 08-02-01 | <.050 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |

| LOCAL IDENT- I- FIER | DATE | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-------------------------------|----------|--|---|---|
| NJDEP MW61 | 08-01-01 | <.034 | <.005 | <.009 |
| NJDEP MW66 | 08-02-01 | <.034 | <.005 | <.009 |
| NJDEP MW63 | 08-06-01 | <.034 | <.005 | <.009 |
| NJDEP MW64 | 08-02-01 | <.034 | <.005 | <.009 |

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

547

AMBIENT GROUND-WATER-QUALITY NETWORK

WATERSHED MANAGEMENT AREA 14

| STATION IDENTIFICATION NUMBER | NJ-WRD WELL NUMBER | LOCAL IDENTIFIER | LATITUDE | LONGITUDE | ALTITUDE OF LAND SURFACE (FT.) | WELL DEPTH | SCREEN INTERVAL (FT.) | AQUIFER UNIT |
|-------------------------------|--------------------|-------------------------|----------|-----------|--------------------------------|------------|-----------------------|--------------|
| *393947074464501 | 011404 | NJDEP HAMMONTON MW54 | 393947 | 0744645 | 68 | 14 | 9 - 14 | 121CKKD |
| *394640074323201 | 051504 | NJDEP WOODLAND TWP MW58 | 394640 | 0743232 | 68 | 10 | 5 - 10 | 121CKKD |

* - Field data and samples for laboratory analyses provided by the New Jersey Department of Environmental Protection.

Aquifer units:

121CKKD - Kirkwood-Cohansey aquifer system

REMARKS.--For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Explanation of the records, Quality-control data" in the "Introduction".

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENTIFIER | STATION NUMBER | DATE | TIME | SAMPLE TYPE | FLOW RATE (G/M) (00059) | PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004) | TURBIDITY FIELD WATER UNFLTRD (NTU) (61028) | BAROMETRIC PRESURE (MM HG) (00025) | OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301) |
|------------------|-----------------|----------|------|-----------------|-------------------------|---|---|------------------------------------|--|
| NJDEP MW54 | 393947074464501 | 07-26-01 | 1100 | ENVIRONMENTAL | .50 | 35 | 1.0 | 758 | -- |
| NJDEP MW58 | 394640074323201 | 07-27-01 | 1330 | EQUIPMENT BLANK | -- | -- | -- | -- | -- |
| | | 07-31-01 | 0845 | AMBIENT BLANK | -- | -- | -- | -- | -- |
| | | 07-31-01 | 1000 | ENVIRONMENTAL | .50 | 40 | 1.8 | 769 | 3 |

| LOCAL IDENTIFIER | DATE | OXYGEN, DIS-SOLVED (MG/L) (00300) | PH WATER FIELD (STANDARD UNITS) (00400) | SPECIFIC CONDUCTANCE (US/CM) (00095) | TEMPERATURE WATER (DEG C) (00010) | HARDNESS TOTAL (MG/L AS CaCO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS Ca) (00915) | MAGNESIUM DIS-SOLVED (MG/L AS Mg) (00925) | POTASSIUM DIS-SOLVED (MG/L AS K) (00935) | SODIUM DIS-SOLVED (MG/L AS Na) (00930) | ALKALINITY WAT DIS TOT IT (MG/L AS CaCO3) (39086) |
|------------------|----------|-----------------------------------|---|--------------------------------------|-----------------------------------|--|---|---|--|--|---|
| NJDEP MW54 | 07-26-01 | <.2 | 5.1 | 239 | 19.0 | 84 | 16.8 | 10.3 | 5.18 | 3.8 | 3 |
| NJDEP MW58 | 07-27-01 | -- | -- | -- | -- | -- | <.01 | <.008 | -- | <.1 | -- |
| | 07-31-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-31-01 | .3 | 5.1 | 54 | 21.0 | 4 | .91 | .465 | 4.87 | 1.9 | 3 |

| LOCAL IDENTIFIER | DATE | BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453) | CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940) | FLUORIDE, DIS-SOLVED (MG/L AS F) (00950) | SILICA, DIS-SOLVED (MG/L AS SiO2) (00955) | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301) | NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITROGEN, AMMONIA ORGANIC DIS-SOLVED (MG/L AS N) (00623) | NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) |
|------------------|----------|---|---|--|---|--|---|--|--|--|--|
| NJDEP MW54 | 07-26-01 | 4 | 12.5 | <.2 | 3.4 | 40.1 | 140 | 133 | <.040 | .38 | 8.69 |
| NJDEP MW58 | 07-27-01 | -- | -- | -- | <.1 | -- | -- | -- | -- | -- | -- |
| | 07-31-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-31-01 | 3 | 4.0 | <.2 | 2.4 | 11.2 | 35 | 29 | <.040 | E.07 | E.038 |

| LOCAL IDENTIFIER | DATE | NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITROGEN, ORTHO DIS-SOLVED (MG/L AS N) (00602) | PHOSPHORUS, ORTHO DIS-SOLVED (MG/L AS P) (00671) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) | ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106) | ANTIMONY, DIS-SOLVED (UG/L AS SB) (01095) | ARSENIC, DIS-SOLVED (UG/L AS AS) (01000) | BARIUM, DIS-SOLVED (UG/L AS BA) (01005) | BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010) | BORON, DIS-SOLVED (UG/L AS B) (01020) |
|------------------|----------|--|--|--|--|---|---|--|---|--|---------------------------------------|
| NJDEP MW54 | 07-26-01 | .026 | 9.1 | <.020 | 4.3 | 263 | .13 | E.1 | 35.7 | E.04 | 38 |
| NJDEP MW58 | 07-27-01 | -- | -- | -- | -- | <1 | E.03 | <.2 | <1.0 | <.06 | <7 |
| | 07-31-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-31-01 | <.006 | -- | <.020 | 1.7 | 158 | .05 | .4 | 12.7 | <.06 | 14 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | DATE | CADMIUM DIS- SOLVED (UG/L AS CD) (01025) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | MERCURY DIS- SOLVED (UG/L AS HG) (01056) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145) | SILVER, DIS- SOLVED (UG/L AS AG) (01075) |
|-------------------------------|----------|---|--|--|--|---|---|---|---|---|---|
| NJDEP MW54 | 07-26-01 | .07 | E.6 | 1.3 | 90 | .12 | 12.7 | <.01 | .47 | E.2 | <1.0 |
| NJDEP MW58 | 07-27-01 | <.04 | <.8 | <.2 | <10 | <.08 | <.1 | <.01 | <.06 | <.3 | <1.0 |
| | 07-31-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-31-01 | .12 | <.8 | .5 | 1320 | <.08 | 41.3 | <.01 | .90 | <.3 | <1.0 |
| LOCAL IDENT- I- FIER | DATE | THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | 1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) | 1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103) | 1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541) | TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) |
| NJDEP MW54 | 07-26-01 | .05 | <1 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| NJDEP MW58 | 07-27-01 | <.04 | <1 | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-31-01 | -- | -- | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| | 07-31-01 | .07 | 9 | <.10 | <.10 | <.10 | <.2 | <.10 | <.10 | <.10 | <.10 |
| LOCAL IDENT- I- FIER | DATE | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102) | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) |
| NJDEP MW54 | 07-26-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| NJDEP MW58 | 07-27-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-31-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| | 07-31-01 | <.10 | <.10 | <.20 | <.20 | <.10 | <.2 | <.10 | <.10 | <.10 | <.2 |
| LOCAL IDENT- I- FIER | DATE | DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577) | ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- BUTYL ETHYL WATER UNFLTRD RECOVER (UG/L) (50004) | ETHER TERT- PENTYL METHYL WATER UNFLTRD RECOVER (UG/L) (50005) | ETHYL- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) |
| NJDEP MW54 | 07-26-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| NJDEP MW58 | 07-27-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-31-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| | 07-31-01 | <.2 | <.2 | <.10 | <.2 | <.10 | <.10 | <.2 | <.2 | <.20 | <.10 |
| LOCAL IDENT- I- FIER | DATE | STYRENE TOTAL (UG/L) (77128) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | VINYL CHLO- RIDE TOTAL (UG/L) (39175) | ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987) | ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126) | BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989) | GROSS BETA, DIS- SOLVED AS (PCI/L) CS-137) (03515) |
| NJDEP MW54 | 07-26-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | 1.1 | 2.43 | 1.7 | 8.77 |
| NJDEP MW58 | 07-27-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 07-31-01 | <.10 | <.1 | <.10 | <.10 | <.20 | <.2 | -- | -- | -- | -- |
| | 07-31-01 | <.10 | <.1 | .41 | <.10 | <.20 | <.2 | .70 | 3.51 | 1.1 | 7.61 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

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AMBIENT GROUND-WATER-QUALITY NETWORK--Continued

WATER-COLUMN PESTICIDE ANALYSES

Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only pesticides identified by the analyses in one or more samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | ACETO- CHLOR, WATER FLTRD | ALA- CHLOR, WATER, DISS, REC | ALPHA BHC DIS- SOLVED (UG/L) | ATRA- ZINE, WATER, DISS, REC | BEN- FLUR- ALIN WAT FLD | CAR- BARYL WATER FLTRD | CARBO- FURAN WATER FLTRD |
|-------------------------------|-----------------|--------|----------|------|------------------------------------|--|--|--|----------------------------------|---------------------------------|-----------------------------------|
| | | | | | REC (UG/L) | REC, (UG/L) | (UG/L) | REC (UG/L) | GF, REC (UG/L) | GF, REC (UG/L) | GF, REC (UG/L) |
| NJDEP MW54 | 393947074464501 | | 07-26-01 | 1100 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |
| NJDEP MW58 | 394640074323201 | | 07-31-01 | 1000 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 |

| LOCAL IDENT- I- FIER | DATE | CHLOR- PYRIFOS DIS- SOLVED (UG/L) | CYANA- ZINE, WATER, DISS, REC (UG/L) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) | DI- AZINON, DIS- SOLVED (UG/L) | DI- ELDRIN DIS- SOLVED (UG/L) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L) | LINDANE DIS- SOLVED (UG/L) | LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) | MALA- THON, DIS- SOLVED (UG/L) |
|-------------------------------|----------|---|---|--|---|--|---|--|-------------------------------------|--|--|
| | | (38933) | (04041) | (82682) | (04040) | (39572) | (39381) | (82668) | (39341) | (82666) | (39532) |
| NJDEP MW54 | 07-26-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |
| NJDEP MW58 | 07-31-01 | <.005 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 |

| LOCAL IDENT- I- FIER | DATE | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) | METO- LACHLOR WATER DISSOLV (UG/L) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) | P,P' DDE DISSOLV (UG/L) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) | PRO- METON, WATER, DISS, REC (UG/L) | SI- MAZINE, WATER, DISS, REC (UG/L) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) |
|-------------------------------|----------|--|--|---|---|--|----------------------------------|--|--|--|--|
| | | (82686) | (39415) | (82630) | (82671) | (82684) | (34653) | (82683) | (04037) | (04035) | (82670) |
| NJDEP MW54 | 07-26-01 | <.050 | E.010 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 |
| NJDEP MW58 | 07-31-01 | <.050 | <.013 | <.006 | <.002 | .007 | <.003 | <.010 | <.015 | <.011 | <.016 |

| LOCAL IDENT- I- FIER | DATE | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) |
|-------------------------------|----------|---|--|--|
| | | (82665) | (82681) | (82661) |
| NJDEP MW54 | 07-26-01 | E.297 | <.005 | <.009 |
| NJDEP MW58 | 07-31-01 | <.034 | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

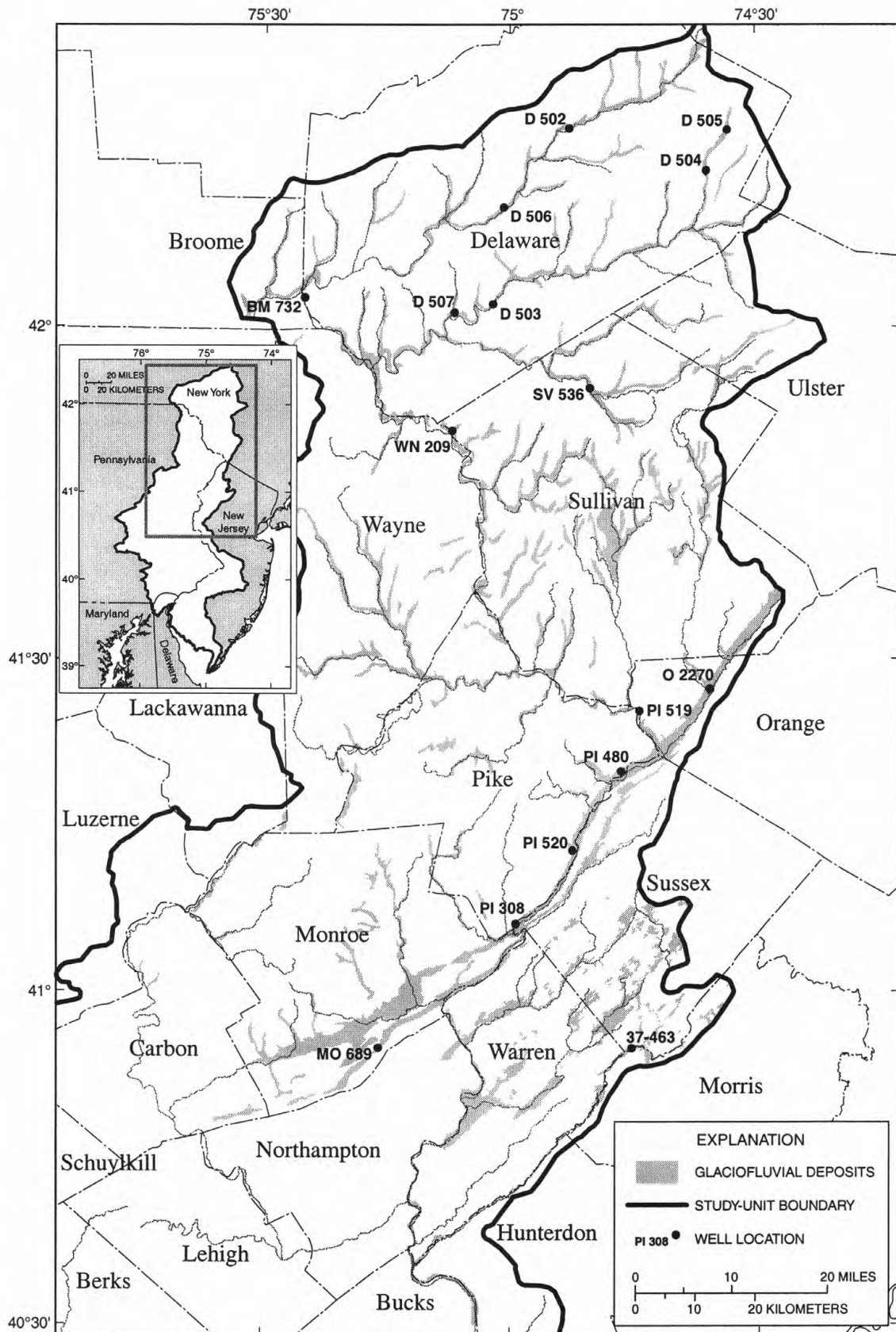


Figure 63. Location of sites in the Delaware River Basin National Water-Quality Assessment Program, ground-water synoptic study in the glaciofluvial deposits within the New England, Valley and Ridge, and Appalachian Plateau Physiographic Provinces, water year 2001.

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES

The following tables contain site, water-level, and water-quality data from a network of 16 domestic and monitoring wells. The network was established as part of the National Water-Quality Assessment (NAWQA) Program in the Delaware River Basin (DELR).

The wells were sampled to assess the status of ground-water quality in the glaciofluvial deposits of the New England, Valley and Ridge, and Appalachian Plateau Physiographic Provinces. Samples were tested for physical characteristics, nutrients, major ions, trace elements, dissolved and volatile organic compounds (VOCs), pesticides (including their metabolites), and radioisotopes. Many VOCs and pesticide constituents were not detected at any of the 16 wells.

Tables listing all of the VOC and pesticide schedule analytes and their reporting levels are in "Explanation of the Records" in the "Introduction." Only VOCs and pesticide compounds measured at or above the reporting levels at one or more sites (either surface water or ground water) of the DELR NAWQA Project are listed in the water-quality table.

WATER-QUALITY CONTROL DATA

As part of the water-quality sampling for the DELR NAWQA, an extensive quality-assurance plan was executed to ensure the integrity of the sample results. Quality-control samples were collected as blanks, including ambient, trip, source-solution, and equipment blanks; replicates; and spikes (both field and lab). These quality-control samples were analyzed for nutrients, major ions, trace elements, dissolved and volatile organic compounds, pesticides and their metabolites, and radioisotopes. Source-solution blanks were analyzed for volatile organic compounds (VOCs), and spikes were analyzed for pesticides and VOCs.

The following summarizes the quality-control sample results: Fifteen replicate samples were collected at 4 separate sample sites for one or more of the above chemical groups. All replicates closely reproduced the results for the environmental samples. Results from replicate samples are included within the water-quality tables on following pages. Twenty-six blank samples were collected. Concentrations of all constituents analyzed in the blank samples were less than the method detection limits, except for dissolved residue, which had one hit of 17 mg/L. The two field pesticides spikes of 100 uL/1 liter of sample had recoveries between 97 and 106 percent. The two lab pesticides spikes of 200 uL/1 liter of sample had recoveries of between 71 and 112 percent. The one VOCs spike of 20 uL/40mL of sample had a recovery between 98 and 100 percent. One VOC spike was unrecoverable due to a spiking error (sample was spiked with 10 uL/40mL of sample instead of the required 20 uL).

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | STATION NUMBER | DATE | TIME | SAMPLE TYPE | AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028) | AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027) | ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000) | DEPTH OF WELL, TOTAL (FEET) (72008) | DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019) |
|--------------------|-----------------|----------|------|---------------|--|---|--|-------------------------------------|---|
| MONROE COUNTY PA | | | | | | | | | |
| MO 689 | 405501075155401 | 07-18-01 | 1200 | ENVIRONMENTAL | 1028 | 1028 | 470 | 64 | 14.59 |
| PIKE COUNTY PA | | | | | | | | | |
| PI 308 | 410612074591501 | 07-16-01 | 1200 | ENVIRONMENTAL | 1028 | 1028 | 350 | 108 | 30.11 |
| PI 480 | 411957074462601 | 07-11-01 | 1200 | ENVIRONMENTAL | 1028 | 1028 | 465 | 213 | 86.99 |
| | | 07-11-01 | 1201 | REPLICATE | 80020 | 1028 | 465 | 213 | 86.99 |
| | | 07-11-01 | 1210 | REPLICATE | 80020 | 1028 | 465 | 213 | 86.99 |
| PI 519 | 412522074441301 | 07-10-01 | 1100 | ENVIRONMENTAL | 1028 | 1028 | 600 | 120 | 103.82 |
| PI 520 | 411252074522001 | 07-12-01 | 1100 | ENVIRONMENTAL | 1028 | 1028 | 440 | 200 | 38.48 |
| WAYNE COUNTY PA | | | | | | | | | |
| WN 209 | 415040075070301 | 07-25-01 | 1200 | ENVIRONMENTAL | 1028 | 1028 | 820 | 142 | 20.16 |
| SUSSEX COUNTY NJ | | | | | | | | | |
| 370463 | 405459074451201 | 07-17-01 | 1300 | ENVIRONMENTAL | 1028 | 1028 | 660 | 123 | 30.68 |
| | | 07-17-01 | 1301 | REPLICATE | 80020 | 1028 | 660 | 123 | 30.68 |
| | | 07-17-01 | 1304 | REPLICATE | 80020 | 1028 | 660 | 123 | 30.68 |
| BROOME COUNTY NY | | | | | | | | | |
| BM 732 | 420244075251101 | 07-26-01 | 1200 | ENVIRONMENTAL | 1028 | 1028 | 1000 | 22 | 9.54 |
| DELAWARE COUNTY NY | | | | | | | | | |
| D 502 | 421758074524101 | 07-24-01 | 1200 | ENVIRONMENTAL | 1028 | 1028 | 1380 | 25.5 | 21.55 |
| D 503 | 420207075020401 | 07-30-01 | 1100 | ENVIRONMENTAL | 1028 | 1028 | 1080 | 120 | 15.98 |
| D 504 | 421409074355701 | 07-31-01 | 1100 | ENVIRONMENTAL | 1028 | 1028 | 1540 | 45 | 18.17 |
| D 505 | 421747074332301 | 08-14-01 | 1300 | ENVIRONMENTAL | 1028 | 1028 | 1500 | 70.4 | 3.73 |
| | | 08-14-01 | 1301 | REPLICATE | 80020 | 1028 | 1500 | 70.4 | 3.73 |
| | | 08-14-01 | 1304 | REPLICATE | 80020 | 1028 | 1500 | 70.4 | 3.73 |
| D 506 | 421052075004501 | 08-15-01 | 1400 | ENVIRONMENTAL | 1028 | 1028 | 1280 | 128 | 38.70 |
| D 507 | 420125075064801 | 08-01-01 | 1200 | ENVIRONMENTAL | 1028 | 1028 | 1034 | 23 | 15.71 |
| ORANGE COUNTY NY | | | | | | | | | |
| O 2270 | 412722074354501 | 08-09-01 | 1200 | ENVIRONMENTAL | 1028 | 1028 | 500 | 28 | 20.00 |
| | | 08-09-01 | 1201 | REPLICATE | 80020 | 1028 | 500 | 28 | 20.00 |
| | | 08-09-01 | 1210 | REPLICATE | 80020 | 1028 | 500 | 28 | 20.00 |
| SULLIVAN COUNTY NY | | | | | | | | | |
| SV 536 | 415429074501101 | 07-23-01 | 1100 | ENVIRONMENTAL | 1028 | 1028 | 1460 | 125 | 32.61 |

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028) | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (MS/CM) (00095) | TEMPER- ATURE WATER (DEG C) (00010) | HARD- NESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) |
|--------------------|--|--|--|--|---|--|---|---|--|---|
| MONROE COUNTY PA | | | | | | | | | | |
| MO 689 | .6 | .4 | 8.1 | 211 | 14.6 | 110 | 30.3 | 7.13 | .35 | 2.3 |
| PIKE COUNTY PA | | | | | | | | | | |
| PI 308 | 3.4 | 7.3 | 6.2 | 100 | 10.4 | 32 | 9.55 | 1.93 | .72 | 5.2 |
| PI 480 | 8.1 | 3.1 | 7.7 | 329 | 11.8 | 140 | 45.7 | 6.17 | .47 | 9.0 |
| | 8.1 | 3.1 | 7.7 | 329 | 11.8 | 140 | 45.8 | 6.18 | .48 | 9.1 |
| | 8.1 | 3.1 | 7.7 | 329 | 11.8 | -- | -- | -- | -- | -- |
| PI 519 | 4.8 | 10.9 | 6.5 | 95 | 13.0 | 39 | 11.7 | 2.25 | .30 | 2.7 |
| PI 520 | 1.6 | 9.6 | 7.2 | 210 | 11.2 | 77 | 25.9 | 2.94 | .47 | 8.8 |
| WAYNE COUNTY PA | | | | | | | | | | |
| WN 209 | .3 | <.2 | 7.9 | 190 | 13.8 | 80 | 25.1 | 4.13 | .79 | 9.2 |
| SUSSEX COUNTY NJ | | | | | | | | | | |
| 370463 | 15 | 8.1 | 8.2 | 514 | 13.2 | 160 | 36.3 | 17.4 | 1.07 | 40.9 |
| | 15 | 8.1 | 8.2 | 514 | 13.2 | -- | -- | -- | -- | -- |
| | 15 | 8.1 | 8.2 | 514 | 13.2 | -- | -- | -- | -- | -- |
| BROOME COUNTY NY | | | | | | | | | | |
| BM 732 | 15 | 2.1 | 6.0 | 115 | 11.0 | 32 | 8.82 | 2.44 | 1.08 | 7.9 |
| DELAWARE COUNTY NY | | | | | | | | | | |
| D 502 | 13 | 6.6 | 6.2 | 174 | 15.4 | 65 | 19.3 | 4.00 | 1.24 | 7.1 |
| D 503 | 3.7 | 5.8 | 5.8 | 221 | 11.4 | 75 | 17.3 | 7.67 | 1.07 | 9.4 |
| D 504 | 1.3 | 10.2 | 6.5 | 153 | 11.0 | 45 | 14.6 | 2.18 | .70 | 11.0 |
| D 505 | 1.4 | 4.5 | 6.5 | 74 | 14.6 | 27 | 8.53 | 1.43 | .69 | 3.1 |
| | 1.4 | 4.5 | 6.5 | 74 | 14.6 | -- | -- | -- | -- | -- |
| | 1.4 | 4.5 | 6.5 | 74 | 14.6 | -- | -- | -- | -- | -- |
| D 506 | 4.9 | 7.6 | 6.3 | 86 | 13.0 | 31 | 7.98 | 2.70 | 1.01 | 3.4 |
| D 507 | .4 | 7.3 | 5.8 | 349 | 12.2 | 48 | 13.9 | 3.24 | 2.64 | 43.5 |
| ORANGE COUNTY NY | | | | | | | | | | |
| O 2270 | .5 | 5.5 | 5.9 | 143 | 15.2 | 35 | 10.3 | 2.10 | .82 | 11.3 |
| | .5 | 5.5 | 5.9 | 143 | 15.2 | 35 | 10.4 | 2.10 | .83 | 11.4 |
| | .5 | 5.5 | 5.9 | 143 | 15.2 | -- | -- | -- | -- | -- |
| SULLIVAN COUNTY NY | | | | | | | | | | |
| SV 536 | 2.4 | .6 | 7.5 | 138 | 11.8 | 64 | 20.0 | 3.42 | .68 | 2.2 |

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086) | BROMIDE DIS- SOLVED (MG/L AS BR) (71870) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623) |
|--------------------|--|---|--|---|--|--|---|--|--|--|
| MONROE COUNTY PA | | | | | | | | | | |
| MO 689 | 95 | .01 | 2.0 | <.2 | 7.5 | 13.6 | 133 | 121 | <.040 | <.10 |
| PIKE COUNTY PA | | | | | | | | | | |
| PI 308 | 14 | .02 | 9.3 | <.2 | 8.8 | 12.7 | 67 | 57 | E.022 | <.10 |
| PI 480 | 78 | .02 | 34.4 | <.2 | 8.5 | 26.1 | 230 | 180 | <.040 | <.10 |
| | 78 | .02 | 34.3 | <.2 | 8.5 | 26.0 | 230 | 180 | <.040 | <.10 |
| | 78 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| PI 519 | 21 | <.01 | 4.5 | <.2 | 8.8 | 10.2 | 66 | 59 | <.040 | <.10 |
| PI 520 | 43 | .02 | 26.7 | <.2 | 7.7 | 14.0 | 127 | 113 | <.040 | <.10 |
| WAYNE COUNTY PA | | | | | | | | | | |
| WN 209 | 94 | .03 | 2.3 | E.1 | 7.2 | 3.5 | 104 | 110 | .055 | <.10 |
| SUSSEX COUNTY NJ | | | | | | | | | | |
| 370463 | 96 | <.01 | 90.3 | E.1 | 17.5 | 13.2 | 289 | 275 | <.040 | <.10 |
| | 96 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 96 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| BROOME COUNTY NY | | | | | | | | | | |
| BM 732 | 18 | .02 | 15.2 | <.2 | 4.5 | 8.6 | 59 | 62 | <.040 | <.10 |
| DELAWARE COUNTY NY | | | | | | | | | | |
| D 502 | 29 | .02 | 9.0 | <.2 | 8.3 | 14.1 | 128 | 109 | <.040 | E.07 |
| D 503 | 20 | .05 | 34.0 | <.2 | 10.2 | 11.6 | 162 | 125 | <.040 | <.10 |
| D 504 | 44 | .02 | 19.0 | <.2 | 7.3 | 9.7 | 105 | 100 | <.040 | <.10 |
| D 505 | 22 | .02 | 3.9 | <.2 | 5.2 | 4.8 | 41 | 42 | <.040 | <.10 |
| | 22 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 22 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| D 506 | 21 | <.01 | 5.2 | <.2 | 5.2 | 8.4 | 42 | 50 | E.036 | <.10 |
| D 507 | 22 | .04 | 83.9 | <.2 | 4.2 | 9.1 | 205 | 178 | <.040 | E.05 |
| ORANGE COUNTY NY | | | | | | | | | | |
| O 2270 | 14 | .03 | 24.3 | <.2 | 5.2 | 9.1 | 99 | 78 | <.040 | <.10 |
| | 14 | .03 | 24.1 | <.2 | 5.3 | 8.9 | 99 | 77 | <.040 | <.10 |
| | 14 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SULLIVAN COUNTY NY | | | | | | | | | | |
| SV 536 | 57 | <.01 | 4.6 | .2 | 5.0 | 1.6 | 75 | 73 | <.040 | <.10 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P) (00660) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | TOTAL COLI- FORM, M ENDO MF, WTR (COL/ 100 ML) (31501) | E COLI, NA-MUG, WATER (COL/ 100 ML) (50278) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106) | ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095) |
|--------------------|--|--|--|--|--|---|---|--|--|--|
| MONROE COUNTY PA | | | | | | | | | | |
| MO 689 | .052 | E.005 | .055 | .014 | .018 | 3.8 | <1 | -- | <1 | <.05 |
| PIKE COUNTY PA | | | | | | | | | | |
| PI 308 | .134 | E.003 | -- | E.005 | <.020 | .37 | <1 | -- | <1 | <.05 |
| PI 480 | .544 | <.006 | -- | <.006 | <.020 | <.30 | <1 | -- | <1 | .05 |
| | .537 | <.006 | -- | <.006 | <.020 | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | <1 | E.05 |
| PI 519 | 1.23 | <.006 | -- | <.006 | <.020 | E.22 | <1 | -- | <1 | <.05 |
| PI 520 | .161 | <.006 | -- | <.006 | <.020 | E.25 | <1 | -- | <1 | <.05 |
| WAYNE COUNTY PA | | | | | | | | | | |
| WN 209 | E.025 | <.006 | .107 | .040 | .035 | <.30 | <1 | -- | <1 | <.05 |
| SUSSEX COUNTY NJ | | | | | | | | | | |
| 370463 | .145 | E.004 | .098 | .035 | .032 | .59 | >80 | <1 | 1 | <.05 |
| | -- | -- | -- | -- | -- | .41 | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| BROOME COUNTY NY | | | | | | | | | | |
| BM 732 | .442 | <.006 | -- | .007 | <.020 | E.28 | E8 | <1 | <1 | <.05 |
| DELAWARE COUNTY NY | | | | | | | | | | |
| D 502 | 6.29 | <.006 | -- | E.004 | <.020 | .43 | >80 | <1 | <1 | E.03 |
| D 503 | 4.89 | <.006 | -- | .014 | E.012 | .37 | <1 | -- | 2 | <.05 |
| D 504 | 2.02 | <.006 | -- | .011 | E.009 | E.27 | <1 | -- | <1 | .06 |
| D 505 | .333 | <.006 | -- | .006 | <.020 | .41 | <1 | -- | <1 | <.05 |
| | -- | -- | -- | -- | -- | E.32 | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| D 506 | .651 | <.006 | -- | <.006 | <.020 | E.29 | <1 | -- | <1 | E.03 |
| D 507 | 1.01 | <.006 | -- | .006 | <.020 | E.27 | <1 | -- | 2 | <.05 |
| ORANGE COUNTY NY | | | | | | | | | | |
| O 2270 | 1.36 | <.006 | -- | .010 | <.020 | E.23 | E2 | <1 | 1 | <.05 |
| | 1.36 | <.006 | -- | .010 | <.020 | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | <1 | <.05 |
| SULLIVAN COUNTY NY | | | | | | | | | | |
| SV 536 | .210 | <.006 | .144 | .054 | .047 | 1.2 | E2 | <1 | <1 | <.05 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | ARSENIC DIS- SOLVED (UG/L AS AS) (01000) | BARIUM, DIS- SOLVED (UG/L AS BA) (01005) | BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010) | BORON, DIS- SOLVED (UG/L AS B) (01020) | CADMIUM DIS- SOLVED (UG/L AS CD) (01025) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030) | COBALT, DIS- SOLVED (UG/L AS CO) (01035) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) |
|--------------------|---|---|---|---|---|--|---|---|---|---|
| MONROE COUNTY PA | | | | | | | | | | |
| MO 689 | 1.2 | 36.2 | <.06 | <7 | <.04 | <.8 | .04 | 1.6 | <10 | E.06 |
| PIKE COUNTY PA | | | | | | | | | | |
| PI 308 | <.2 | 2.2 | <.06 | 10 | <.04 | <.8 | .04 | 17.3 | 70 | .43 |
| PI 480 | E.1 | 8.3 | <.06 | E5 | <.04 | <.8 | .07 | 1.5 | 10 | .46 |
| | -- | -- | -- | -- | -- | -- | -- | -- | 20 | -- |
| | <.2 | 8.2 | <.06 | E6 | <.04 | <.8 | .07 | 1.4 | -- | .50 |
| PI 519 | <.2 | 13.8 | <.06 | 16 | E.03 | <.8 | .02 | 14.2 | M | .92 |
| PI 520 | <.2 | 3.3 | <.06 | 10 | <.04 | E.6 | .04 | 2.9 | M | .09 |
| WAYNE COUNTY PA | | | | | | | | | | |
| WN 209 | .8 | 41.1 | <.06 | 14 | <.04 | <.8 | .04 | <.2 | 50 | .09 |
| SUSSEX COUNTY NJ | | | | | | | | | | |
| 370463 | E.1 | 16.8 | <.06 | E6 | <.04 | <.8 | .04 | 3.1 | 30 | .42 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| BROOME COUNTY NY | | | | | | | | | | |
| BM 732 | <.2 | 33.2 | <.06 | 7 | <.04 | <.8 | .03 | 10.6 | 190 | .31 |
| DELAWARE COUNTY NY | | | | | | | | | | |
| D 502 | E.1 | 76.7 | <.06 | 10 | <.04 | <.8 | .06 | 86.8 | 120 | .38 |
| D 503 | E.1 | 32.4 | <.06 | 8 | E.04 | <.8 | .03 | 11.5 | 10 | .48 |
| D 504 | .6 | 38.1 | <.06 | 9 | <.04 | <.8 | .03 | 21.0 | 40 | 1.03 |
| D 505 | .2 | 15.9 | <.06 | 8 | <.04 | <.8 | .02 | <.2 | <10 | <.08 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| D 506 | E.1 | 20.1 | <.06 | 8 | <.04 | <.8 | 2.04 | <.2 | 570 | <.08 |
| D 507 | <.2 | 69.8 | <.06 | 15 | E.02 | <.8 | .06 | 52.5 | 110 | 1.86 |
| ORANGE COUNTY NY | | | | | | | | | | |
| O 2270 | E.1 | 75.8 | <.06 | 10 | <.04 | <.8 | .04 | 31.6 | 10 | 2.02 |
| | -- | -- | -- | -- | -- | -- | -- | -- | 10 | -- |
| | E.1 | 77.3 | <.06 | 11 | <.04 | <.8 | .04 | 35.1 | -- | 2.29 |
| SULLIVAN COUNTY NY | | | | | | | | | | |
| SV 536 | E.2 | 8.0 | <.06 | <7 | <.04 | <.8 | .02 | 2.0 | M | <.08 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not qualified.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

557

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | LITHIUM DIS- SOLVED (UG/L AS LI) (01130) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145) | SILVER, DIS- SOLVED (UG/L AS AG) (01075) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080) | THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057) | VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) |
|--------------------|---|---|--|---|--|---|---|--|---|---|
| MONROE COUNTY PA | | | | | | | | | | |
| MO 689 | 3.6 | 3.6 | .6 | <.06 | .8 | <1.0 | 337 | <.04 | <.2 | 1 |
| PIKE COUNTY PA | | | | | | | | | | |
| PI 308 | 2.0 | 5.0 | <.2 | .71 | <.3 | <1.0 | 39.2 | <.04 | <.2 | 3 |
| PI 480 | 5.9 | 1.6 | .3 | <.06 | .5 | <1.0 | 131 | <.04 | <.2 | 1 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 6.1 | 1.7 | .3 | <.06 | .3 | <1.0 | 131 | <.04 | <.2 | 2 |
| PI 519 | 1.1 | 1.4 | <.2 | <.06 | <.3 | <1.0 | 19.1 | .04 | <.2 | 4 |
| PI 520 | 2.6 | .7 | <.2 | <.06 | <.3 | <1.0 | 72.8 | <.04 | <.2 | 6 |
| WAYNE COUNTY PA | | | | | | | | | | |
| WN 209 | 2.7 | 490 | .9 | <.06 | <.3 | <1.0 | 239 | <.04 | E.2 | <1 |
| SUSSEX COUNTY NJ | | | | | | | | | | |
| 370463 | .5 | 1.3 | .3 | <.06 | <.3 | <1.0 | 59.1 | <.04 | .4 | 1 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| BROOME COUNTY NY | | | | | | | | | | |
| BM 732 | E.2 | 5.9 | <.2 | .11 | <.3 | <1.0 | 29.2 | <.04 | <.2 | 4 |
| DELAWARE COUNTY NY | | | | | | | | | | |
| D 502 | .8 | 7.7 | <.2 | <.06 | E.2 | <1.0 | 60.2 | <.04 | <.2 | 15 |
| D 503 | 2.0 | 9.9 | <.2 | .68 | E.2 | <1.0 | 67.8 | <.04 | <.2 | 8 |
| D 504 | .6 | 2.0 | <.2 | <.06 | <.3 | <1.0 | 45.5 | <.04 | <.2 | 4 |
| D 505 | E.3 | 11.1 | .4 | .08 | <.3 | <1.0 | 28.7 | <.04 | <.2 | <1 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| D 506 | .4 | 157 | <.2 | 5.10 | <.3 | <1.0 | 20.1 | <.04 | E.2 | 2 |
| D 507 | E.3 | 4.0 | <.2 | .17 | <.3 | <1.0 | 45.1 | <.04 | <.2 | 14 |
| ORANGE COUNTY NY | | | | | | | | | | |
| O 2270 | E.2 | 6.3 | <.2 | <.06 | E.2 | <1.0 | 48.5 | <.04 | <.2 | 24 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | E.2 | 7.5 | <.2 | .06 | <.3 | <1.0 | 48.2 | <.04 | <.2 | 19 |
| SULLIVAN COUNTY NY | | | | | | | | | | |
| SV 536 | .4 | 8.2 | <.2 | <.06 | E.2 | <1.0 | 28.9 | <.04 | <.2 | 2 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | ACETO- CHLOR ESA FLTRD 0.7 mM GF REC (UG/L) (61029) | ACETO- CHLOR OA FLTRD 0.7 mM GF REC (UG/L) (61030) | ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260) | ALA- CHLOR OA FLTRD 0.7 mM GF REC (UG/L) (61031) | ALA- CHLOR, (ESA) WAT FLT GF 0.7U REC (UG/L) (50009) | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | CAF- FEINE, WATER FLTRD REC (UG/L) (50305) |
|--------------------|--|---|--|---|---|--|---|---|--|
| MONROE COUNTY PA | | | | | | | | | |
| MO 689 | <.05 | <.05 | -- | <.05 | <.050 | -- | -- | <.009 | <.010 |
| PIKE COUNTY PA | | | | | | | | | |
| PI 308 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | <.007 | <.010 |
| PI 480 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | <.007 | <.010 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| PI 519 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | <.007 | <.010 |
| PI 520 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | <.007 | <.010 |
| WAYNE COUNTY PA | | | | | | | | | |
| WN 209 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | <.007 | <.010 |
| SUSSEX COUNTY NJ | | | | | | | | | |
| 370463 | <.05 | <.05 | <.004 | .05 | <.050 | <.002 | <.005 | <.007 | <.010 |
| | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | <.007 | <.010 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| BROOME COUNTY NY | | | | | | | | | |
| BM 732 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | E.004 | <.010 |
| DELAWARE COUNTY NY | | | | | | | | | |
| D 502 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | .013 | <.010 |
| D 503 | <.05 | <.05 | <.004 | <.05 | .080 | <.002 | <.005 | <.007 | <.010 |
| D 504 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | E.006 | <.010 |
| D 505 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | <.007 | <.010 |
| | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | <.007 | <.010 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| D 506 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | E.011 | <.010 |
| D 507 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | <.007 | <.010 |
| ORANGE COUNTY NY | | | | | | | | | |
| O 2270 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | <.007 | <.010 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SULLIVAN COUNTY NY | | | | | | | | | |
| SV 536 | <.05 | <.05 | <.004 | <.05 | <.050 | <.002 | <.005 | <.007 | E.004 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | CAR- BARYL WATER FLTRD 0.7 m GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 m GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 m GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038) | DI- AZINON, DIS- SOLVED (UG/L) (39572) | DI- ELDRIN DIS- SOLVED (UG/L) (39381) |
|--------------------|--|--|--|--|---|--|--|---|--|
| MONROE COUNTY PA | | | | | | | | | |
| MO 689 | -- | -- | -- | -- | -- | <.028 | <.04 | -- | -- |
| PIKE COUNTY PA | | | | | | | | | |
| PI 308 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.04 | <.005 | <.005 |
| PI 480 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.04 | <.005 | <.005 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| PI 519 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.04 | <.005 | <.005 |
| PI 520 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.04 | <.005 | <.005 |
| WAYNE COUNTY PA | | | | | | | | | |
| WN 209 | E.005 | <.020 | <.005 | <.018 | <.003 | <.006 | <.04 | <.005 | <.005 |
| SUSSEX COUNTY NJ | | | | | | | | | |
| 370463 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.04 | <.005 | <.005 |
| | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.04 | <.005 | <.005 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| BROOME COUNTY NY | | | | | | | | | |
| BM 732 | <.041 | <.020 | <.005 | <.018 | <.003 | E.004 | <.04 | <.005 | <.005 |
| DELAWARE COUNTY NY | | | | | | | | | |
| D 502 | <.041 | <.020 | <.005 | <.018 | <.003 | E.022 | <.04 | <.005 | <.005 |
| D 503 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.04 | <.005 | <.005 |
| D 504 | <.041 | <.020 | <.005 | <.018 | <.003 | E.002 | <.04 | <.005 | <.005 |
| D 505 | <.041 | <.020 | <.005 | <.018 | <.003 | E.003 | <.04 | <.005 | <.005 |
| | <.041 | <.020 | <.005 | <.018 | <.003 | E.003 | <.04 | <.005 | <.005 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| D 506 | <.041 | <.020 | <.005 | <.018 | <.003 | E.004 | E.01 | <.005 | <.005 |
| D 507 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.04 | <.005 | <.005 |
| ORANGE COUNTY NY | | | | | | | | | |
| O 2270 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.04 | <.005 | <.005 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SULLIVAN COUNTY NY | | | | | | | | | |
| SV 536 | <.041 | <.020 | <.005 | <.018 | <.003 | <.006 | <.04 | <.005 | <.005 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | DIMETH- ENAMID OXA, WATER FLT, REC (UG/L) (62482) | DIMETH- ENAMID, ESA, WAT FLT (UG/L) (61951) | EPTC WATER FLTRD 0.7 m GF, REC (UG/L) (82668) | FLUFEN- ACET, ESA, WAT FLT (UG/L) (61952) | FLUFE- NACET OXA WATER FLT, REC (UG/L) (62483) | IMAZ- AQUIN WATER FLTRD REC (UG/L) (50356) | LINDANE DIS- SOLVED (UG/L) (39341) | LIN- URON WATER FLTRD 0.7 m GF, REC (UG/L) (82666) | MALA- THION, DIS- SOLVED (UG/L) (39532) |
|--------------------|--|--|---|--|---|--|--|---|--|
| MONROE COUNTY PA | | | | | | | | | |
| MO 689 | <.0500 | <.05 | -- | <.05 | <.0500 | <.016 | -- | -- | -- |
| PIKE COUNTY PA | | | | | | | | | |
| PI 308 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| PI 480 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| PI 519 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| PI 520 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| WAYNE COUNTY PA | | | | | | | | | |
| WN 209 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.002 | <.004 | <.035 | <.027 |
| SUSSEX COUNTY NJ | | | | | | | | | |
| 370463 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| BROOME COUNTY NY | | | | | | | | | |
| BM 732 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| DELAWARE COUNTY NY | | | | | | | | | |
| D 502 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| D 503 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| D 504 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| D 505 | <.0500 | <.05 | <.002 | <.05 | <.0500 | E.021 | <.004 | <.035 | <.027 |
| | <.0500 | <.05 | <.002 | <.05 | <.0500 | E.019 | <.004 | <.035 | <.027 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| D 506 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| D 507 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| ORANGE COUNTY NY | | | | | | | | | |
| O 2270 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SULLIVAN COUNTY NY | | | | | | | | | |
| SV 536 | <.0500 | <.05 | <.002 | <.05 | <.0500 | <.016 | <.004 | <.035 | <.027 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

561

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | METHYL AZIN- PHOS WAT FLT 0.7 m GF, REC (UG/L) (82686) | METOLA- CHLOR ESA FLTRD 0.7 mM GF REC (UG/L) (61043) | METOLA- CHLOR OA FLTRD 0.7 mM GF REC (UG/L) (61044) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 m GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 m GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 m GF, REC (UG/L) (82683) |
|--------------------|---|---|--|---|--|--|---|---|---|
| MONROE COUNTY PA | | | | | | | | | |
| MO 689 | -- | <.05 | <.05 | -- | -- | -- | -- | -- | -- |
| PIKE COUNTY PA | | | | | | | | | |
| PI 308 | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| PI 480 | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| PI 519 | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| PI 520 | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| WAYNE COUNTY PA | | | | | | | | | |
| WN 209 | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| SUSSEX COUNTY NJ | | | | | | | | | |
| 370463 | <.050 | .05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| BROOME COUNTY NY | | | | | | | | | |
| BM 732 | <.050 | .17 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| DELAWARE COUNTY NY | | | | | | | | | |
| D 502 | <.050 | 1.27 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| D 503 | <.050 | .67 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| D 504 | <.050 | .26 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| D 505 | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| D 506 | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| D 507 | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| ORANGE COUNTY NY | | | | | | | | | |
| O 2270 | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SULLIVAN COUNTY NY | | | | | | | | | |
| SV 536 | <.050 | <.05 | <.05 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 |

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | PRO-METON, WATER, DISS, REC (UG/L) (04037) | SI-MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU-THIURON WATER FLTRD 0.7 m GF, REC (UG/L) (82670) | TER-BACIL WATER FLTRD 0.7 m GF, REC (UG/L) (82665) | THIO-BENCARB WATER FLTRD 0.7 m GF, REC (UG/L) (82681) | TRI-FLUR- ALIN WAT FLT 0.7 m GF, REC (UG/L) (82661) | 1,1,1-TRI- CHLORO- ETHANE TOTAL (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501) |
|--------------------|---|---|---|--|---|---|---|--|---|
| MONROE COUNTY PA | | | | | | | | | |
| MO 689 | -- | -- | <.006 | -- | -- | -- | <.03 | <.04 | <.04 |
| PIKE COUNTY PA | | | | | | | | | |
| PI 308 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| PI 480 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| PI 519 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | E.03 | <.04 | <.04 |
| PI 520 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| WAYNE COUNTY PA | | | | | | | | | |
| WN 209 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| SUSSEX COUNTY NJ | | | | | | | | | |
| 370463 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | <.03 | <.04 | <.04 |
| BROOME COUNTY NY | | | | | | | | | |
| BM 732 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| DELAWARE COUNTY NY | | | | | | | | | |
| D 502 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| D 503 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| D 504 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| D 505 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | <.03 | <.04 | <.04 |
| D 506 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| D 507 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| ORANGE COUNTY NY | | | | | | | | | |
| O 2270 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SULLIVAN COUNTY NY | | | | | | | | | |
| SV 536 | <.015 | <.011 | <.016 | <.034 | <.005 | <.009 | <.03 | <.04 | <.04 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | ACETONE WATER WHOLE TOTAL (UG/L) (81552) | 1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613) | BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551) | BENZENE 124-TRI METHYL UNFLT RECOVER (UG/L) (77222) | BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) |
|--------------------|---|--|---|---|--|---|---|--|---|
| MONROE COUNTY PA | | | | | | | | | |
| MO 689 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| PIKE COUNTY PA | | | | | | | | | |
| PI 308 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| PI 480 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| PI 519 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| PI 520 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| WAYNE COUNTY PA | | | | | | | | | |
| WN 209 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| SUSSEX COUNTY NJ | | | | | | | | | |
| 370463 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| BROOME COUNTY NY | | | | | | | | | |
| BM 732 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| DELAWARE COUNTY NY | | | | | | | | | |
| D 502 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| D 503 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| D 504 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| D 505 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| D 506 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| D 507 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| ORANGE COUNTY NY | | | | | | | | | |
| O 2270 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SULLIVAN COUNTY NY | | | | | | | | | |
| SV 536 | <7 | <.3 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 |

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON DI- SULFIDE WATER TOTAL (UG/L) (77041) | CHLORO- BENZENE TOTAL (UG/L) (34301) | CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105) | CHLORO- FORM TOTAL (UG/L) (32106) | CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093) | BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101) | DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668) |
|--------------------|---------------------------------------|--|---|--|---|---|---|---|---|
| MONROE COUNTY PA | | | | | | | | | |
| MO 689 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| PIKE COUNTY PA | | | | | | | | | |
| PI 308 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| PI 480 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| PI 519 | <.04 | <.06 | <.07 | <.03 | <.2 | E.04 | <.04 | <.05 | <.3 |
| PI 520 | <.04 | <.06 | <.07 | <.03 | <.2 | E.08 | <.04 | <.05 | <.3 |
| WAYNE COUNTY PA | | | | | | | | | |
| WN 209 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| SUSSEX COUNTY NJ | | | | | | | | | |
| 370463 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| BROOME COUNTY NY | | | | | | | | | |
| BM 732 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| DELAWARE COUNTY NY | | | | | | | | | |
| D 502 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| D 503 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | E.6 |
| D 504 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| D 505 | <.04 | <.06 | <.07 | <.03 | <.2 | E.03 | <.04 | <.05 | <.3 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | <.04 | <.06 | <.07 | <.03 | <.2 | E.04 | <.04 | <.05 | <.3 |
| D 506 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| D 507 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| ORANGE COUNTY NY | | | | | | | | | |
| O 2270 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SULLIVAN COUNTY NY | | | | | | | | | |
| SV 536 | <.04 | <.06 | <.07 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 |

E Estimated value.

< Actual value is known to be less than the value shown.

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | ETHER ETHER WATER UNFLTRD RECOVER (UG/L) (81576) | ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005) | ETHER- BENZENE TOTAL (UG/L) (34371) | FREON- 113 WATER UNFLTRD REC (UG/L) (77652) | FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607) | METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032) | METHYL- CHLO- RIDE TOTAL (UG/L) (34418) | METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423) | META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795) |
|--------------------|--|---|---|---|--|--|--|--|--|
| MONROE COUNTY PA | | | | | | | | | |
| MO 689 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| PIKE COUNTY PA | | | | | | | | | |
| PI 308 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| PI 480 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| PI 519 | <.2 | <.1 | <.03 | <.06 | <2 | .7 | <.2 | <.2 | <.06 |
| PI 520 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| WAYNE COUNTY PA | | | | | | | | | |
| WN 209 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| SUSSEX COUNTY NJ | | | | | | | | | |
| 370463 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| BROOME COUNTY NY | | | | | | | | | |
| BM 732 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| DELAWARE COUNTY NY | | | | | | | | | |
| D 502 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| D 503 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| D 504 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| D 505 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| D 506 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| D 507 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |
| ORANGE COUNTY NY | | | | | | | | | |
| O 2270 | <.2 | <.1 | <.03 | <.06 | <2 | E.1 | <.2 | <.2 | <.06 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SULLIVAN COUNTY NY | | | | | | | | | |
| SV 536 | <.2 | <.1 | <.03 | <.06 | <2 | <.2 | <.2 | <.2 | <.06 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, GROUND WATER IN THE GLACIOFLUVIAL DEPOSITS WITHIN THE NEW ENGLAND, VALLEY AND RIDGE, AND APPALACHIAN PLATEAU PHYSIOGRAPHIC PROVINCES,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| LOCAL ID | O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275) | O- XYLENE WATER WHOLE TOTAL (UG/L) (77135) | P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356) | TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475) | TOLUENE TOTAL (UG/L) (34010) | TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180) | TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488) | RADON 222 TOTAL (PCI/L) (82303) | URANIUM NATURAL DIS- SOLVED (UG/L) AS U (22703) |
|--------------------|--|--|--|--|---------------------------------------|--|---|---|---|
| MONROE COUNTY PA | | | | | | | | | |
| MO 689 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 373 | .51 |
| PIKE COUNTY PA | | | | | | | | | |
| PI 308 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 823 | <.02 |
| PI 480 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 497 | .15 |
| | -- | -- | -- | -- | -- | -- | -- | 479 | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | .16 |
| PI 519 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 932 | <.02 |
| PI 520 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 860 | E.01 |
| WAYNE COUNTY PA | | | | | | | | | |
| WN 209 | <.03 | <.04 | <.07 | <.1 | .17 | <.04 | <.09 | 828 | .59 |
| SUSSEX COUNTY NY | | | | | | | | | |
| 370463 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 1450 | .86 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | -- | -- |
| BROOME COUNTY NY | | | | | | | | | |
| BM 732 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 1640 | <.02 |
| DELAWARE COUNTY NY | | | | | | | | | |
| D 502 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 1290 | <.02 |
| D 503 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 719 | <.02 |
| D 504 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 1640 | .06 |
| D 505 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 1520 | .03 |
| | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | -- | -- |
| D 506 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 1090 | <.02 |
| D 507 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 1120 | <.02 |
| ORANGE COUNTY NY | | | | | | | | | |
| O 2270 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 576 | E.02 |
| | -- | -- | -- | -- | -- | -- | -- | 546 | -- |
| | -- | -- | -- | -- | -- | -- | -- | -- | E.02 |
| SULLIVAN COUNTY NY | | | | | | | | | |
| SV 536 | <.03 | <.04 | <.07 | <.1 | <.05 | <.04 | <.09 | 2280 | .24 |

E Estimated value.

< Actual value is known to be less than the value shown.

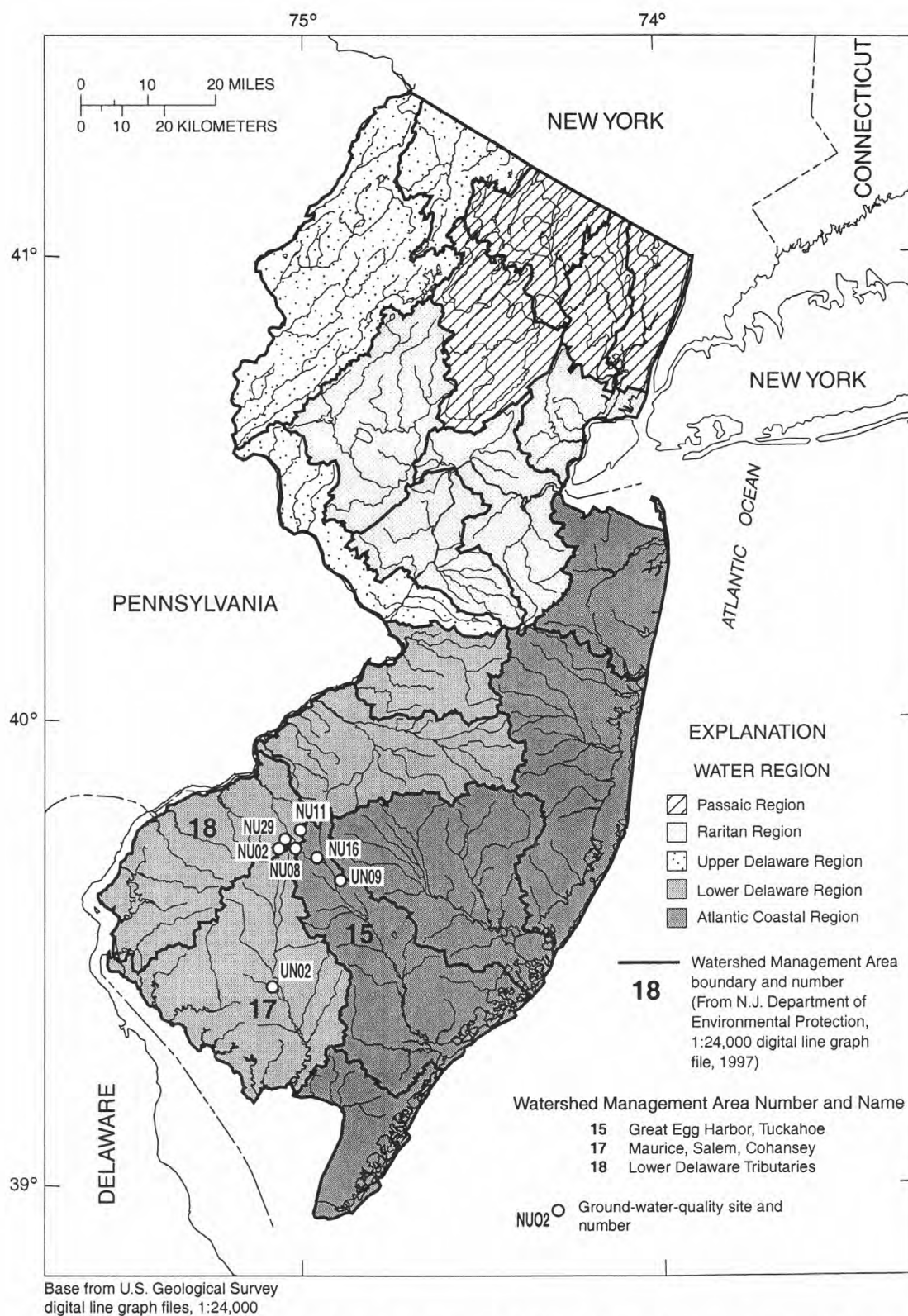


Figure 64. Location of sites in the Long Island-New Jersey National Water-Quality Assessment Program, ground-water low-intensity-phase synoptic study, calendar years 1999-2001.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

LINJ NANQA GROUND-WATER-QUALITY NETWORK

| STATION IDENTIFICATION NUMBER | NJ-WRD WELL NUMBER | LOCAL IDENTIFIER | LATITUDE | LONGITUDE | ALTITUDE OF LAND SURFACE (FT.) | WELL DEPTH | SCREEN INTERVAL (FT.) | AQUIFER UNIT |
|-------------------------------------|--------------------------|---------------------|----------|-----------|---|---------------|-----------------------------|-----------------|
| 392558075051901 | 110925 | USGS UND02 | 392558 | 0750519 | 55 | 26 | 24 - 26 | 121CKKD |
| 393940074534201 | 070842 | USGS UND09 | 393940 | 0745342 | 100 | 14 | 12 - 14 | 121CKKD |
| 394233074574401 | 070843 | USGS NU16 | 394233 | 0745744 | 125 | 22 | 20 - 22 | 121CKKD |
| 394340075012701 | 151220 | USGS NU08 | 394340 | 0750127 | 155 | 30 | 28 - 30 | 121CKKD |
| 394342075040301 | 151210 | USGS NU02 | 394342 | 0750403 | 150 | 19 | 17 - 19 | 121CKKD |
| 394446075031001 | 151258 | USGS NU29 | 394446 | 0750310 | 120 | 19 | 17 - 19 | 121CKKD |
| 394604075003601 | 070836 | USGS NU11 | 394604 | 0750036 | 165 | 37 | 35 - 37 | 121CKKD |

Aquifer unit:

121CKKD - Kirkwood-Cohansey

REMARKS.--Samples were analyzed for volatile organic compounds (VOCs) with laboratory schedule 2020 and pesticides with schedule 2001 (listed in their entirety, with laboratory reporting levels, in "Explanation of the Records" in the "Introduction"). Only VOCs and pesticides identified by the analyses in one or more samples are listed in the following table. For the definition of the type of quality-control data listed under SAMPLE TYPE, refer to "Explanation of the records, Quality-control data" in the "Introduction".

WATER-QUALITY DATA, CALENDAR YEARS 1999-2001

| LOCAL IDENT- I- FIER | STATION | NUMBER | DATE | TIME | SAMPLE TYPE | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | BROMIDE DIS- SOLVED (MG/L AS BR) (71870) |
|-------------------------------|-----------------|----------|------|---------------|----------------|---|---|--|---|---|
| USGS UND02 | 392558075051901 | 08-25-00 | 0800 | ENVIRONMENTAL | .67 | .500 | .40 | 1.8 | <.01 | -- |
| | | 08-25-00 | 0805 | FIELD BLANK | -- | -- | -- | -- | -- | -- |
| | | 08-25-01 | 0805 | FIELD BLANK | <.02 | <.014 | <.24 | <.1 | <.01 | <.01 |
| | | 08-28-01 | 1500 | ENVIRONMENTAL | .74 | .530 | .37 | 1.7 | .02 | -- |
| USGS UND09 | 393940074534201 | 08-12-99 | 1000 | ENVIRONMENTAL | -- | -- | -- | -- | <.01 | -- |
| | | 08-28-01 | 0905 | FIELD BLANK | <.01 | <.008 | <.09 | <.1 | <.01 | <.01 |
| | | 08-28-01 | 1000 | ENVIRONMENTAL | .27 | .246 | .22 | 1.5 | <.01 | -- |
| USGS NU16 | 394233074574401 | 08-12-99 | 1300 | ENVIRONMENTAL | -- | -- | -- | -- | .01 | -- |
| | | 08-24-00 | 1100 | ENVIRONMENTAL | 16.1 | 5.95 | 2.82 | 14.6 | .02 | -- |
| | | 08-24-01 | 0900 | ENVIRONMENTAL | 17.4 | 6.56 | 2.81 | 17.4 | <.01 | -- |
| USGS NU08 | 394340075012701 | 08-12-99 | 0800 | ENVIRONMENTAL | -- | -- | -- | -- | .02 | -- |
| | | 08-24-00 | 1600 | ENVIRONMENTAL | .21 | 1.50 | .75 | 8.5 | .02 | -- |
| | | 08-23-01 | 1600 | ENVIRONMENTAL | .15 | 1.17 | .63 | 8.3 | .01 | -- |
| USGS NU02 | 394342075040301 | 11-07-00 | 1100 | ENVIRONMENTAL | 5.48 | 1.62 | 2.76 | 14.3 | .01 | -- |
| | | 08-23-01 | 1330 | ENVIRONMENTAL | 5.63 | 1.72 | 2.64 | 13.1 | <.01 | -- |
| USGS NU29 | 394446075031001 | 08-24-00 | 1800 | ENVIRONMENTAL | 8.98 | 2.20 | 2.51 | 25.7 | .06 | -- |
| | | 08-23-01 | 0900 | ENVIRONMENTAL | 14.6 | 3.50 | 3.16 | 40.5 | .01 | -- |
| USGS NU11 | 394604075003601 | 08-12-99 | 1500 | ENVIRONMENTAL | -- | -- | -- | -- | .01 | -- |
| | | 08-24-00 | 1400 | ENVIRONMENTAL | 6.58 | 1.97 | 3.76 | 7.5 | .04 | -- |
| | | 08-24-01 | 1300 | ENVIRONMENTAL | 7.03 | 1.72 | 3.00 | 7.8 | .01 | -- |

| LOCAL IDENT- I- FIER | DATE | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS STO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) |
|-------------------------------|----------|--|---|--|--|---|--|--|--|--|--|
| USGS UND02 | 08-25-00 | 3.5 | <.1 | 4.9 | 10.8 | 33 | .072 | .11 | <.050 | <.010 | -- |
| | 08-25-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 08-25-01 | <.3 | <.1 | <.1 | <.3 | <10 | <.020 | <.10 | <.050 | <.010 | -- |
| | 08-28-01 | 3.4 | <.2 | 5.1 | 11.6 | 34 | .059 | .12 | <.050 | <.006 | -- |
| USGS UND09 | 08-12-99 | 2.4 | <.1 | -- | 11.2 | 24 | <.020 | <.10 | <.050 | <.010 | -- |
| | 08-28-01 | <.1 | <.2 | <.1 | <.1 | 18 | <.040 | <.10 | <.050 | <.006 | -- |
| | 08-28-01 | 3.8 | <.2 | 4.2 | 13.6 | 42 | <.040 | <.10 | E.023 | <.006 | -- |
| USGS NU16 | 08-12-99 | 35.4 | <.1 | -- | 20.7 | 140 | <.020 | <.10 | 2.17 | <.010 | -- |
| | 08-24-00 | 43.7 | <.1 | 2.7 | 16.9 | 153 | <.020 | <.10 | 2.41 | <.010 | -- |
| | 08-24-01 | 52.7 | <.2 | 2.5 | 18.2 | 150 | E.021 | .11 | 2.01 | <.006 | 2.1 |
| USGS NU08 | 08-12-99 | 16.9 | <.1 | -- | <.1 | 40 | <.020 | <.10 | .843 | <.010 | -- |
| | 08-24-00 | 15.1 | <.1 | 6.2 | <.3 | 35 | <.020 | <.10 | 1.18 | <.010 | -- |
| | 08-23-01 | 13.5 | <.2 | 6.1 | <.1 | 54 | <.040 | <.10 | 1.23 | <.006 | -- |
| USGS NU02 | 11-07-00 | 15.0 | <.2 | 4.4 | 21.4 | 78 | <.041 | <.10 | 2.89 | <.006 | -- |
| | 08-23-01 | 16.6 | <.2 | 3.9 | 19.6 | 94 | <.040 | E.08 | 2.80 | <.006 | -- |
| USGS NU29 | 08-24-00 | 43.8 | <.1 | 2.4 | 6.5 | 126 | .239 | .46 | <.050 | <.010 | -- |
| | 08-23-01 | 84.4 | <.2 | 2.6 | 8.1 | 196 | .178 | .35 | .102 | <.006 | .45 |
| USGS NU11 | 08-12-99 | 15.9 | <.1 | -- | 9.7 | 71 | <.020 | <.10 | 2.66 | <.010 | -- |
| | 08-24-00 | 14.8 | <.1 | 4.9 | 10.6 | 70 | <.020 | <.10 | 2.96 | <.010 | -- |
| | 08-24-01 | 12.7 | <.2 | 5.2 | 18.6 | 60 | E.026 | .15 | 2.53 | <.006 | 2.7 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES
 LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued
 WATER-QUALITY DATA, CALENDAR YEARS 1999-2001

| LOCAL IDENT- I- FIER | DATE | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | 1,1,1- TRI- CHLORO- ETHANE (UG/L) (34506) | 1,1-DI- CHLORO- ETHANE (UG/L) (34496) | 1,1-DI- CHLORO- ETHYL- ENE (UG/L) (34501) | ACETONE WATER WHOLE TOTAL (UG/L) (81552) | 1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613) |
|-------------------------------|----------|--|--|---|---|---|--|---|--|---|--|
| USGS UND02 | 08-25-00 | .035 | .033 | 2.2 | 7700 | 44.5 | <.03 | <.07 | <.04 | <7 | <.3 |
| | 08-25-00 | -- | -- | -- | -- | -- | <.03 | <.07 | <.04 | <7 | <.3 |
| | 08-25-01 | <.006 | <.010 | .47 | <10 | <2.2 | -- | -- | -- | -- | -- |
| | 08-28-01 | .034 | E.035 | 2.0 | 7700 | 51.5 | <.03 | <.04 | <.04 | <7 | <.3 |
| USGS UND09 | 08-12-99 | <.004 | <.010 | -- | -- | -- | <.03 | <.07 | <.04 | <5 | <.3 |
| | 08-28-01 | <.006 | <.020 | .58 | <10 | <3.0 | <.03 | <.04 | <.04 | <7 | <.3 |
| | 08-28-01 | <.006 | <.020 | .98 | 10 | 15.2 | <.03 | <.04 | <.04 | <7 | <.3 |
| USGS NU16 | 08-12-99 | <.004 | <.010 | -- | -- | -- | E.02 | <.07 | <.04 | <5 | <.3 |
| | 08-24-00 | <.006 | <.010 | .86 | <10 | 40.2 | E.01 | <.07 | <.04 | <7 | <.3 |
| | 08-24-01 | <.006 | <.020 | .67 | M | 29.1 | <.03 | <.04 | <.04 | <7 | <.3 |
| USGS NU08 | 08-12-99 | <.004 | <.010 | -- | -- | -- | E.01 | <.07 | <.04 | <5 | <.3 |
| | 08-24-00 | <.006 | <.010 | .53 | <10 | 2.7 | <.03 | <.07 | <.04 | <7 | <.3 |
| | 08-23-01 | <.006 | <.020 | .40 | 20 | E1.6 | <.03 | <.04 | <.04 | <7 | <.3 |
| USGS NU02 | 11-07-00 | <.006 | <.018 | .66 | <10 | 15.8 | E.01 | <.04 | <.04 | <7 | <.3 |
| | 08-23-01 | <.006 | <.020 | .61 | M | 17.4 | <.03 | <.04 | <.04 | <7 | <.3 |
| USGS NU29 | 08-24-00 | .009 | <.010 | -- | 3010 | 43.3 | <.03 | <.07 | <.04 | <7 | <.3 |
| | 08-23-01 | E.006 | <.020 | 3.7 | 2440 | 52.7 | <.03 | <.04 | <.04 | <7 | <.3 |
| USGS NU11 | 08-12-99 | <.004 | <.010 | -- | -- | -- | <.03 | <.07 | <.04 | <5 | <.3 |
| | 08-24-00 | <.006 | <.010 | .63 | <10 | 7.7 | <.03 | <.07 | <.04 | <7 | <.3 |
| | 08-24-01 | <.006 | <.020 | .52 | 200 | 21.8 | <.03 | <.04 | E.04 | <7 | <.3 |

| LOCAL IDENT- I- FIER | DATE | BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551) | BENZENE 124-TRI METHYL UNFLTRD RECOVER (UG/L) (77222) | BENZENE 135-TRI METHYL WATER UNFLTRD (UG/L) (77226) | BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566) | BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571) | ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223) | BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536) | BENZENE TOTAL (UG/L) (34030) | BROMO- FORM TOTAL (UG/L) (32104) | CARBON DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041) |
|-------------------------------|----------|---|---|---|---|---|--|---|---------------------------------------|--|--|
| USGS UND02 | 08-25-00 | <.2 | <.06 | <.04 | <.05 | <.05 | <.03 | <.05 | <.04 | <.06 | <.07 |
| | 08-25-00 | <.2 | <.06 | <.04 | <.05 | <.05 | <.03 | <.05 | <.04 | <.06 | <.07 |
| | 08-25-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 08-28-01 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | <.04 | <.06 | <.07 |
| USGS UND09 | 08-12-99 | <.2 | <.06 | <.04 | <.05 | <.05 | <.03 | <.05 | <.10 | <.10 | <.37 |
| | 08-28-01 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | <.04 | <.06 | <.07 |
| | 08-28-01 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | <.04 | <.06 | <.07 |
| USGS NU16 | 08-12-99 | <.2 | <.06 | <.04 | <.05 | <.05 | <.03 | <.05 | <.10 | <.10 | <.37 |
| | 08-24-00 | <.2 | <.06 | <.04 | <.05 | <.05 | <.03 | <.05 | <.04 | <.06 | <.07 |
| | 08-24-01 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | <.04 | <.06 | <.07 |
| USGS NU08 | 08-12-99 | <.2 | <.06 | <.04 | <.05 | <.05 | <.03 | <.05 | <.10 | <.10 | <.37 |
| | 08-24-00 | <.2 | <.06 | <.04 | <.05 | <.05 | <.03 | <.05 | <.04 | <.06 | <.07 |
| | 08-23-01 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | <.04 | <.06 | <.07 |
| USGS NU02 | 11-07-00 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | <.04 | <.06 | <.07 |
| | 08-23-01 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | <.04 | <.06 | <.07 |
| USGS NU29 | 08-24-00 | <.2 | <.06 | <.04 | <.05 | <.05 | <.03 | <.05 | <.04 | <.06 | <.07 |
| | 08-23-01 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | <.04 | <.06 | <.07 |
| USGS NU11 | 08-12-99 | <.2 | <.06 | <.04 | <.05 | <.05 | <.03 | <.05 | <.10 | <.10 | <.37 |
| | 08-24-00 | <.2 | <.06 | <.04 | <.05 | <.05 | <.03 | <.05 | <.04 | <.06 | <.07 |
| | 08-24-01 | <.2 | <.06 | <.04 | <.03 | <.05 | <.03 | <.03 | <.04 | <.06 | <.07 |

E Estimated value.

< Actual value is known to be less than the value shown.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, CALENDAR YEARS 1999-2001

| LOCAL IDENT- IFIER | DATE | CHLORO- BENZENE | CHLORO- DI- BROMO- METHANE | CHLORO- FORM | CIS-1,2 -DI- CHLORO- ETHENE | BROMO- DI- CHLORO- METHANE | DI- CHLORO- DI- FLUORO- METHANE | ETHER ETHYL WATER | ETHER TERT- PENTYL METHYL | ETHER ETHYL- BENZENE | FREON- 113 WATER |
|--------------------------|----------|---|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|---|---|---|------------------------------------|-------------------------------------|
| | | TOTAL (UG/L) (34301) | TOTAL (UG/L) (32105) | TOTAL (UG/L) (32106) | TOTAL (UG/L) (77093) | TOTAL (UG/L) (32101) | TOTAL (UG/L) (34668) | UNFLTRD RECOVER (UG/L) (81576) | UNFLTRD RECOVER (UG/L) (50005) | TOTAL (UG/L) (34371) | UNFLTRD REC (UG/L) (77652) |
| USGS UND02 | 08-25-00 | <.03 | <.2 | <.05 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| | 08-25-00 | <.03 | <.2 | <.05 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| | 08-25-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 08-28-01 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| USGS UND09 | 08-12-99 | <.03 | <.2 | E.02 | <.04 | <.05 | <.1 | <.2 | <.1 | <.03 | <.03 |
| | 08-28-01 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| | 08-28-01 | <.03 | <.2 | E.04 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| USGS NU16 | 08-12-99 | <.03 | <.2 | 9.12 | <.04 | <.05 | <.1 | <.2 | <.1 | <.03 | <.03 |
| | 08-24-00 | <.03 | <.2 | 4.51 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| | 08-24-01 | <.03 | <.2 | 3.06 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| USGS NU08 | 08-12-99 | <.03 | <.2 | 1.88 | <.04 | <.05 | <.1 | <.2 | <.1 | <.03 | <.03 |
| | 08-24-00 | <.03 | <.2 | .64 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| | 08-23-01 | <.03 | <.2 | .51 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| USGS NU02 | 11-07-00 | <.03 | <.2 | .18 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| | 08-23-01 | <.03 | <.2 | .16 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| USGS NU29 | 08-24-00 | <.03 | <.2 | <.05 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| | 08-23-01 | <.03 | <.2 | <.02 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| USGS NU11 | 08-12-99 | <.03 | <.2 | .90 | <.04 | <.05 | <.1 | <.2 | <.1 | <.03 | <.03 |
| | 08-24-00 | <.03 | <.2 | .73 | <.04 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| | 08-24-01 | <.03 | <.2 | 4.80 | E.01 | <.05 | <.3 | <.2 | <.1 | <.03 | <.06 |
| LOCAL IDENT- IFIER | DATE | FURAN, TETRA- HYDRO- WATER | METHYL TERT- BUTYL ETHER | METHYL- CHLO- RIDE | METHYL ENE CHLO- RIDE | META/ PARA- XYLENE WATER | O- CHLORO- TOLUENE | O- XYLENE WATER | P-ISO- PROPYL- TOLUENE | TETRA- CHLORO- ETHYL- ENE | TOLUENE |
| | | UNFLTRD RECOVER (UG/L) (81607) | WAT UNF REC (UG/L) (78032) | TOTAL (UG/L) (34418) | TOTAL (UG/L) (34423) | UNFLTRD REC (UG/L) (85795) | TOTAL (UG/L) (77275) | WHOLE TOTAL (UG/L) (77135) | WHOLE TOTAL (UG/L) (77356) | TOTAL (UG/L) (34475) | TOTAL (UG/L) (34010) |
| USGS UND02 | 08-25-00 | <2 | <.2 | <.5 | <.4 | <.06 | <.04 | <.04 | <.07 | <.1 | <.05 |
| | 08-25-00 | <2 | <.2 | <.5 | <.4 | <.06 | <.04 | <.04 | <.07 | <.1 | <.05 |
| | 08-25-01 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 08-28-01 | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | <.05 |
| USGS UND09 | 08-12-99 | <9 | <.2 | <.2 | <.4 | <.06 | <.04 | <.06 | <.11 | <.1 | <.05 |
| | 08-28-01 | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | <.05 |
| | 08-28-01 | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | <.05 |
| USGS NU16 | 08-12-99 | <9 | <.2 | <.2 | <.4 | <.06 | <.04 | <.06 | <.11 | M | <.05 |
| | 08-24-00 | <2 | E.1 | <.5 | <.4 | <.06 | <.04 | <.04 | <.07 | <.1 | <.05 |
| | 08-24-01 | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | <.05 |
| USGS NU08 | 08-12-99 | <9 | E.1 | <.2 | <.4 | <.06 | <.04 | <.06 | <.11 | <.1 | <.05 |
| | 08-24-00 | <2 | <.2 | <.5 | <.4 | <.06 | <.04 | <.04 | <.07 | <.1 | <.05 |
| | 08-23-01 | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | <.05 |
| USGS NU02 | 11-07-00 | 9 | .3 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | M | <.05 |
| | 08-23-01 | <2 | .4 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | <.05 |
| USGS NU29 | 08-24-00 | <2 | <.2 | <.5 | <.4 | <.06 | <.04 | <.04 | <.07 | <.1 | <.05 |
| | 08-23-01 | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | <.05 |
| USGS NU11 | 08-12-99 | <9 | .3 | <.2 | <.4 | <.06 | <.04 | <.06 | <.11 | <.1 | <.05 |
| | 08-24-00 | <2 | E.1 | <.5 | <.4 | <.06 | <.04 | <.04 | <.07 | <.1 | <.05 |
| | 08-24-01 | <2 | <.2 | <.2 | <.2 | <.06 | <.03 | <.04 | <.07 | <.1 | <.05 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES

LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued

WATER-QUALITY DATA, CALENDAR YEARS 1999-2001

| LOCAL IDENT- IFIER | DATE | TRI- CHLORO- ETHYL- ENE | TRI- CHLORO- FLUORO- METHANE | ACETO- CHLOR, WATER FLTRD | ALA- CHLOR, WATER, DISS, REC, | ALPHA BHC DIS- SOLVED | ATRA- ZINE, WATER, DISS, REC | BEN- FLUR- ALIN WAT FLD | CAR- BARYL WATER FLTRD | CARBO- FURAN WATER FLTRD | CHLOR- PYRIFOS DIS- SOLVED |
|--------------------------|----------|---|--|---|---|---------------------------------|--|----------------------------------|--|-----------------------------------|--|
| | | TOTAL (UG/L) (39180) | TOTAL (UG/L) (34488) | REC (UG/L) (49260) | REC, (UG/L) (46342) | (UG/L) (34253) | (UG/L) (39632) | GF, REC (UG/L) (82673) | GF, REC (UG/L) (82680) | GF, REC (UG/L) (82674) | (UG/L) (38933) |
| USGS UND02 | 08-25-00 | <.04 | <.09 | <.002 | <.002 | <.002 | <.001 | <.002 | <.003 | <.003 | <.004 |
| | 08-25-00 | <.04 | <.09 | <.002 | <.002 | <.002 | <.001 | <.002 | <.003 | <.003 | <.004 |
| | 08-25-01 | -- | -- | <.002 | <.002 | <.002 | <.001 | <.002 | <.003 | <.003 | <.004 |
| | 08-28-01 | <.04 | <.09 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 |
| USGS UND09 | 08-12-99 | <.04 | <.09 | <.002 | <.002 | <.002 | <.001 | <.002 | <.003 | <.003 | <.004 |
| | 08-28-01 | <.04 | <.09 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 |
| | 08-28-01 | <.04 | <.09 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | E.003 |
| USGS NU16 | 08-12-99 | <.04 | <.09 | <.002 | <.002 | <.002 | <.001 | <.002 | <.003 | <.003 | <.004 |
| | 08-24-00 | <.04 | <.09 | <.002 | <.002 | <.002 | E.002 | <.002 | <.003 | <.003 | <.004 |
| | 08-24-01 | <.04 | <.09 | <.004 | <.002 | <.005 | E.002 | <.010 | <.041 | <.020 | <.005 |
| USGS NU08 | 08-12-99 | <.04 | .27 | <.002 | <.002 | <.002 | <.001 | <.002 | <.003 | <.003 | <.004 |
| | 08-24-00 | <.04 | .11 | <.002 | <.002 | <.002 | <.001 | <.002 | <.003 | <.003 | <.004 |
| | 08-23-01 | <.04 | .12 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 |
| USGS NU02 | 11-07-00 | <.04 | <.09 | <.004 | <.002 | <.005 | M | <.010 | <.041 | <.020 | <.005 |
| | 08-23-01 | <.04 | <.09 | <.004 | <.002 | <.005 | .008 | <.010 | <.041 | <.020 | <.005 |
| USGS NU29 | 08-24-00 | <.04 | <.09 | <.002 | <.002 | <.002 | .009 | <.002 | <.003 | <.003 | <.004 |
| | 08-23-01 | <.04 | <.09 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 |
| USGS NU11 | 08-12-99 | <.04 | <.09 | <.002 | <.002 | <.002 | <.001 | <.002 | <.003 | <.003 | <.004 |
| | 08-24-00 | <.04 | <.09 | <.002 | <.002 | <.002 | <.001 | <.002 | <.003 | <.003 | <.004 |
| | 08-24-01 | E.05 | <.09 | <.004 | <.002 | <.005 | <.007 | <.010 | <.041 | <.020 | <.005 |
| LOCAL IDENT- IFIER | DATE | CYANA- ZINE, WATER, DISS, REC | DCPA WATER FLTRD 0.7 U GF, REC | DEETHYL ATRA- ZINE, WATER, DISS, REC | DI- AZINON, DIS- SOLVED | DI- ELDRIN DIS- SOLVED | EPTC WATER FLTRD 0.7 U GF, REC | LINDANE DIS- SOLVED | LIN- URON WATER FLTRD 0.7 U GF, REC | MALA- THION, DIS- SOLVED | METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC |
| | | (UG/L) (04041) | (UG/L) (82682) | (UG/L) (04040) | (UG/L) (39572) | (UG/L) (39381) | (UG/L) (82668) | (UG/L) (39341) | (UG/L) (82666) | (UG/L) (39532) | (UG/L) (82686) |
| USGS UND02 | 08-25-00 | <.004 | <.002 | <.002 | <.002 | <.001 | <.002 | <.004 | <.002 | <.005 | <.001 |
| | 08-25-00 | <.004 | <.002 | <.002 | <.002 | <.001 | <.002 | <.004 | <.002 | <.005 | <.001 |
| | 08-25-01 | <.004 | <.002 | <.002 | <.002 | <.001 | <.002 | <.004 | <.002 | <.005 | <.001 |
| | 08-28-01 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 |
| USGS UND09 | 08-12-99 | <.004 | <.002 | <.002 | <.002 | <.001 | <.002 | <.004 | <.002 | <.005 | <.001 |
| | 08-28-01 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 |
| | 08-28-01 | E.012 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 |
| USGS NU16 | 08-12-99 | <.004 | <.002 | <.002 | <.002 | <.001 | <.002 | <.004 | <.002 | <.005 | <.001 |
| | 08-24-00 | <.004 | <.002 | E.002 | <.002 | <.001 | <.002 | <.004 | <.002 | <.005 | <.001 |
| | 08-24-01 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 |
| USGS NU08 | 08-12-99 | <.004 | <.002 | E.001 | <.002 | <.001 | <.002 | <.004 | <.002 | <.005 | <.001 |
| | 08-24-00 | <.004 | <.002 | <.002 | <.002 | <.001 | <.002 | <.004 | <.002 | <.005 | <.001 |
| | 08-23-01 | <.018 | <.003 | <.006 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 |
| USGS NU02 | 11-07-00 | <.018 | <.003 | E.005 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 |
| | 08-23-01 | <.018 | <.003 | E.005 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 |
| USGS NU29 | 08-24-00 | <.004 | <.002 | E.007 | <.002 | <.001 | <.002 | <.004 | <.002 | <.005 | <.001 |
| | 08-23-01 | <.018 | <.003 | E.003 | <.005 | <.005 | <.002 | <.004 | <.035 | <.027 | <.050 |
| USGS NU11 | 08-12-99 | <.004 | <.002 | <.002 | <.002 | .016 | <.002 | <.004 | <.002 | <.005 | <.001 |
| | 08-24-00 | <.004 | <.002 | <.002 | <.002 | .099 | <.002 | <.004 | <.002 | <.005 | <.001 |
| | 08-24-01 | <.018 | <.003 | <.006 | <.005 | .025 | <.002 | <.004 | <.035 | <.027 | <.050 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

WATER QUALITY AT MISCELLANEOUS GROUND-WATER SITES
 LINJ NAWQA GROUND-WATER-QUALITY NETWORK--Continued
 WATER-QUALITY DATA, CALENDAR YEARS 1999-2001

| LOCAL IDENT- I- FIER | DATE | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P,P' DDE DISSOLV (UG/L) (34653) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) |
|-------------------------------|----------|---|--|--|---|---|---|---|---|---|--|
| USGS UND02 | 08-25-00 | <.002 | <.004 | <.004 | <.003 | <.006 | <.004 | <.018 | <.005 | <.010 | <.007 |
| | 08-25-00 | <.002 | <.004 | <.004 | <.003 | <.006 | <.004 | <.018 | <.005 | <.010 | <.007 |
| | 08-25-01 | <.002 | <.004 | <.004 | <.003 | <.006 | <.004 | <.018 | <.005 | <.010 | <.007 |
| | 08-28-01 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 | <.034 |
| USGS UND09 | 08-12-99 | <.002 | <.004 | <.004 | <.003 | <.006 | <.004 | <.018 | <.005 | <.010 | <.007 |
| | 08-28-01 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.110 | <.011 | <.016 | <.034 |
| | 08-28-01 | E.005 | <.006 | <.002 | <.007 | <.003 | <.010 | E.007 | <.011 | <.016 | <.034 |
| USGS NU16 | 08-12-99 | <.002 | <.004 | <.004 | <.003 | <.006 | <.004 | .019 | .006 | <.010 | <.007 |
| | 08-24-00 | <.002 | <.004 | <.004 | <.003 | <.006 | <.004 | .026 | .009 | <.010 | <.007 |
| | 08-24-01 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | .024 | E.005 | <.016 | <.034 |
| USGS NU08 | 08-12-99 | <.002 | <.004 | <.004 | <.003 | <.006 | <.004 | <.018 | <.005 | <.010 | <.007 |
| | 08-24-00 | <.002 | <.004 | <.004 | <.003 | <.006 | <.004 | <.018 | <.005 | <.010 | <.007 |
| | 08-23-01 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | <.011 | <.016 | <.034 |
| USGS NU02 | 11-07-00 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | E.006 | <.016 | <.034 |
| | 08-23-01 | E.004 | <.006 | <.002 | <.007 | <.003 | <.010 | <.015 | E.007 | <.016 | <.034 |
| USGS NU29 | 08-24-00 | .006 | <.004 | <.004 | <.003 | <.006 | <.004 | .021 | E.005 | <.010 | <.007 |
| | 08-23-01 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | .024 | <.011 | <.016 | <.034 |
| USGS NU11 | 08-12-99 | <.002 | <.004 | <.004 | <.003 | <.006 | <.004 | <.018 | .479 | <.010 | <.007 |
| | 08-24-00 | <.002 | <.004 | <.004 | <.003 | <.006 | <.004 | E.014 | .024 | <.010 | <.007 |
| | 08-24-01 | <.013 | <.006 | <.002 | <.007 | <.003 | <.010 | E.004 | .058 | <.016 | <.034 |

| LOCAL IDENT- I- FIER | DATE | TER- BUTYL- AZINE, WATER, DISS, REC (UG/L) (04022) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) |
|-------------------------------|----------|---|---|---|
| USGS UND02 | 08-25-00 | -- | <.002 | <.002 |
| | 08-25-00 | -- | <.002 | <.002 |
| | 08-25-01 | -- | <.002 | <.002 |
| | 08-28-01 | -- | <.005 | <.009 |
| USGS UND09 | 08-12-99 | -- | <.002 | <.002 |
| | 08-28-01 | -- | <.005 | <.009 |
| | 08-28-01 | -- | <.005 | <.009 |
| USGS NU16 | 08-12-99 | <.005 | <.002 | <.002 |
| | 08-24-00 | -- | <.002 | <.002 |
| | 08-24-01 | -- | <.005 | <.009 |
| USGS NU08 | 08-12-99 | -- | <.002 | <.002 |
| | 08-24-00 | -- | <.002 | <.002 |
| | 08-23-01 | -- | <.005 | <.009 |
| USGS NU02 | 11-07-00 | -- | <.005 | <.009 |
| | 08-23-01 | -- | <.005 | <.009 |
| USGS NU29 | 08-24-00 | -- | <.002 | <.002 |
| | 08-23-01 | -- | <.005 | <.009 |
| USGS NU11 | 08-12-99 | <.005 | <.002 | <.002 |
| | 08-24-00 | -- | <.002 | <.002 |
| | 08-24-01 | -- | <.005 | <.009 |

E Estimated value.

< Actual value is known to be less than the value shown.

M Presence of material verified but not quantified.

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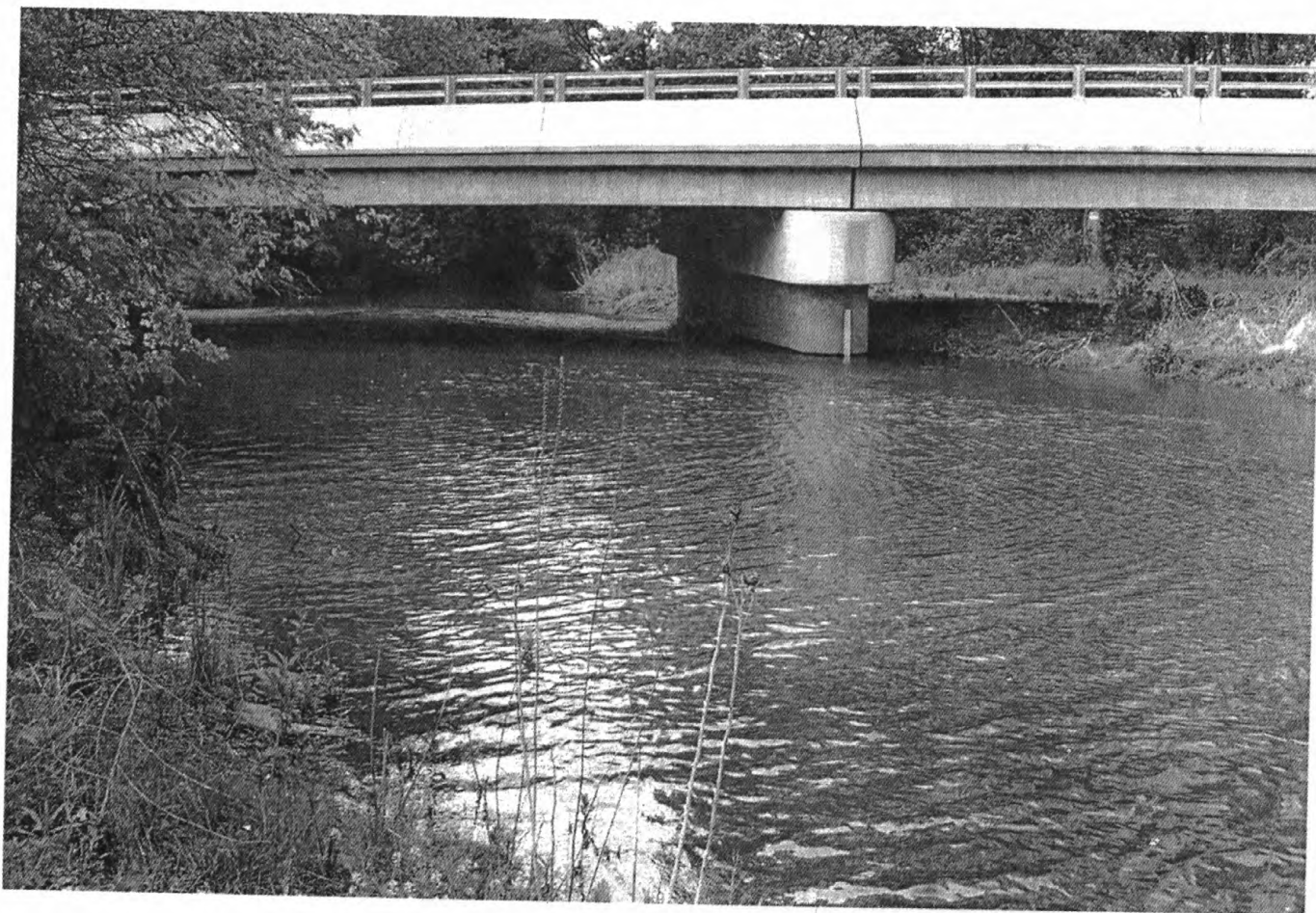
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01467005 North Branch Rancocas Creek at Iron Works Park, at Mount Holly
Watershed Integrator Station
Ambient Stream Monitoring Network
(file photograph, U.S. Geological Survey, West Trenton, New Jersey)



01401400 Heathcote Brook at Kingston
Mixed Land Use Indicator Station
Ambient Stream Monitoring Network
(file photograph, U.S. Geological Survey, West Trenton, New Jersey)



01400640 Millstone River near Grovers Mill
Agricultural Land Use Indicator Station
Ambient Stream Monitoring Network
(file photograph, U.S. Geological Survey, West Trenton, New Jersey)

CONVERSION FACTORS AND VERTICAL DATUM

| Multiply | By | To obtain |
|--|------------------------|----------------------------|
| Length | | |
| inch (in.) | 2.54×10^1 | millimeter |
| | 2.54×10^{-2} | meter |
| foot (ft) | 3.048×10^{-1} | meter |
| mile (mi) | 1.609×10^0 | kilometer |
| Area | | |
| acre | 4.047×10^3 | square meter |
| | 4.047×10^{-1} | square hectometer |
| | 4.047×10^{-3} | square kilometer |
| square mile (mi ²) | 2.590×10^0 | square kilometer |
| Volume | | |
| gallon (gal) | 3.785×10^0 | liter |
| | 3.785×10^0 | cubic decimeter |
| | 3.785×10^{-3} | cubic meter |
| million gallons (Mgal) | 3.785×10^3 | cubic meter |
| | 3.785×10^{-3} | cubic hectometer |
| cubic foot (ft ³) | 2.832×10^1 | cubic decimeter |
| | 2.832×10^{-2} | cubic meter |
| cubic-foot-per-second day [(ft ³ /s) d] | 2.447×10^3 | cubic meter |
| | 2.447×10^{-3} | cubic hectometer |
| acre-foot (acre-ft) | 1.233×10^3 | cubic meter |
| | 1.233×10^{-3} | cubic hectometer |
| | 1.233×10^{-6} | cubic kilometer |
| Flow | | |
| cubic foot per second (ft ³ /s) | 2.832×10^1 | liter per second |
| | 2.832×10^1 | cubic decimeter per second |
| | 2.832×10^{-2} | cubic meter per second |
| gallon per minute (gal/min) | 6.309×10^{-2} | liter per second |
| | 6.309×10^{-2} | cubic decimeter per second |
| | 6.309×10^{-5} | cubic meter per second |
| million gallons per day (Mgal/d) | 4.381×10^1 | cubic decimeter per second |
| | 4.381×10^{-2} | cubic meter per second |
| Mass | | |
| ton (short) | 9.072×10^{-1} | megagram or metric ton |

Sea level: In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.



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