Hydrologic, Water-Quality, Bed-Sediment, Soil-Chemistry, and Statistical Summaries of Data for the Cambridge, Massachusetts, Drinking-Water Source Area, Water Year 2004

By Kirk P. Smith

In cooperation with the
City of Cambridge, Massachusetts, Water Department

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Conversion Factors, Datums, and Abbreviations

Multiply	By	To obtain
foot (ft)	0.3048	meter
inch (in.)	2.54	centimeter (cm)
inch (in.)	25.4	millimeter (mm)
inch (in.)	25,400	micron (µm)
inch (in.)	25,400,000	nanometer (nm)
mile (mi)	1.609	kilometers
million gallons (Mgal)	3785.4	cubic meters (m^3)
million gallons per day (Mgal/d)	0.04381	cubic meters per second (m^3/s)
square miles (mi^2)	2.590	square kilometer (km^2)

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows

°F=1.8°C+32

Vertical coordinate information is referenced to the National Geodetic Vertical Datum of 1929 (NGVD 29).

Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83).

Water- and sediment-quality constituents are expressed in milligrams per liter (mg/L), micrograms per liter (µg/L), parts per million (ppm), and parts per billion (ppb). Milligrams per liter is a unit expressing the concentration of chemical constituents in solution as weight (milligrams) of solute per unit volume (liter) of water. One thousand milligrams per liter is equivalent to one gram per liter. One thousand micrograms per liter is equivalent to one milligram per liter. For concentrations less than 7,000 mg/L, the numerical value is the same as for concentrations in ppm.

Specific conductance of water is expressed in microsiemens per centimeter at 25 degrees Celsius (µS/cm).

ASTM	American Society for Testing and Materials
CWD	City of Cambridge, Massachusetts, Water Department
ICPES	Inductively coupled plasma emission spectroscopy
ISO	International Organization for Standardization
NIST	National Institute of Standards and Technology
PAH	Polyaromatic hydrocarbons
TOC	Total organic carbon
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey

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Abstract

Records of water quantity, water quality, and meteorological parameters were continuously collected from three reservoirs, two primary streams, and four subbasin tributaries in the Cambridge, Massachusetts, drinking-water supply system during water year 2004 (that is, October 2003 through September 2004). Samples of base-flow water, bed sediment, and local soils were collected in the subbasins of the Hobbs Brook Reservoir and Stony Brook Reservoir drainage areas and analyzed for selected elements and organic constituents. These data were collected to assist watershed administrators in managing the drinking-water supply and to identify sources of contaminants and potential trends in contaminant loading to the water supply.

The monthly average capacities for each reservoir were greater than 91 percent for the current water year. Recorded precipitation in the water-supply area was greater during the current year than during the previous two years. The annual mean specific conductance for Fresh Pond Reservoir was similar to the annual mean specific conductance for Stony Brook at Route 20, at Waltham (U.S. Geological Survey station 01104460), which is the principal tributary feeding the Stony Brook Reservoir.

Water samples were collected from four tributaries during base-flow conditions in August 2004. Concentrations of dissolved chloride and total recoverable manganese in water samples from three subbasins exceeded the U.S. Environmental Protection Agency (USEPA) secondary drinking-water standards of 250 and 0.05 mg/L, respectively. Concentrations of total recoverable iron in water samples exceeded the USEPA secondary drinking-water standard of 0.3 mg/L in two subbasins. Pyrene and fluoranthene were the only polyaromatic hydrocarbons detected in any subbasin; however, the concentrations were low and were not quantifiable. Eleven pesticides were found in the four drainage subbasins; however, no single pesticide was common to all of the drainage subbasins. Measurable concentrations of caffeine were found in three of the four drainage subbasins.

Concentrations of copper, chromium, and lead in samples of bed sediment collected from four tributaries had the greatest amount of variation, while concentrations of titanium, calcium, yttrium, lanthanum, and aluminum were among the elements with lowest amount of variation. Concentrations for most elements and organic compounds increased with a decrease in the particle size of the bed sediment. The average concentrations for most elements in samples of soil collected in four drainage subbasins were similar for each subbasin; however, the maximum concentration for each element differed from subbasin to subbasin.

Introduction

Hydrologic and water-quality monitoring is critical for the effective management and protection of drinking-water supplies. This integrated activity includes monitoring both the quantity and quality of water because these factors determine the physical, chemical, and biological state of the water supply. Without accurate information on the past and current state of these water supplies, effective preservation and remediation programs cannot be implemented, and the effectiveness of these programs cannot be evaluated.

The U.S. Geological Survey (USGS) works closely with municipal water suppliers throughout the nation to address specific water problems by conducting hydrologic- and water-quality-monitoring programs and detailed investigations (Patterson, 1997). One such program, conducted from 1997 through 1998 by the USGS in cooperation with the city of Cambridge, Massachusetts, Water Department (CWD), was designed to identify sources of contaminants in the drinking-water source area for the city (Waldron and Bent, 2001). Subsequently the USGS, in cooperation with the CWD, designed and implemented a water-monitoring network within the drinking-water source area. Data from this network has been published annually in the USGS Annual Water Data Reports for Massachusetts and Rhode Island (Socolow and others, 1999, 2000, 2001, 2002, 2003, and 2004).

The CWD supplies approximately 15 Mgal/d to more than 100,000 customers. Most of this water is obtained from a system of reservoirs in parts of Lexington, Lincoln, Waltham, Weston, and in Cambridge (fig. 1). The drainage basin contributing water to these reservoirs has undergone rapid development in recent years and encompasses major transportation corridors, as well as large areas of industrial, commercial, and high-density residential land use. Because the city of Cambridge owns less than 5 percent of the land in the basin contributing to its water-supply system, the CWD relies heavily on monitoring to provide information for optimizing the management of its reservoirs for water quality and quantity. The USGS monitoring network provides near-real-time information that assists the CWD in responding rapidly to water-quality changes caused by accidental or intentional contamination. This information also benefits the CWD, other municipalities, and state agencies involved with water-resource development and management in the Charles River Basin by enhancing their understanding of the relation between local drinking-water management practices and regional issues of water supply and hydrologic-system response.

Purpose and Scope

This report presents records of water quantity, water quality, and meteorological parameters collected from the Cambridge, Massachusetts, drinking-water supply area collected during water year 2004. It describes the monitoring network, data-collection methods for all types of data, and computation methods. It also describes the physicochemical characteristics of stream-bed sediments and local soils in four selected subbasins.

Figure 1. The Cambridge, Massachusetts, drinking-water source-area monitoring network for water year 2004, Lexington, Waltham, and Weston, Massachusetts.

Description of Monitoring Network

The drinking-water source area for Cambridge, Massachusetts, consists of three primary storage reservoirs (Hobbs Brook Reservoir, Stony Brook Reservoir, and Fresh Pond), two principal streams (Hobbs Brook and Stony Brook), and nine small tributaries. Sites were selected for continuous monitoring on the basis of the necessity for water-supply regulation by the CWD and of information gained in previous USGS investigations that identified specific areas as potentially important sources of contaminants. Attributes of the monitoring stations are listed in table 1; locations of sites selected for continuous monitoring are shown in figure 1.

Reservoir altitude measurements and meteorological measurements are recorded by monitoring stations installed at each reservoir (USGS station numbers 01104430, 01104480, and 422302071083801). Water-quality measurements of reservoir water are also recorded at USGS stations 01104480 and 422302071083801. Specific physical properties monitored at these sites are listed in table 2. These data are recorded at a frequency of 15 minutes and are uploaded to a USGS database on an hourly basis by phone modem, and are available through the USGS Massachusetts–Rhode Island Water Science Center Home Page on the World Wide Web (http://ma.water.usgs.gov).

Stream-stage measurements are recorded by monitoring stations on each principal stream and at the outlet of the Stony Brook Reservoir (USGS station numbers 01104430, 01104460, and 01104480). Water-quality measurements for each principal stream are also recorded at USGS stations 01104430 and 01104460. Specific physical properties monitored at these sites are listed in table 2. These data are recorded at a frequency of 15 minutes and are uploaded to a USGS database on an hourly basis by phone modem. In addition to measurements made on the principal streams, stream-stage measurements and water-quality measurements are recorded by monitoring stations on four of the small tributaries (USGS station numbers 01104415, 01104433, 01104455, and 01104475). Because the drainage areas of these sites are small and have large percentages of impervious surface, the hydrologic responses, and often the water-quality responses, change rapidly. To document these responses effectively, the monitoring stations record stream-stage and water-quality measurements at variable frequencies as high as 1 minute. These data are uploaded to a USGS database on an hourly basis by digital cellular modem. Principal stream data and tributary data are available through the USGS Massachusetts-Rhode Island Water Science Center Home Page on the World Wide Web (http://ma.water.usgs.gov).

Table 1. Names, locations, and drainage areas of U.S. Geological Survey monitoring stations within the drinking-water source area for Cambridge, Massachusetts, for water year 2004.

REMARKS.--USGS, U.S. Geological Survey; Latitude and Longitude, In degrees, minutes, and seconds; mi^2, square mile; --, not applicable.

Station name	USGS station number	Latitude ° ′ ″	Longitude ° ′ ″	Drainage area (mi^2)
Cambridge Reservoir, unnamed tributary 2, near Lexington	01104415	42 26 09	71 15 38	0.41
Cambridge Reservoir near Kendal Green	01104430	42 23 53	71 16 26	6.86
Hobbs Brook, unnamed tributary 1, near Kendal Green	01104433	42 23 28	71 16 18	.4
Stony Brook, unnamed tributary 1, near Waltham	01104455	42 22 21	71 16 15	.48
Stony Brook at Route 20 at Waltham	01104460	42 21 08	71 16 16	22
Stony Brook Reservoir, unnamed tributary 1, near Weston	01104475	42 21 16	71 16 07	.85
Stony Brook Reservoir at dam near Waltham	01104480	42 21 20	71 15 56	23.7
Fresh Pond gate house at Cambridge	422302071083801	42 23 02	71 08 38	--

Table 2. Physical properties measured at each monitoring station.

REMARKS.--USGS, U.S. Geological Survey; X, indicates physical property measured.

Physical parameter	USGS station number							
	01104415	01104430	01104433	01104455	01104460	01104475	01104480	422302071083801
Stream stage	X	X	X	X	X	X	X	
Reservoir altitude		X					X	X
Water temperature	X	X	X	X	X	X	X	X
Specific conductance	X	X	X	X	X	X	X	X
Dissolved oxygen							X	
pH					X		X	
Turbidity					X		X	
Air temperature		X					X	X
Precipitation		X					X	X

Continuous Data Collection and Computation

The monitoring network provides near-real-time information used to manage the quantity and quality of water in the CWD drinking-water source area effectively. At each site, permanently installed analytical equipment automatically measures selected hydrologic, meteorological, and water-quality parameters and relays the information to water managers through telephone voice modems and the World Wide Web.

Surface-Water Data

The basic data collected at the monitoring stations include records of stream stage and measurements of discharge of streams, and the water altitude and capacity of reservoirs. In addition, observations of factors affecting the stage-discharge relation or the altitude-capacity relation, weather records, and other information are used to supplement these basic data in determining the daily flow or capacity of water in storage. Measurements of discharge are made with a current meter by standard USGS methods (Buchanan and Somers, 1968, 1969; Carter and Davidian, 1968; Kennedy, 1983 and 1984; Rantz and others, 1982). The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

To determine streamflow at each USGS stream-monitoring station in the CWD water-supply system, discharge-rating tables for any stage are prepared from stage-discharge curves (Rantz and others, 1982). The daily mean discharge is computed from these stage and rating tables, and then the monthly and yearly mean discharges are computed from these daily values. If the stage-discharge relation for a station is temporarily changed by aquatic growth or debris in the control section, the daily mean discharge is computed by the shifting-control method (Rantz and others, 1982).

For the USGS monitoring stations on reservoirs in the CWD water-supply system, capacity tables giving the volume for any reservoir water altitude are prepared from water altitude-area relation curves defined by surveys. From the tables, the daily, monthly, or yearly changes in volume are computed.

For some stream-gaging stations, recorder or sensor malfunctions can cause gaps in the water-stage record or inaccurate readings, which cannot be used to compute daily discharge. For periods of malfunction, the daily mean discharges are estimated on the basis of the recorded range in water

level, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, and other information.

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records. The degree of accuracy of the records is defined as "excellent" if 95 percent or more of the daily discharge values are within 5 percent of the true values; "good" if these values are within 10 percent of the true values; and "fair" if they are within 15 percent of the true values. A rating of "poor" is assigned to daily discharge values of less than "fair" accuracy. Different accuracies may be attributed to different portions of a streamflow record.

Meteorological Data

Precipitation data are collected by means of heated tipping-bucket precipitation gages that measure the volume of rain or melted snow in 0.01-in. increments. The precipitation gages at USGS station numbers 01104430 and 01104480 include wind screens that reduce bias generated by precipitation missing the instrument. Precipitation data are added for each day and then for each month. In general, the accuracy of precipitation data is assured by proper maintenance and calibration of the device. Precipitation measurements, especially in the form of snow, however, are affected by strong winds and are subject to errors. These errors generally result in underestimating the actual precipitation total at a site.

Air-temperature data are collected with thermistors housed in gill radiation shields. The probes are installed approximately 8 ft above ground surface. The maximum, minimum, and mean temperature values are computed for each day. Monthly statistics are then computed from daily values. The accuracy of air-temperature data is determined by comparing measurements made by the monitoring system and by an independent probe calibrated against a National Institute of Standards and Technology (NIST) traceable thermometer.

Under rare circumstances, when there are no records of precipitation or air temperature, daily values are estimated on the basis of records from nearby stations. These circumstances may include a recorder malfunction, the plugging of the precipitation gage, or a malfunction of the heating element in the precipitation gage.

Water-Quality Data

Water-temperature and specific-conductance data are collected from probes in each stream, tributary, or reservoir except at USGS station number 01104480. Turbidity and pH data are also collected from a probe in the stream at USGS station number 01104460. Measurements of specific conductance, pH, dissolved oxygen, and turbidity at USGS station number 01104480 are collected by a flow-through system receiving reservoir water from a submersible pump.

The accuracy of the collected water-quality records depends primarily on the rate of sensor drift, sensor fouling, and debris collection. Typically, sensors become fouled by aquatic growth more rapidly in the warmer months. In most cases, corrections for fouling and drift can be applied to the data to improve their accuracy. For parameters other than water temperature, such corrections are made on the basis of the performance of the sensor in several standardized solutions before and after sensor maintenance. The accuracy of water-temperature data is determined by comparing measurements made by the monitoring system and by an independent probe calibrated against a NIST-traceable thermometer. One of four accuracy classifications ranging from excellent to poor is applied to physical properties measured at each station. The accuracy rating is based on data values recorded before any shifts or corrections are made for fouling and drift. The basis for each rating classification is listed in table 3.

Table 3. Rating classifications for error ranges in continuous water-quality records and meteorological records.

REMARKS.--FNU, Formazin nephelometric units; ≤ actual value is less than or equal to value shown; ±, plus or minus value shown; >, actual value is greater than value shown; %, percent.

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Water temperature	≤±0.2°C	> ±0.2 to 0.5°C	> ±0.5 to 0.8°C	> ±0.8°C
Specific conductance	≤±3%	> ±3 to 10%	> ±10 to 15%	> ±15%
Dissolved oxygen	≤±0.3 mg/L	> ±0.3 to 0.5 mg/L	> ±0.5 to 0.8 mg/L	> ±0.8 mg/L
pH	≤±0.2 unit	> ±0.2 to 0.5 unit	> ±0.5 to 0.8 unit	> ±0.8 unit
Turbidity	≤±5% or 5 FNUs, whichever is greater	> ±5 to 10% or 10 FNUs, whichever is greater	> ±10 to 15% or 15 FNUs, whichever is greater	> ±15% or 20 FNUs, whichever is greater
Air temperature	≤±0.4°C	> ±0.4 to 0.8°C	> ±0.8 to 2°C	> ±2°C
Precipitation	≤±2%	> ±2 to 4%	> ±4 to 6%	> ±6%

Collection of Samples

Samples of base-flow water were collected in four tributaries within the Hobbs Brook Reservoir and Stony Brook Reservoir drainage basins during August 2004 and analyzed for physical, chemical, and biological constituents. Samples of bed sediment were collected in the same four tributaries, sieved into selected particle-size ranges, and analyzed for inorganic and organic constituents. Samples of local soil were collected in the same drainage areas as the water and bed-sediment samples and analyzed for the same inorganic constituents.

Water Samples

Water samples were collected from four tributaries near USGS monitoring stations 01104415, 01104433, 01104455, and 01104475 in August 2004 and analyzed for distributions of particle size and concentrations of suspended sediment, 6 major ions, total nitrogen, total phosphorus, 8 total metals, 17 polyaromatic hydrocarbons, 64 pesticides and metabolites, and *E. coli* bacteria. Samples were collected under base-flow conditions with an antecedent dry period of at least 5 days.

Samples were analyzed for concentrations of suspended sediment and distribution of particle size at the USGS Kentucky District Sediment Lab (Guy, 1970; Sholar and Shreve, 1998). Samples were analyzed for chemical concentrations at the USGS laboratory in Denver, CO (Patton and Kryskalla, 2003; Furlong and others, 2001; American Public Health Association, 1998; Garbarino and Struzeski, 1998; Hoffman and others, 1996; Fishman, 1993; McLain, 1993; Fishman and Friedman, 1989; Wershaw and others, 1987). Samples were processed for bacteria analysis on the basis of the methods described by Myers and Sylvester (1997) and the U. S. Environmental Protection Agency (USEPA) method 1603 (2002b) on site and placed in portable incubators in a mobile field laboratory.

Bed-Sediment Samples

Samples of surficial bed sediment were collected from depositional zones in the tributaries near the USGS monitoring stations. Samples of bed sediment from each tributary were prepared for analysis of inorganic constituents by being placed in precleaned polyethylene bowls and being homogenized with a Teflon spatula. A portion of each sample was set aside and the remaining sample was wet-sieved in the field through a precleaned 2.00-mm polyethylene sieve. A subsample of the sieved material was wet-sieved a second time with a precleaned 0.062-mm nylon-mesh sieve mounted in a plastic frame. Native water and sediment particles smaller than 0.062 mm in diameter were collected in precleaned polyethylene bags and allowed to settle for several days. The supernatant was decanted and discarded, and the sediment retained for chemical analysis.

Similarly, samples of bed sediment were prepared for analysis of semivolatile compounds by being placed in precleaned stainless-steel bowls and being homogenized with a Teflon spatula. Each sample was wet-sieved in the field through a precleaned 2.00-mm stainless-steel sieve. A subsample of the sieved material was wet-sieved a second time with a precleaned 0.250-mm stainless-steel sieve. Native water and sediment particles smaller than 0.250 mm in diameter were collected in precleaned Teflon bags and allowed to settle for several days. The supernatant was decanted and discarded, and the sediment retained for chemical analysis. Replicate samples of bed sediment at each site were split from seven homogenized samples of sieved and unsieved bed sediment.

Samples of bed sediment consisting of particles smaller than 0.062 mm in diameter, between 0.062 mm and 0.250 mm in diameter, between 0.250 mm and 2.00 mm in diameter, and unsieved samples were submitted to XRAL Laboratory of Ontario, Canada, for analysis of 32 elements and total organic carbon (TOC). Concentrations of inorganic constituents were determined with the use of USEPA method 3050B (U.S. Environmental Protection Agency, 1996) and inductively coupled plasma emission spectroscopy (ICPES). TOC was determined by infrared spectroscopy. Samples of bottom sediment consisting of particles smaller than 0.250 mm in diameter and particles between 0.250 mm and 2.00 mm in diameter were submitted to the USGS National Water Quality Laboratory in Denver, Colorado, for analysis of organic compounds. Organic compound concentrations were determined by gas chromatography-electron impact mass spectrometry (Furlong and others, 1996).

Soil Samples

Five samples of local soil were collected within the drainage basins to USGS stations 01104415, 01104433, 01104455, and 01104475. Samples were collected near trees with diameters greater than 1 ft, which were presumed to be in areas that had been undisturbed for the last several decades. Samples were collected through successive soil horizons to a maximum depth of 1 ft with a stainless-steel soil-recovery probe equipped with a precleaned plastic liner.

The soil from each core was separated from the organic-litter layer and homogenized. Each homogenized sample of soil was split into two subsamples. One subsample from each core was allowed to air-dry. Once the subsamples were dry, portions of soil of equivalent dry weight from each core subsample from the same drainage subbasin were composited and analyzed for particle size at the USGS Kentucky Sediment Laboratory. The remaining subsamples of homogenized soil from each core were submitted to XRAL Laboratory, where the concentrations of 32 elements in the subsamples were determined with the use of USEPA method 3050B (U.S. Environmental Protection Agency, 1996) and ICPES. Replicate samples were prepared from homogenized samples of soil.

Presentation of Data

Data for all monitoring stations are presented in the same format (tables 4–11, at back of report). Continuous records for each USGS monitoring station include a station description and history for each parameter. Where available, a daily summary table, monthly statistics table, and a summary statistics table are provided for discharge and reservoir capacity. These data are followed by meteorological data tables and summaries where available, and then by water-quality data tables and summaries. Finally, analytical results for the water, bed-sediment, and soil samples are presented.

Station Description

Each table includes a description of each USGS monitoring station that provides information about the period of record, record accuracy, and other remarks pertinent to station operation.

PERIOD OF DAILY RECORD.—The time period during which each type of data has been collected at the station. These data may have been collected occasionally or continuously.

GAGE.—The value and source of the datum used to monitor stream or reservoir altitudes.

REMARKS.—The accuracy of the records, special methods of computation, and conditions that may affect parameters at the station.

EXTREMES FOR THE PERIOD OF RECORD AND FOR CURRENT YEAR.—Extreme values for each type of data collected for the period of record and the current year, and possibly other pertinent items.

Surface-Water Data

The description and history of each monitoring station is followed by a data table of daily mean values of discharge for the current water year with summary data, a tabular statistical summary of monthly mean flow data for a designated period (by water year), and summary statistics for annual, daily, and instantaneous discharges, as well as data pertaining to annual runoff and flow duration.

Data Table of Daily Mean Values

The daily table of discharge records gives the total discharge for each day of the water year. In the monthly summary for the table, the line labeled TOTAL gives the sum of the daily discharges for each month; the line labeled MEAN gives the arithmetic average of the daily discharges for the month; the lines labeled MAX and MIN give the maximum and minimum daily discharges, respectively, for each month; and the line labeled MED gives the median daily discharge for each month. Discharge per unit area in the drainage basin for the month is expressed in millions of gallons per day per square mile (line labeled MGDSM); runoff is given in inches (line labeled IN). Values for discharge per unit area and runoff in inches are not calculated for stations affected by reservoir regulation.

Statistics of Monthly Mean Data

A tabular summary of the statistics [lines labeled (MEAN), maximum (MAX), and minimum (MIN)] for the monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly mean flows are provided immediately below those values (it is possible to have a first occurrence of a maximum or minimum only if there are two or more equal maxima or minima). The designated period is expressed as FOR WATER YEARS __-__, WATER YEAR (WY), and lists the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station description. The designated period consists of all of the station records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the table.

Summary Statistics

A table titled SUMMARY STATISTICS follows the statistics of the monthly mean data. This table consists of four columns with the first column containing the labels for each statistic. The table provides a statistical summary of yearly, daily, and instantaneous discharges, not only for the current water year, but also for the previous calendar year and for a designated period, as appropriate. The

designated period, WATER YEARS __-__, consists of all of the station records within the specified water years, including complete months of record for partial water years. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the table. All of the statistical characteristics designated ANNUAL (see line labeled below) were calculated for the complete water years within the designated period.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the station description. Because the designated period may not be the same as the station period of record in the station description, the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading; if this is the case, it will be noted in the REMARKS paragraph. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data are omitted for stations affected by reservoir regulation.

ANNUAL TOTAL.—The sum of all the daily mean values of discharge for the designated water year.

ANNUAL MEAN.—The arithmetic mean of the individual daily discharges for the year noted or for the designated period.

HIGHEST ANNUAL MEAN.—The maximum annual mean discharge during the designated period.

LOWEST ANNUAL MEAN.—The minimum annual mean discharge during the designated period.

HIGHEST DAILY MEAN.—The maximum daily mean discharge for the designated period.

LOWEST DAILY MEAN.—The minimum daily mean discharge for the designated period.

ANNUAL RUNOFF.—Indicates the total quantity of water in runoff for a drainage area for the year. Millions of gallons per day per square mile (MGDSM) is the average number of millions of gallons of water flowing per day from each square mile of area drained; the runoff is assumed to be distributed uniformly in time and area. Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.—The discharge that has been exceeded 10 percent of the time for the designated period (the 10-percent flow-duration discharge).

50 PERCENT EXCEEDS.—The discharge that has been exceeded 50 percent of the time for the designated period (the 50-percent flow-duration discharge).

90 PERCENT EXCEEDS.—The discharge that has been exceeded 90 percent of the time for the designated period (the 90-percent flow-duration discharge).

Reservoir Data

Continuous records of reservoir altitude and capacity immediately follow records of discharge. Data tables for each parameter consist of daily mean values. Tabular statistical summaries of monthly values are below each data table.

Meteorological and Water-Quality Data

Continuous records of meteorological and water-quality parameters immediately follow records of reservoir altitude and capacity. Data tables for precipitation consist of daily totals. Data tables for all other parameters consist of daily maximum, minimum, and mean values (except pH, for which only median values are reported). Tabular statistical summaries of monthly values are below each data table.

Water, Bed-Sediment, and Soil Data

Analytical results for water, bed-sediment, and soil samples immediately follow continuous records of water-quality data. Replicate samples are listed after the primary sample. Sample blanks or spikes are listed at the bottom of each table.

Data for the Cambridge Drinking-Water Supply System

The data presented in this report should be useful to the water-resource managers in the city of Cambridge, MA, in optimizing the management of the drinking-water supply reservoirs for water quality and quantity. The data allow clarification of the relation between reservoir management practices and current conditions, and trends in water quantity and quality in the subbasins of the hydrologic system.

Surface water

Monthly average reservoir capacities for Hobbs Brook Reservoir (USGS station number 01104430) were greater than 97 percent for water year 2004. The monthly mean flow discharged to the lower basin was less than the medians of the monthly mean flows calculated for water years 1997 through 2003 (Socolow and others, 1999, 2000, 2001, 2002, 2003, and 2004) except for the months of December and April (fig. 2). Monthly mean specific conductance was generally higher than the medians of the monthly mean conductances calculated for water years 1997 through 2003 (Socolow and others, 1999, 2000, 2001, 2002, 2003, and 2004) for all months (fig. 3) despite the reservoir being consistently near capacity.

Monthly average reservoir capacities for Stony Brook Reservoir (USGS station number 01104480) were greater than 92 percent for water year 2004. In general, the monthly mean flow discharged from Stony Brook Reservoir to the Charles River was less than the medians of the monthly mean values for water years 2001 through 2003 (Socolow and others, 2002, 2003, and 2004) except for the months of April, July, August, and September (fig. 4). Monthly average reservoir capacities for Fresh Pond Reservoir (USGS station number 422302071083801) were greater than 91 percent for water year 2004. The annual mean specific conductance for Fresh Pond Reservoir was 514 µS/cm (table 11) compared to an annual mean specific conductance of 523 µS/cm for Stony Brook near Route 20, in Waltham (USGS station number 01104460), which is the principal tributary feeding the Stony Brook Reservoir (table 8).

Monthly precipitation totals for stations at Hobbs Brook Reservoir and Stony Brook Reservoir were similar for the months of October through January, and June; however, monthly precipitation totals for other months varied by as much as 35 percent. In general, variability between monthly precipitation totals for all stations is attributed to differences in storm tracks, storm-intensity patterns, and storm-wind intensity. Additionally, variability between monthly precipitation totals during the winter months is compounded by changes in precipitation type; snow is less dense and the efficiency of the gage in collecting snow is more affected by wind than its efficiency in collecting rain. Because the precipitation gage at the Stony Brook Reservoir (USGS station number 01104480) is more susceptible to wind bias than the gage at Hobbs Brook Reservoir, precipitation totals measured by the Stony Brook gage are lower. Approximately 7 and 50 percent more precipitation was recorded at the Hobbs Brook Reservoir during water year 2004 than during water years 2002 and 2003 (Socolow and others, 2003, and 2004), respectively.

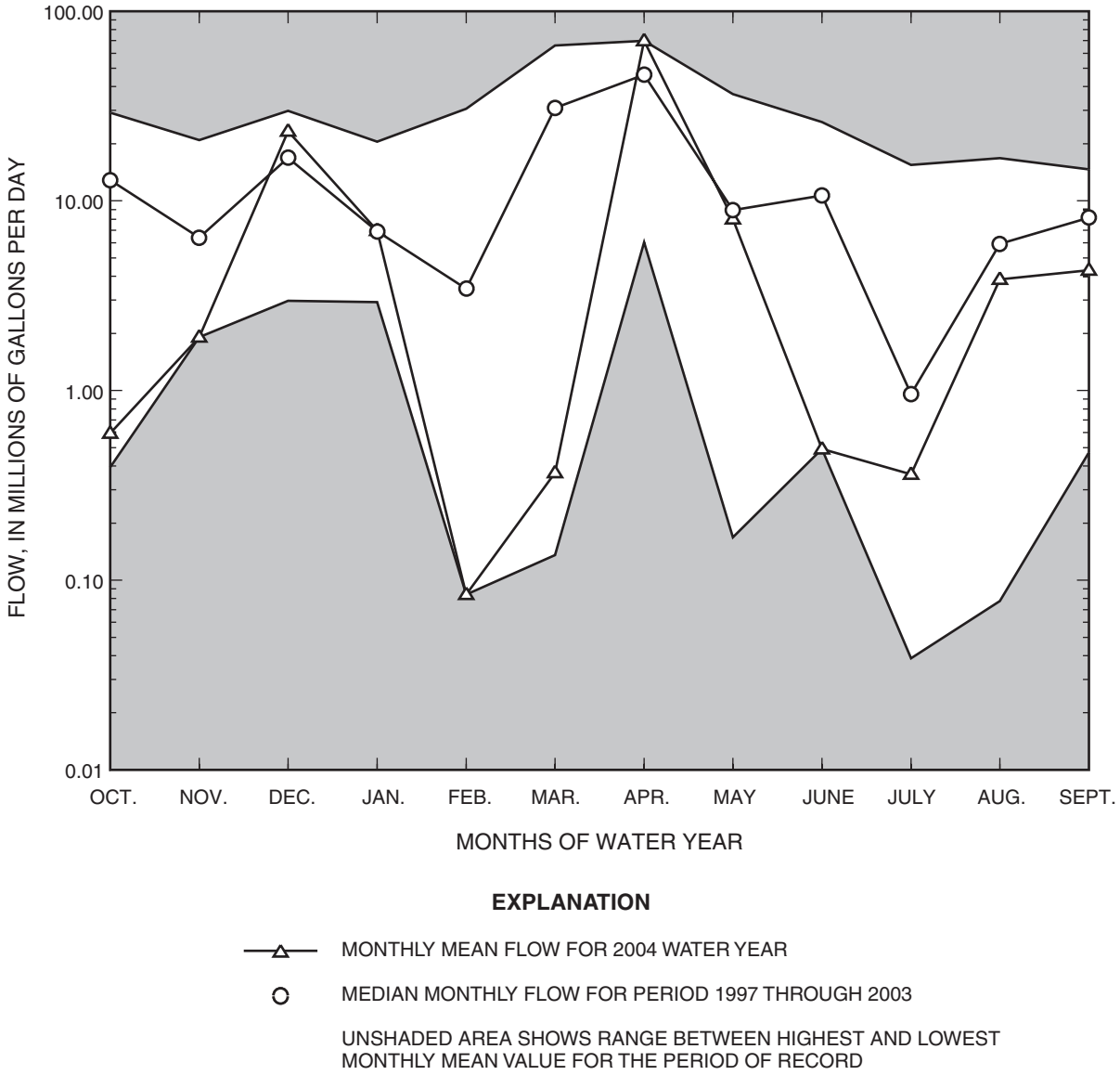

Figure 2. Monthly mean flows for water year 2004 for U.S. Geological Survey station number 01104430, Cambridge Reservoir near Kendal Green, Massachusetts, compared to the period-of-record maximum and minimum monthly mean flows and the median monthly flow for water years 1997 through 2003.

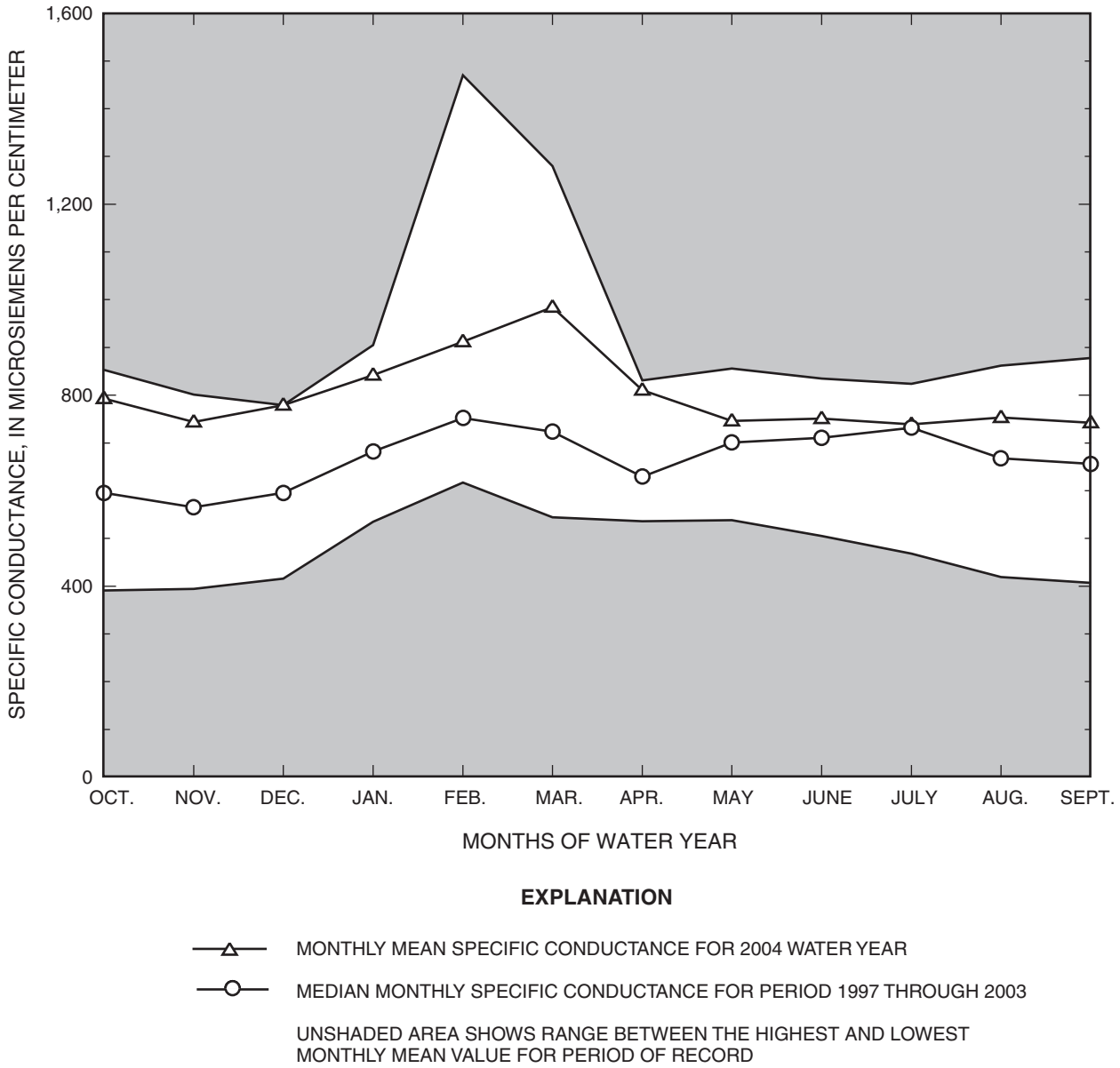

Figure 3. Monthly mean specific conductance for water year 2004 for U.S. Geological Survey station number 01104430, Cambridge Reservoir near Kendal Green, Massachusetts, compared to the period-of-record maximum and minimum monthly mean specific conductance, and the median monthly specific conductance for water years 1997 through 2003.

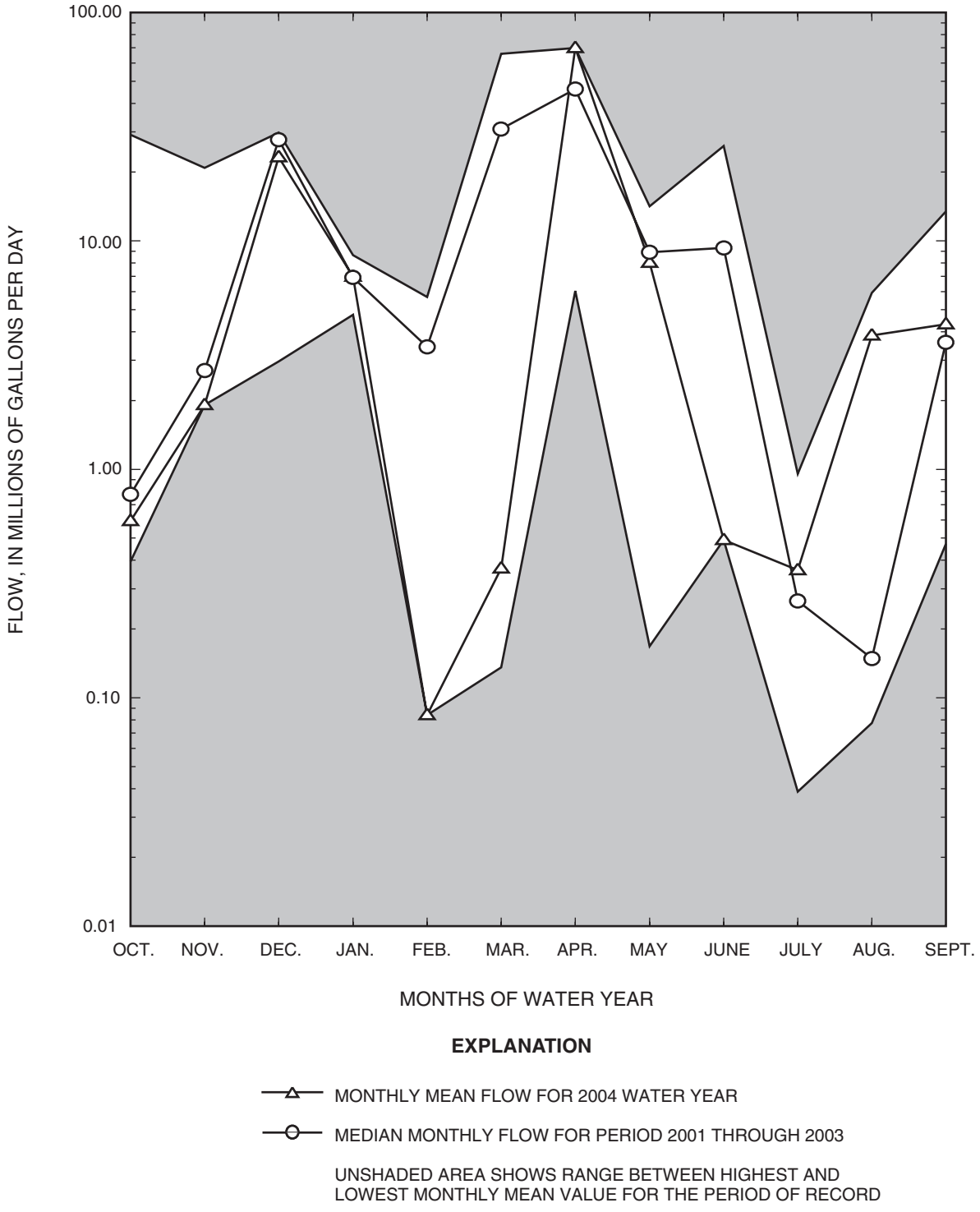

Figure 4. Monthly mean flows for water year 2004 for U.S. Geological Survey station number 01104480, Stony Brook Reservoir at dam near Waltham, Massachusetts, compared to the period-of-record maximum and minimum monthly mean flows and the median monthly flow for water years 2001 through 2003.

Three of four monitoring stations on the tributaries to the reservoirs were either reactivated or installed during water year 2004 by the USGS. These tributaries differ from the principal streams where the water quantity, as well as the water quality, responds more rapidly to stormwater runoff. Data illustrating these effects for flow and specific conductance at USGS stations 01104415, 01104433, 01104455, and 01104475 are shown in figures 5–8. Monthly mean flows for USGS station 01104455 exceeded the medians of monthly mean flows calculated for water years 1998 through 2003 (Socolow and others, 1999, 2000, 2001, 2002, 2003, and 2004) a total of six times during water year 2004 (fig. 9). Four new maximum monthly flows were calculated for the period of record. The monthly mean specific conductances were similar to the respective medians of the monthly mean specific conductances calculated for water years 1998 through 2003 (Socolow and others, 1999, 2000, 2001, 2002, 2003, and 2004) except for the months of January, February, and March (fig. 10).

Water Samples

Concentrations of dissolved calcium, magnesium, potassium, sodium, and sulfate were similar for USGS stations 01104415, 01104433, and 01104455 (tables 4, 6, and 7). Concentrations of these constituents were lowest at USGS station 01104475 (table 9). Concentrations of dissolved chloride and total recoverable manganese in water samples exceeded the USEPA secondary drinking water standards of 250 and 0.05 mg/L (U.S. Environmental Protection Agency, 2002a) respectively, at USGS stations 01104415, 01104433, and 01104455. Concentrations of total recoverable iron in water samples exceeded the USEPA secondary drinking water standard of 0.3 mg/L (U.S. Environmental Protection Agency, 2002a) at USGS stations 01104415 and 01104433. Concentrations of *E. coli* in water samples ranged from 18 to 380 colonies per 100 milliliters of water with the highest concentration found at USGS station 01104433. The range of concentrations of most total recoverable metals in water samples was one order of magnitude. Chromium was not found in the water at any monitoring station above the reporting level of 0.8 ppb. Pyrene and fluoranthene were the only polyaromatic hydrocarbons (PAHs) detected; however, the concentrations were low and were not quantifiable. Eleven pesticides were found in water samples collected in the four drainage basins. No single pesticide was common to all of the drainage basins; however, diuron and imidacloprid were found in three of the four drainage basins. Measurable concentrations of caffeine were found in three of the four drainage subbasins.

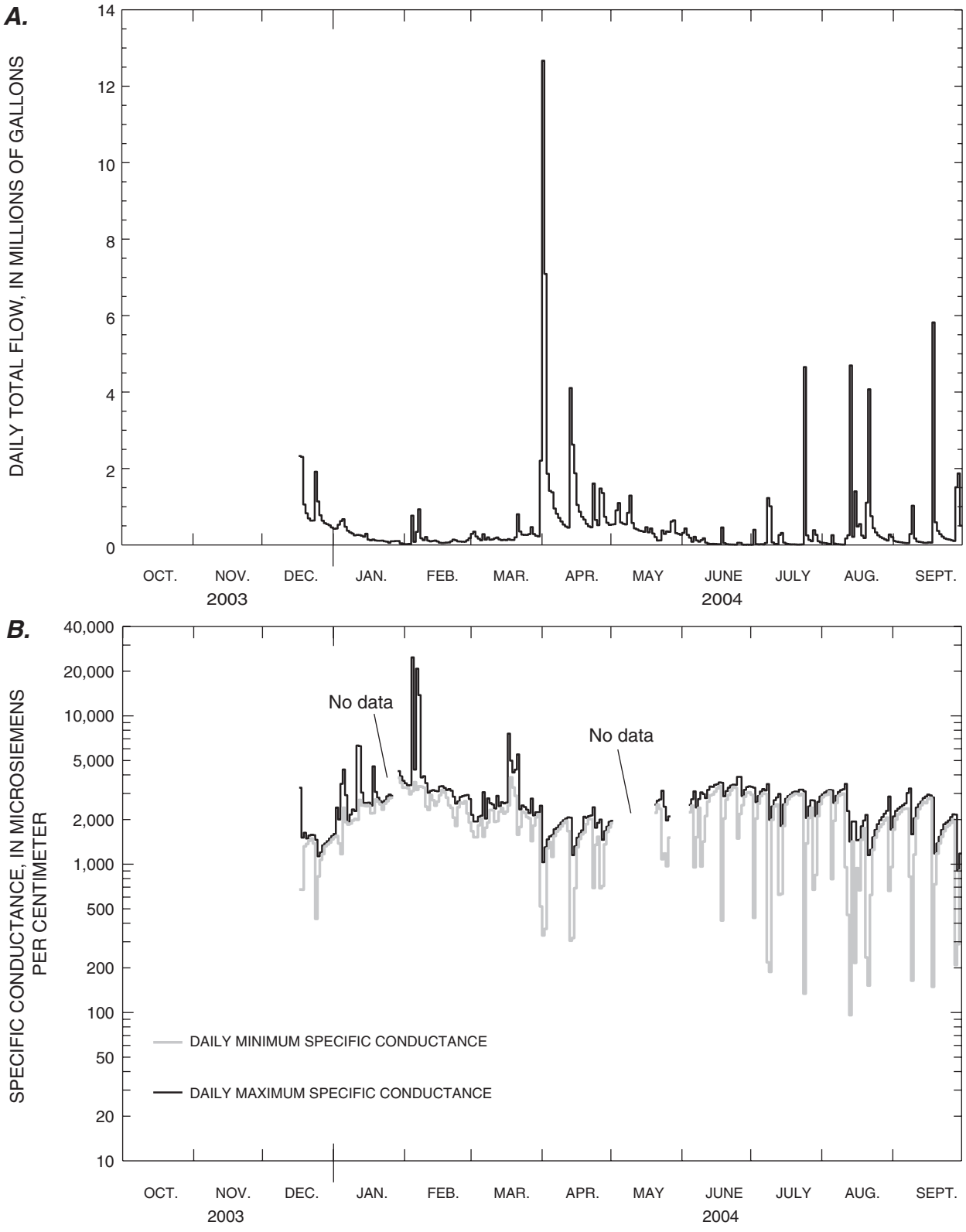

Figure 5. *A*, Daily total flows, and *B*, daily maximum and minimum specific conductance values for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts, for water year 2004.

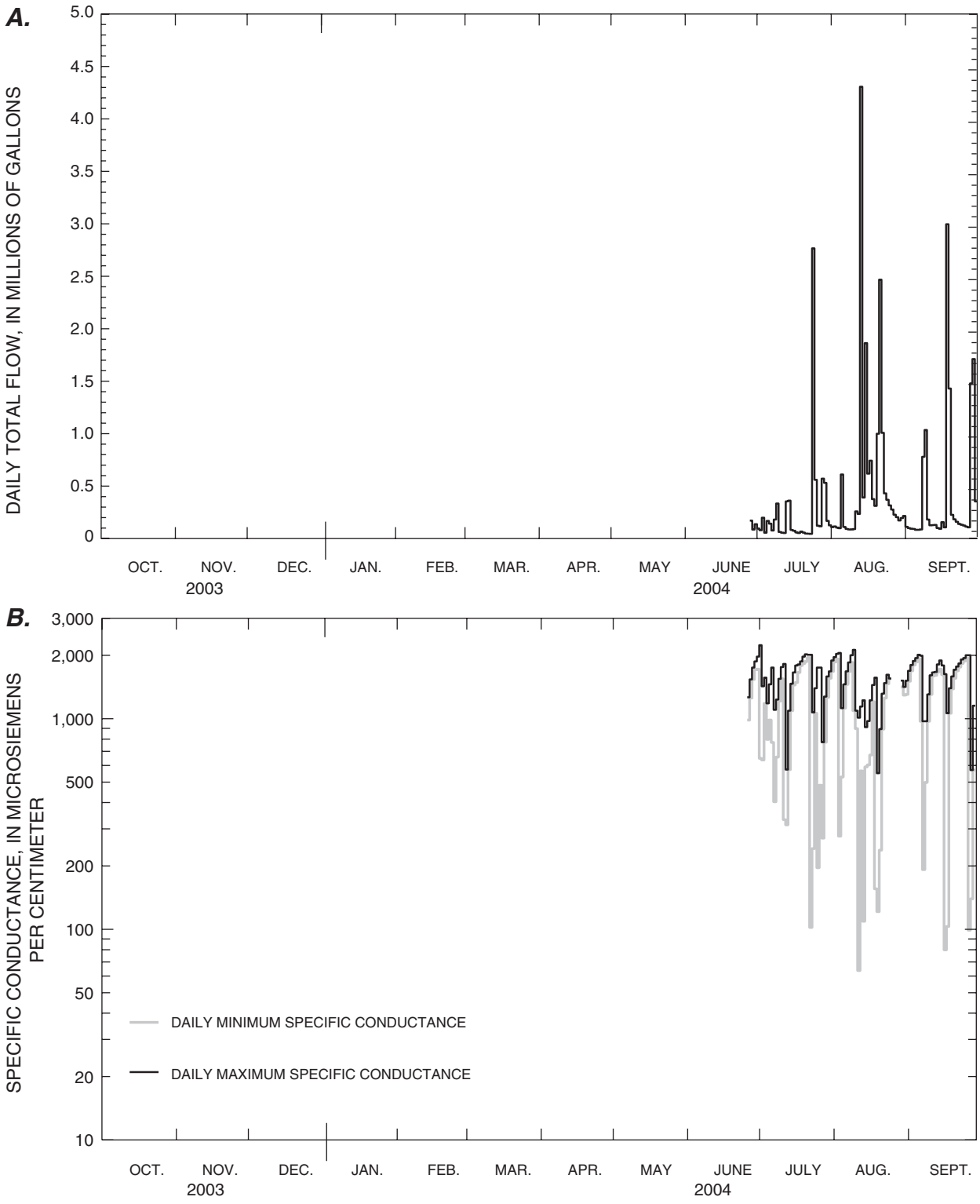

Figure 6. *A*, Daily total flows, and *B*, daily maximum and minimum specific conductance values for U.S. Geological Survey station number 01104433, Hobbs Brook, unnamed tributary 1, Kendal Green, Massachusetts, for water year 2004.

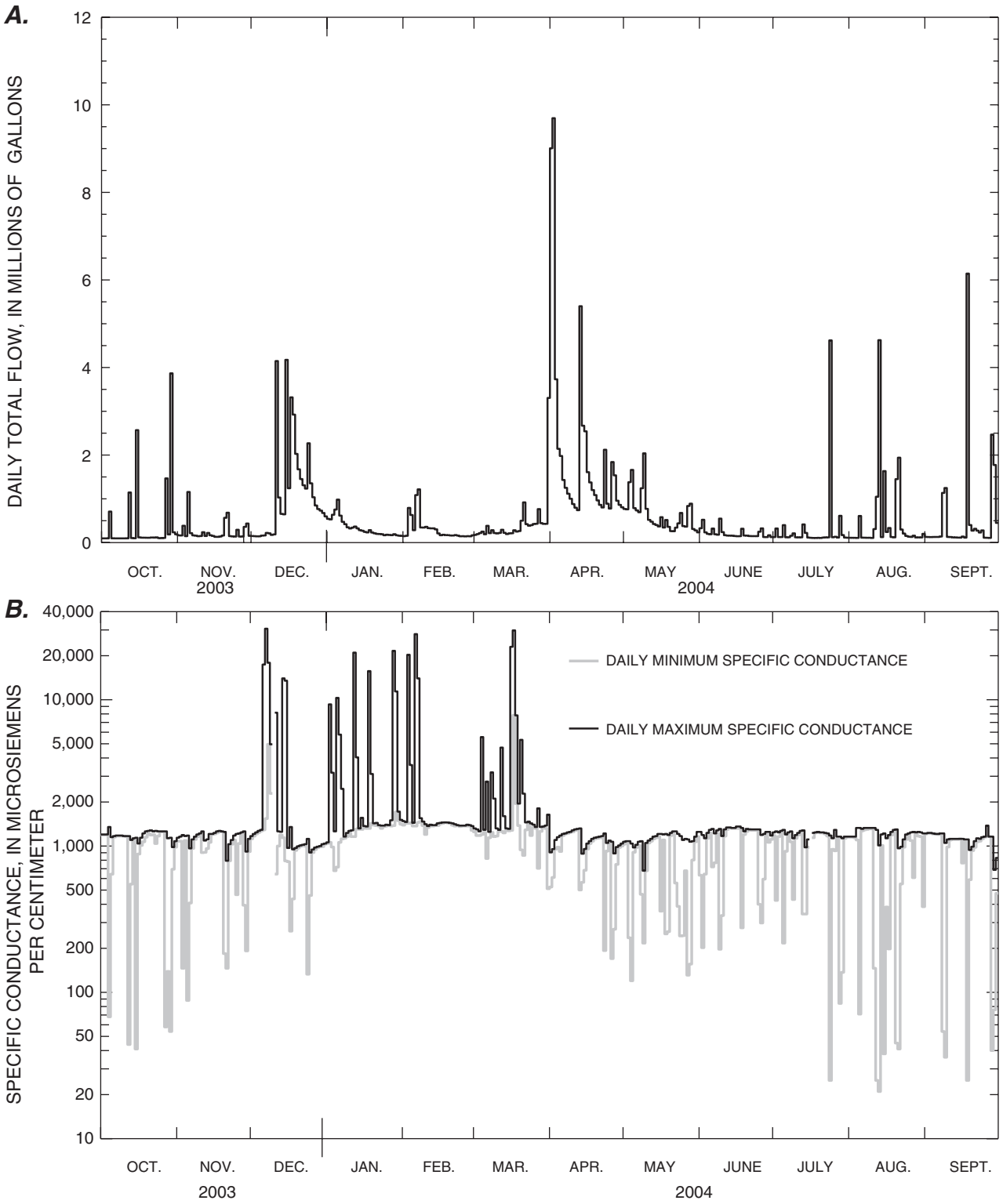

Figure 7. *A*, Daily total flows, and *B*, daily maximum and minimum specific-conductance values for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts, for water year 2004.

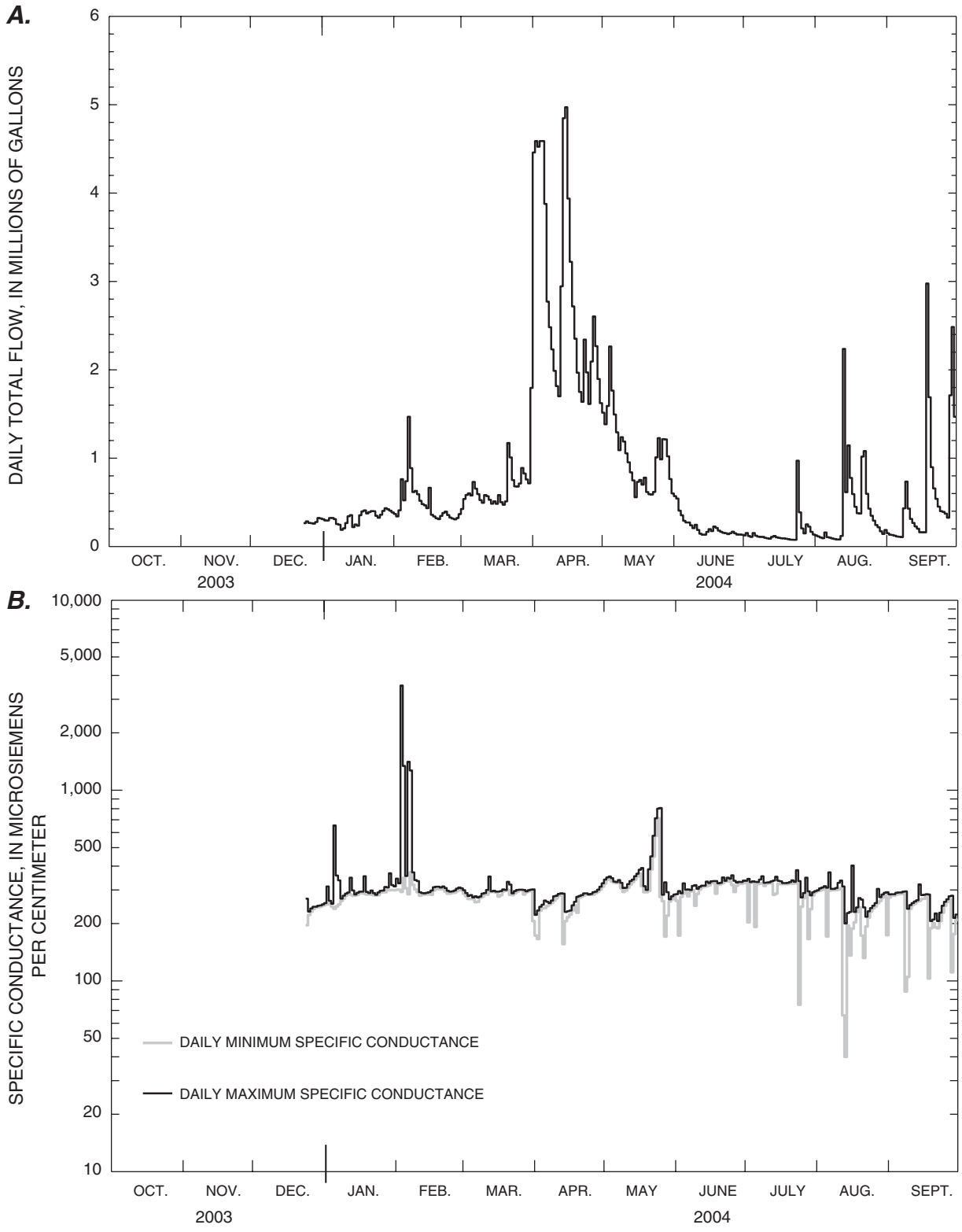

Figure 8. *A*, Daily total flows, and *B*, daily maximum and minimum specific conductance values for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts, for water year 2004.

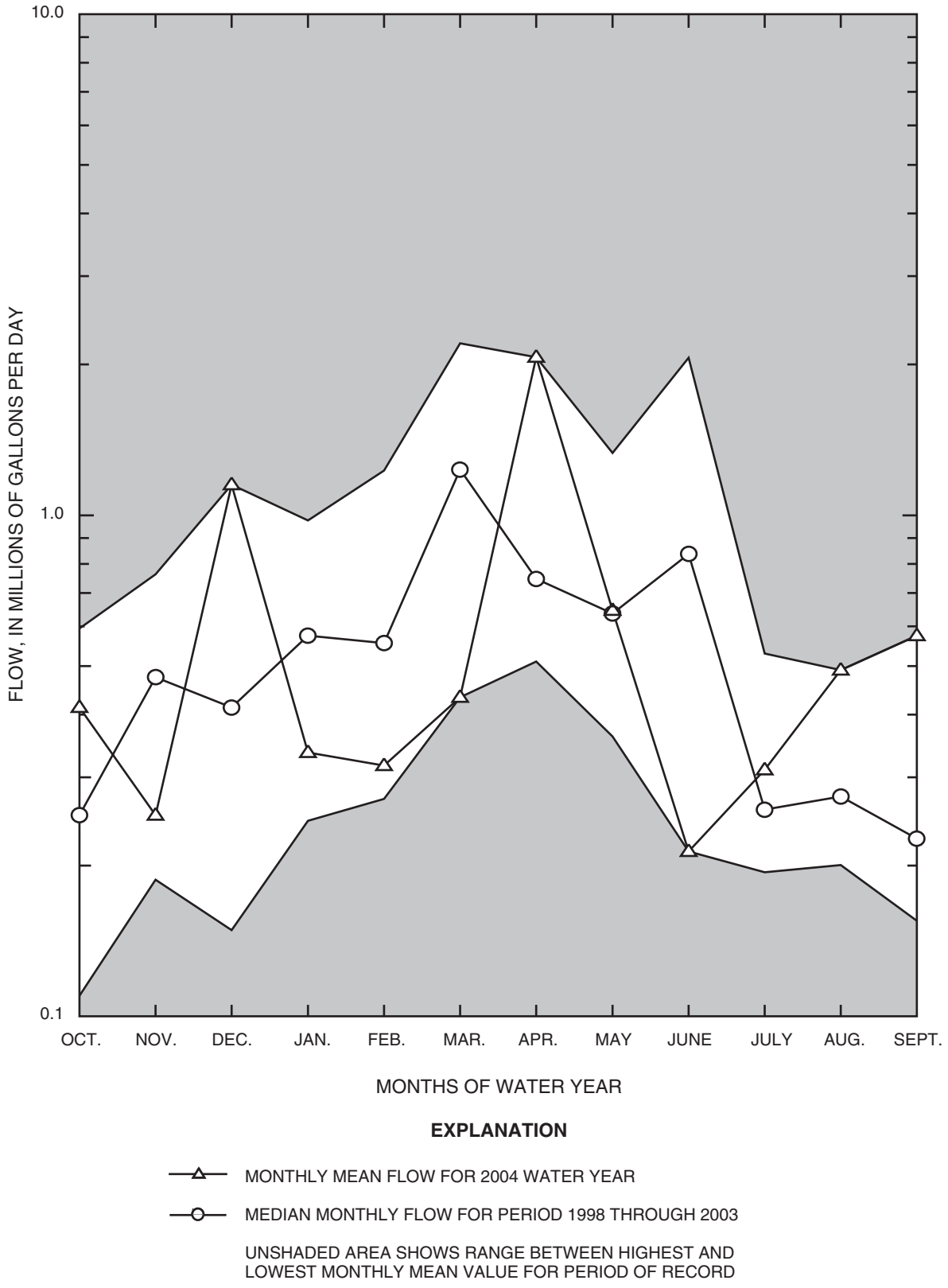

Figure 9. Monthly mean flows for water year 2004 for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts, compared to the period-of-record maximum and minimum monthly mean flows and the median monthly flow for water years 1998 through 2003.

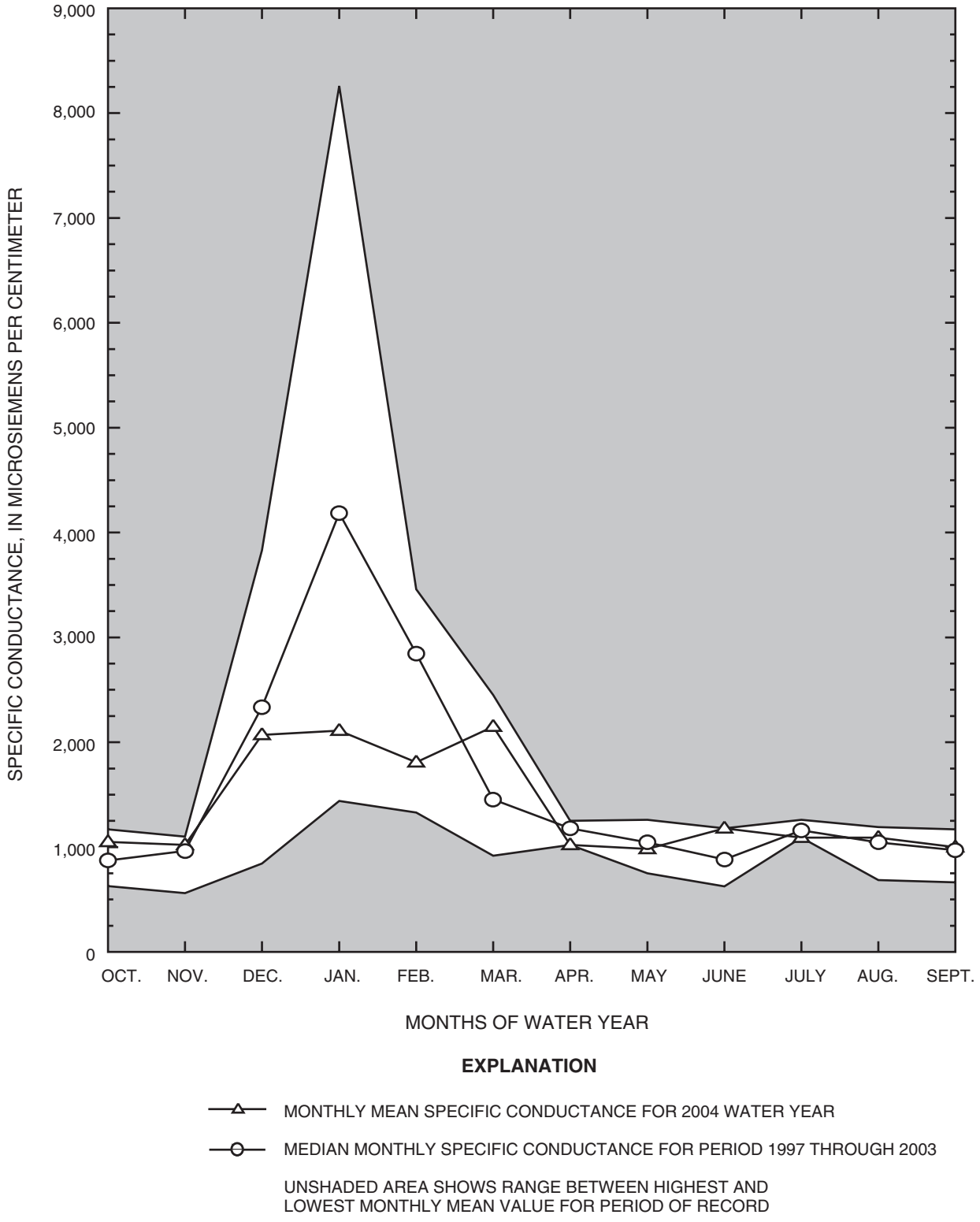

Figure 10. Monthly mean specific conductance for water year 2004 for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts, compared to the period-of-record maximum and minimum monthly mean specific conductance, and the median monthly specific conductance for water years 1998 through 2003.

Bed Sediment

Samples of surficial bed sediment were collected at USGS stations 01104415, 01104433, 01104455, and 01104475. Natural and sieved samples of bed sediment were analyzed for 32 elements, TOC, and selected PAHs (tables, 4, 6, 7, and 9).

Antimony, tungsten, and bismuth were the only elements not detected in any sample of bed sediment. Concentrations of copper, chromium, and lead in unsieved bed sediment had the greatest amount of variation relative to the mean concentration of each respective element, while concentrations of titanium, calcium, yttrium, lanthanum, and aluminum were among the elements with lowest amounts of variation relative to the mean concnetration of each respective element. The average coefficient of variation (COV) for all elements in the same size class ranged from about 21 to 25 percent. The elements with the largest COVs in bed sediment less than 0.062 mm in diameter, between 0.062 and 0.250 mm in diameter, and between 0.250 and 2.00 mm in diameter were manganese, zinc, and lead, respectively. Concentrations of all elements except for chromium and TOC in samples of bed sediment increased with decreasing particle size (fig. 11). Concentrations of most PAHs in samples of bed sediment also were higher in the smaller particle-size range (fig. 12). Concentrations of fluoranthane and pyrene were greatest in both particle-size ranges. In general, concentrations of PAHs in coarse-grained bed sediment exhibited a greater amount of variation than in fine-grained bed sediment. Concentrations of acenaphthene, 9*H*-fluorene, C4-128, C4-alkylated naphthalenes, phenanthrene, C4-178 isomers, C4-alkylated phenanthrene/anthracenes, and C2-252 isomers, C2-alkylated benzopyrene/perylene compounds had the greatest amount of variation in the fine-grained bed sediment and concentrations of acenaphthylene, acenaphthene, 9*H*-fluorene, anthracene, benzo[*b*]fluoranthene, benzo[*k*]fluoranthene had the greatest amount of variation in coarse-grained bed sediment. Conversely, concentrations of acenaphthylene, 2,6-dimethylnaphthalene, C2-128 isomers, C2-alkyated naphthalenes, 1,2-dimethylnaphthalene, C3-128, C3-alkylated naphthalenes, and 2,3,6-trimethylnaphthalene compounds had the least amount of variation in the fine-grained bed sediment. Concentrations of naphthalene, 2-ethylnaphthalene, 1,2-dimethylnaphthalene, C3-252 isomers, C3-alkylated benzopyrene/perylenes and C4-252 isomers, and C4-alkylated benzopyrene/perylenes had the least amount of variation in the coarse-grained bed sediment.

The median relative percent difference between field and laboratory replicate samples for elements in bed sediment was less than 10 percent for elements with more than one detection. The median relative percent difference for replicate samples of bed sediment for TOC was 16 percent. Surrogate recoveries for nitrobenzene-d5 and 2-fluorobiphenyl in samples of bed sediment at USGS station 01104415 were similar to laboratory-control samples; however, surrogate recoveries for terphenyl-d14 were greater than those observed in laboratory-control samples (table 4). Recoveries for the laboratory spike were generally good for most compounds; however, spike recoveries for C4-128, C4-alkylated naphthalenes, 1-methyl-9*H*-Fluorene, phenanthrene, anthracene, 2-methylanthracene, 4,5-methylenephenanthrene, C1-178 isomers, methylated phenanthrene/anthracenes, 1-methylphenanthrene, C2-178 isomers, C2-alkylated phenanthrene/anthracenes, fluoranthene, pyrene, benzo[*a*]anthracene, chrysene, benzo[*g,h,i*]perylene, and coronene were greater than three standard deviations compared to laboratory-control samples. These data indicate a matrix interference that may preclude reliable analysis of these compounds in this particular matrix. Data for these compounds may exhibit a low bias and should be viewed with caution. The laboratory blank samples for all compounds were free from contamination with the exception of benzo[*g,h,i*]perylene, whose concentration was about two orders of magnitude lower than the lowest concentration in the environmental samples.

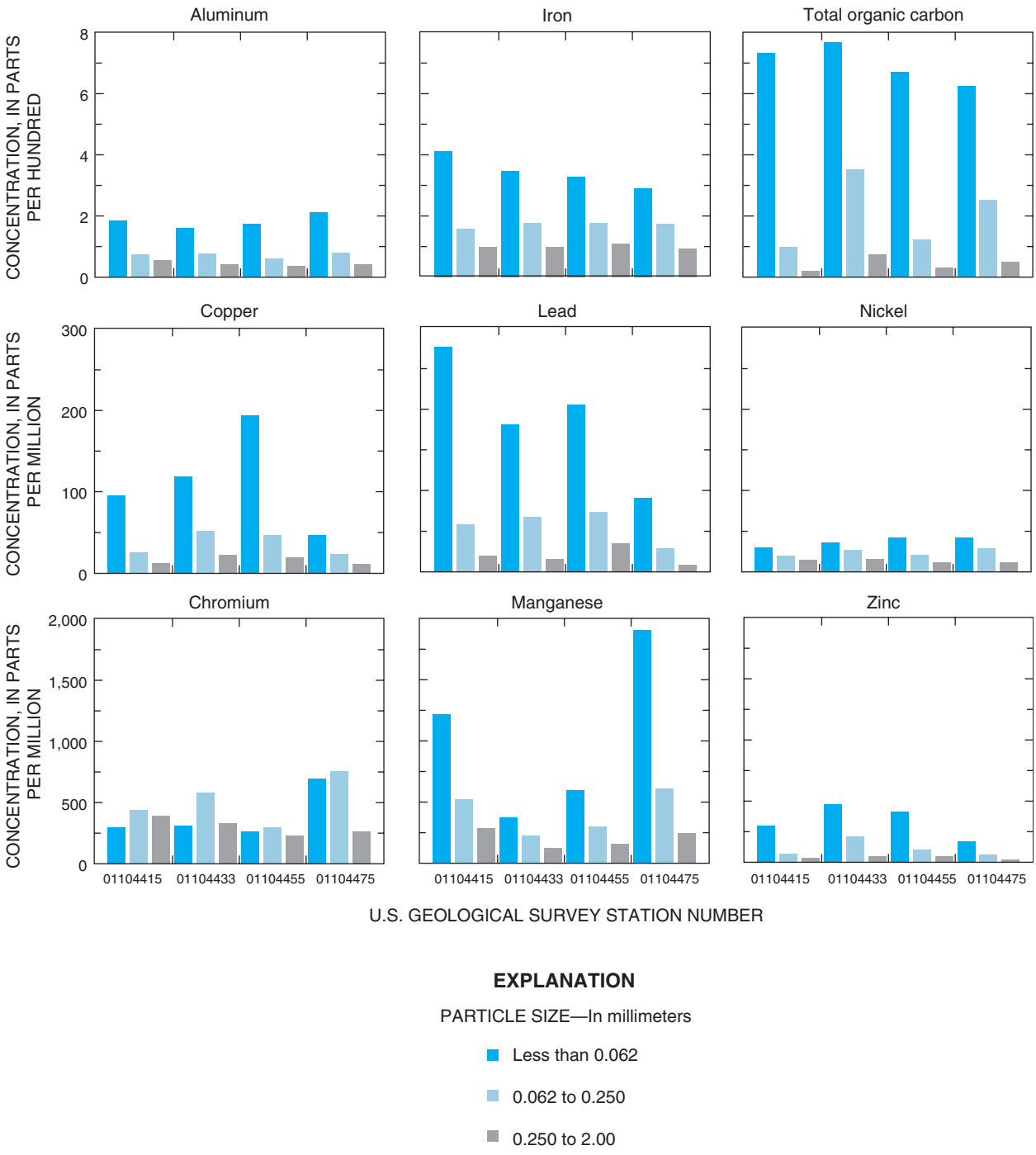

Figure 11. Concentrations of selected elements and total organic carbon in samples of bed sediment collected from four tributaries in the Hobbs Brook Reservoir and Stony Brook Reservoir drainage subbasins, Lexington, Waltham, and Weston, Massachusetts.

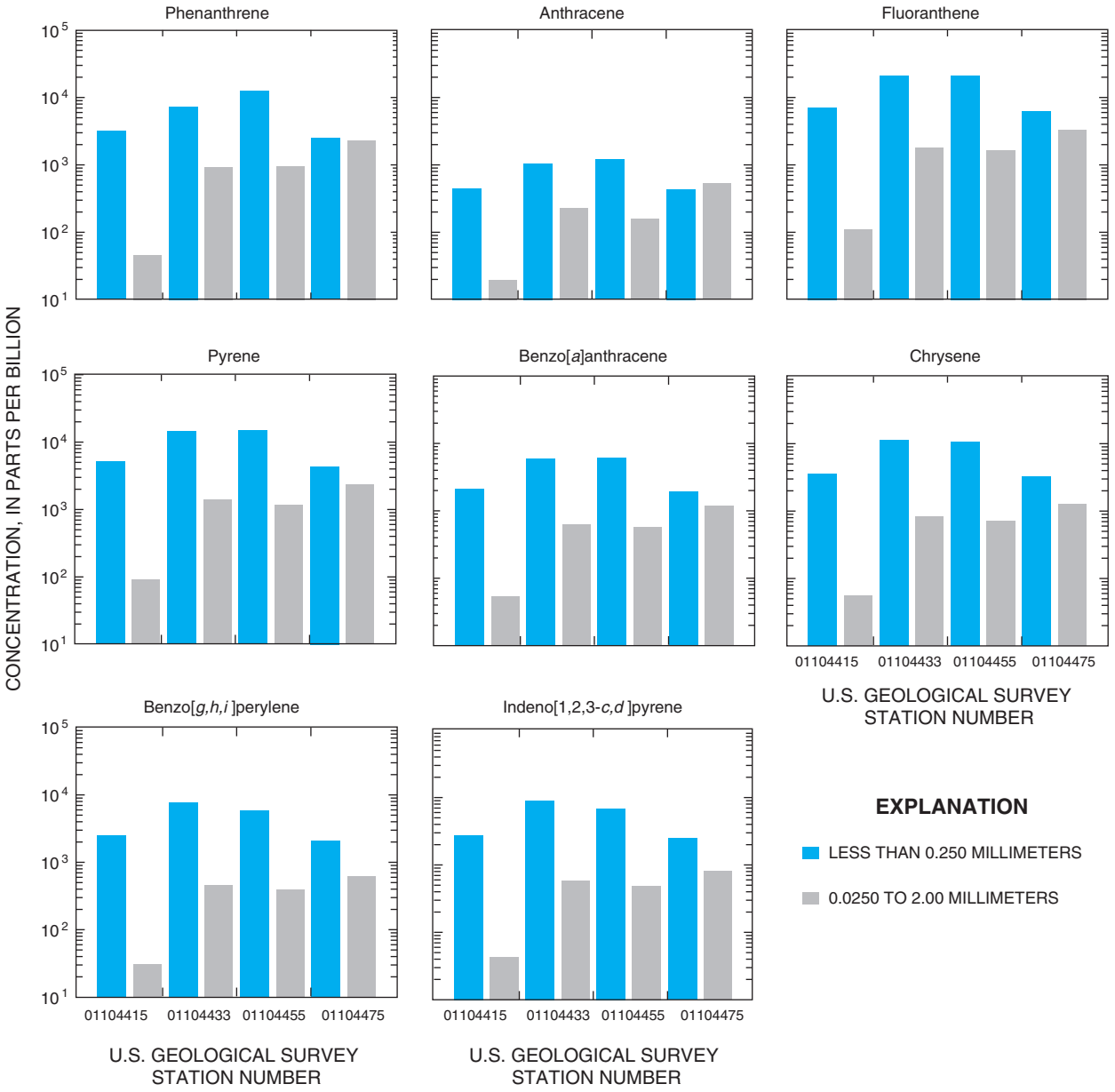

Figure 12. Concentrations of selected organic compounds in samples of bed sediment collected from four tributaries in the Hobbs Brook Reservoir and Stony Brook Reservoir drainage subbasins, Lexington, Waltham, and Weston, Massachusetts.

Soil

Samples of soil were collected at sites in 4 drainage subbasins and analyzed for 32 elements (tables 4, 6, 7, and 9). Bismuth, cadmium, tin, and tungsten were the only elements not detected in any sample. Antimony was found in two samples collected in the drainage basin of USGS station 01104415 (table 4). Silver was found in one sample in the drainage basin of USGS station 01104415 and in one sample in the drainage basin of USGS station 01104455 (tables 4 and 7). Concentrations of arsenic, copper, and lead had the greatest amount of variation, while concentrations of aluminum, lanthanum, and nickel had the lowest amount of variation. In general, the average concentrations for most elements from the different subbasins were similar; however, the maximum concentration for any single element differed from subbasin to subbasin. The median relative percent difference between pairs of field and laboratory replicate samples for elements in soil was less than 6 percent for elements with more than one detection, except for arsenic and zirconium, whose median relative percent difference values were 14 percent and 10 percent, respectively.

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Glossary

Definitions in this glossary are adapted from the U.S. Geological Survey Annual Water Data Report for Massachusetts and Rhode Island (Socolow and others, 2004).

A

Alkalinity The capacity of solutes in an aqueous system to neutralize acid. Alkalinity is determined by titration of a filtered sample.

Annual runoff The total quantity of water that is discharged (runs off) from a drainage basin in a year. This report presents annual runoff data as volumes in millions of gallons per second per square mile and as depths of water on the drainage basin in inches.

B

Base flow 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.

Bed material The sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

C

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

Control A feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the station. 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 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.

D

Datalogger A microprocessor-based data-acquisition system designed specifically to acquire, process, and store data. Most dataloggers are capable of transmitting data by phone modem, cellular modem, radio, or satellite-communication systems.

Datum A surface or point relative to which measurements of height and horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of stream stage or altitude; a horizontal datum is a reference for positions given in terms of latitude and longitude, state plane coordinates, or Univeral Transverse Mercado coordinates.

Discharge or flow The rate at which 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 sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, or pipeline within a given period of time.

Dissolved The 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 Molecular oxygen (O_2, 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 the dissolved oxygen concentration in water from some streams.

Drainage area The area measured in a horizontal plane upstream from the location from which surface runoff from precipitation normally drains by gravity to the stream at that location. Drainage areas given herein include all closed basins, or contributing areas, within the area unless otherwise specified.

Drainage basin A part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff.

E

***Escherichia coli* (*E. coli*)** Bacteria present in the intestine and feces of warmblooded animals. *E. coli* is a member species of the fecal coliform group of indicator bacteria. In the laboratory, *E. coli* 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 (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Estimated (E) concentration value Reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (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 USGS National Water Quality Laboratory will identify the result with an "E" code even though the measured value is greater than the MDL. 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 MDL preceded by a less than sign (<).

F

Flow-duration percentiles Values on a scale of 100 indicating the percentage of time during which a specific flow is exceeded. For example, the 90th-percentile flow duration is less than or equal to 90 percent of all recorded flow rates.

G

Gage datum A horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is slightly below the lowest point of the stream bottom, so that the gage height is usually slightly greater 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 altitudes 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 maintained independently of any national geodetic datum. However, if the altitude 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 gage readings can be converted to altitudes above the national datum by adding the altitude of the gage datum to the gage reading.

Gage height The water-surface altitude, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is 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 Values that are recorded, transmitted, and or computed from a gaging station.

Gaging station A site on a stream or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained.

Gill radiation shield A louvered structure which reflects solar radiation from a temperature sensor but allows air to pass freely around the sensor, thereby serving to keep it at or near ambient temperature.

H

Hardness A physicochemical characteristic that commonly is 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 ($CaCO_3$).

I

Inch As used in this report, a unit of measurement used for 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 The discharge at a particular instant of time (see also "Discharge").

L

Laboratory reporting level (LRL) The concentration generally equal to twice the yearly determined long-term method detection level (LT-MDL) for a given analyte and a given method. The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample containing 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 is reported with a "less than" (<) remark code for samples in which the analyte was not detected. The USGS National Water Quality Laboratory collects quality-control data for selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change.

Long-term method detection level (LT-MDL) A concentration derived by determining the standard deviation of a minimum of 24 method-detection-limit spike-sample concentration measurements during 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 not containing the analyte is predicted to be less than or equal to 1 percent.

M

Mean discharge The arithmetic mean of individual daily mean discharges during a specific period (see also "Discharge").

Metabolite Any substance produced, used, or remaining during or after metabolism (that is, digestion).

Method detection limit 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.

Micrograms per gram 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 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 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 The electrical unit expressing conductance of a solution. Siemens, the basic unit in the International System of Units nomenclature, is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter A unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. The concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

Millions of gallons per day The total volume of water represented by flow over a 24-hour period of time. Expressed as a flow rate, it is the volume of water per unit time (that is, seconds, minutes, or hours) that if held constant, would represent a specified flow for a 24-hour period. One Mgal/d is equivalent to 1.547 cubic feet per second or 0.04381 cubic meters per second.

Millions of gallons per day per square mile The average flow of water in millions of gallons per day from each square mile of area drained. The runoff is assumed to be distributed uniformly in time and area (see also "Annual runoff").

Minimum reporting level (MRL) The smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

N

National Geodetic Vertical Datum of 1929 (NGVD 29) A fixed reference adopted as a standard geodetic datum for altitudes determined by leveling. It formerly was 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").

North American Datum of 1983 (NAD 83) The horizontal control datum for the United States, Canada, Mexico, and Central America that is based on the adjustment of 250,000 points including 600 satellite Doppler stations that constrain the system to a geocentric origin. NAD 83 has been officially adopted as the legal horizontal datum for the United States by the Federal government.

P

Parameter Code A five-digit number used in the USGS computerized data system, National Water Information System, to uniquely identify a specific constituent or property.

Particle size The diameter, in millimeters, of a particle determined by sieve methods.

Peak flow (peak stage) An instantaneous local maximum value in the continuous time series of streamflows or stages. This peak value is preceded by a period of increasing values and followed by a period of decreasing values. Several peak flows ordinarily occur in a year. The maximum peak flow 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 of 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.

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

pH of water The negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed "acidic," and solutions with a pH greater than 7.0 are termed "basic." Solutions with a pH of 7.0 are neutral. The presence and concentration of many chemical constituents commonly dissolved in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

Polar pesticides Pesticides that are very water soluble and tend not to be adsorbed onto soil. These pesticides are also not very soluble in tissues and tend not to bioconcentrate in biota because of their low solubility.

Precipitation Falling products of water-vapor condensation in the atmosphere, such as rain, snow, sleet, and hail.

S

Sea level As used in this report, one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums. See data-statement in the conversion-table page for identification of the datum used in this report.

Sediment 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 origin of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Sodium-adsorption-ratio The expression of relative activity of sodium ions in exchange reactions within soil and 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) A measure of the capacity of water (or other medium) to conduct an electrical current 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 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream and may vary in the same source with changes in the composition of the water.

Stage See "Gage height."

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

Streamflow The discharge in a natural channel. Although the term "discharge" can be applied to the flow in a canal, the word "streamflow" uniquely describes the discharge in a naturally flowing stream. The term "streamflow" includes sources of water in addition to runoff, and applies to discharge affected by diversion or regulation.

Surface area of a lake That area (in 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 The upper surface (0.1 to 0.2 foot) of the bed material.

Suspended As used in tables of chemical analyses, undissolved material in a water-sediment mixture. It is defined operationally as the material retained when environmental water samples are processed through a 0.45-micrometer filter.

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

Suspended-sediment concentration The concentration of suspended sediment in the sampled zone expressed as milligrams of dry sediment per liter of water-sediment mixture. The analytical technique uses the mass of all 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").

T

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

Traceable thermometer A thermometer that has been found to conform to specific requirements of construction and accuracy.

Turbidity An optical property of a liquid that causes light rays to be scattered and absorbed rather than transmitted in straight lines through water. Turbidity, which can make water appear cloudy or muddy, is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms, organic acids, and dyes (ASTM International, 2003). The water color, whether resulting from dissolved compounds or suspended particles, can affect a turbidity measurement. To ensure that USGS turbidity data can be understood and interpreted properly within the context of the instrument used and site conditions encountered, data from each instrument type are stored and reported in the USGS National Water Information System by using parameter codes and measurement reporting units that are specific to the instrument type, with specific instruments designated by the method code. Specific reporting units used in this report are as follows:

NTRU (Nephelometric Turbidity Ratio Units) White or broad band [400–680 nm] light source, 90-degree detection angle, multiple detectors with ratio compensation.

FNU (Formazin Nephelometric Units) Near infrared [780–900 nm] or monochrome light source, 90-degree detection angle, one detector.

FNMU (Formazin Nephelometric Multibeam Units) Near infrared [780–900 nm] or monochrome light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam. For more information see Anderson (2004).

W

Water year In USGS reports dealing with surface-water supply, 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, 2004, is called the “2004 water year.”

Table 4–11

Table 4. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts.

PERIOD OF RECORD.--Water years 1998; March 2003 to current year.

PERIOD OF DAILY RECORD.—

DISCHARGE: October 1997 to September 1998, December 17, 2003, to current year.

WATER TEMPERATURE: October 1997 to September 1998, December 17, 2003, to current year.

SPECIFIC CONDUCTANCE: October 1997 to September 1998, December 17, 2003, to current year.

REMARKS.--Records for discharge are good except those for estimated daily discharges which are poor. Records for water temperature are excellent and records for specific conductance are good. e, estimated.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum recorded 90.5 Mgal/d, June 13, 1998; minimum recorded 0.0 Mgal/d several days in 1998 and on June 30, 2004.

WATER TEMPERATURE: Maximum recorded, 25.0°C, June 27, 2004; minimum, -0.8°C, Jan. 23, 1998.

SPECIFIC CONDUCTANCE: Maximum recorded, 26,800 µS/cm, Mar. 22, 1998; minimum, 42 µS/cm, June 13, 1998.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum recorded 42.7 Mgal/d on Aug. 13; minimum recorded 0 Mgal/d, June 30.

WATER TEMPERATURE: Maximum recorded, 24.3°C, Aug. 30; minimum, -1.0°C, Feb. 4.

SPECIFIC CONDUCTANCE: Maximum recorded, 24,800 µS/cm, Feb. 4; minimum, 96 µS/cm, Aug. 13.

DISCHARGE IN MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY TOTAL VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	0.43	0.02	0.29	13	e0.23	e0.14	0.01	0.06	0.10
2	---	---	---	.43	.02	.35	7.1	e.23	e.18	.40	.05	.08
3	---	---	---	.53	.03	.22	1.9	e.37	e.11	.02	.03	.08
4	---	---	---	.63	.78	.17	1.4	e.46	e.08	.01	.03	.07
5	---	---	---	.65	.08	.12	1.4	e.25	.08	.02	.26	.06
6	---	---	---	.48	.34	.28	.97	e.23	.21	.01	.04	.05
7	---	---	---	.37	.90	.14	.84	e.23	.12	.05	.03	.05
8	---	---	---	.33	.17	.20	.71	e.35	.08	1.2	.02	.28
9	---	---	---	.30	.12	.14	.61	e.54	.13	1.0	.01	1.0
10	---	---	---	.25	.21	.14	.53	e.24	.17	.06	.01	.17
11	---	---	---	.26	.12	.17	.48	e.18	.06	.03	.17	.09
12	---	---	---	.26	.09	.19	.45	e.17	.04	.02	.26	.08
13	---	---	---	.25	.10	.15	4.1	e.16	.03	.26	4.7	.07
14	---	---	---	.21	.12	.12	2.6	e.15	.03	.32	.21	.06
15	---	---	---	.30	.09	.14	1.9	e.14	.03	.06	1.4	.05
16	---	---	---	.14	.06	.12	1.0	e.19	.02	.03	.48	.07
17	---	---	e.97	.12	.05	.16	.84	e.14	.02	.02	.55	.06
18	---	---	2.30	.14	.05	.14	.71	e.18	.46	.01	.25	5.8
19	---	---	1.00	.12	.06	.13	.65	e.12	.05	.02	.18	.59
20	---	---	.84	.11	.06	.20	.55	e.09	.02	.01	1.1	.37
21	---	---	.71	.11	.10	.78	.48	.12	.01	.01	4.1	.28
22	---	---	.63	.12	.14	.36	.46	.12	.01	.01	.78	.22
23	---	---	.64	.10	.12	.27	1.6	.38	.01	.01	.44	.17
24	---	---	1.90	.09	.09	.26	.65	.29	.01	4.7	.33	.16
25	---	---	1.16	.06	.09	.26	.52	.36	.06	.25	.25	.14
26	---	---	.78	.04	.08	.28	1.5	e.14	.05	.14	.21	.12
27	---	---	.63	e.04	.08	.47	1.4	e.25	.01	.10	.17	.10
28	---	---	.57	e.04	.12	.28	.71	e.27	.01	.39	.14	1.5
29	---	---	.54	e.04	.18	.24	.58	e.13	.01	.26	.12	1.9
30	---	---	.52	.05	---	.22	.52	e.12	.01	.10	.28	.50
31	---	---	.46	.04	---	2.20	---	e.11	---	.06	.21	---
TOTAL	---	---	---	7.01	4.50	9.19	50.12	6.93	2.25	9.58	16.86	14.32
MEAN	---	---	---	.23	.16	.30	1.67	.22	.07	.31	.54	.48
MAX	---	---	---	.65	.90	2.2	13	.54	.46	4.7	4.7	5.8
MIN	---	---	---	.04	.02	.12	.45	.09	.01	.01	.01	.05
MED	---	---	---	.14	.09	.20	.78	.41	.04	.05	.21	.11
MGDSM	---	---	---	.55	.38	.72	4.07	.54	.18	.76	1.32	1.16
IN.	---	---	---	.98	.63	1.29	7.04	.97	.32	1.35	2.37	2.01

Table 4. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts.—Continued

DISCHARGE IN MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY TOTAL VALUES—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, WATER YEAR (WY)

MEAN	0.30	0.30	0.20	0.59	0.69	0.66	1.09	0.58	0.81	0.30	0.33	0.28
MAX	0.56	0.37	0.27	0.83	1.12	1.07	1.67	0.93	1.55	0.31	0.54	0.48
(WY)	1999	1998	1998	1999	1998	1998	2004	1998	1998	1998	2004	2004
MIN	0.05	0.23	0.13	0.23	0.16	0.30	0.52	0.22	0.07	0.31	0.11	0.08
(WY)	1998	1999	1999	2004	2004	2004	1998	2004	2004	2004	1998	1998

SUMMARY STATISTICS	WATER YEARS 1998 - 2004	
HIGHEST DAILY MEAN	17.5	Jun 13 1998
LOWEST DAILY MEAN	0.00	Oct 1 1997
ANNUAL RUNOFF (MGDSM)	1.43	
ANNUAL RUNOFF (INCHES)	30.05	
10 PERCENT EXCEEDS	1.29	
50 PERCENT EXCEEDS	0.25	
90 PERCENT EXCEEDS	0.03	

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	6.1	3.7	4.8
2	---	---	---	---	---	---	---	---	---	4.9	3.8	4.6
3	---	---	---	---	---	---	---	---	---	6.2	4.9	5.6
4	---	---	---	---	---	---	---	---	---	7.0	4.1	5.7
5	---	---	---	---	---	---	---	---	---	4.4	3.2	4.0
6	---	---	---	---	---	---	---	---	---	5.0	.9	2.9
7	---	---	---	---	---	---	---	---	---	2.1	.2	1.0
8	---	---	---	---	---	---	---	---	---	1.0	-.2	.3
9	---	---	---	---	---	---	---	---	---	.4	-.2	.0
10	---	---	---	---	---	---	---	---	---	.6	-.3	.0
11	---	---	---	---	---	---	---	---	---	1.1	.3	.6
12	---	---	---	---	---	---	---	---	---	2.5	1.1	1.4
13	---	---	---	---	---	---	---	---	---	2.6	-.3	.6
14	---	---	---	---	---	---	---	---	---	.3	-.2	-.1
15	---	---	---	---	---	---	---	---	---	.1	-.4	-.3
16	---	---	---	---	---	---	---	---	---	1.0	-.2	.1
17	---	---	---	---	---	---	e6.2	e2.8	e4.3	1.1	.6	.8
18	---	---	---	---	---	---	5.1	2.8	4.1	1.5	.5	.9
19	---	---	---	---	---	---	5.5	3.8	4.5	1.2	.1	.5
20	---	---	---	---	---	---	5.5	3.8	4.5	1.6	.1	.5
21	---	---	---	---	---	---	4.7	2.9	3.9	1.7	.1	.7
22	---	---	---	---	---	---	6.1	3.9	4.9	1.7	.0	.7
23	---	---	---	---	---	---	7.0	4.9	5.9	.8	-.2	.1
24	---	---	---	---	---	---	7.8	5.7	6.8	.3	-.4	-.2
25	---	---	---	---	---	---	7.4	4.7	6.3	.6	-.4	-.1
26	---	---	---	---	---	---	5.6	4.6	5.1	e.8	e-.1	e.2
27	---	---	---	---	---	---	6.2	3.5	4.8	---	---	---
28	---	---	---	---	---	---	6.2	3.3	4.6	---	---	---
29	---	---	---	---	---	---	6.8	3.9	5.4	e1.4	e0.0	e0.6
30	---	---	---	---	---	---	7.7	4.6	5.9	1.6	.0	.4
31	---	---	---	---	---	---	6.2	4.4	5.1	1.7	.0	.6
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

Table 4. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts.—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	-0.1	0.7	6.9	2.2	4.0	5.3	4.0	4.5	e16.3	e10.4	e12.7
2	2.7	.1	1.2	7.5	3.4	4.7	5.3	4.1	4.8	---	---	---
3	2.3	.5	1.4	7.3	3.1	4.8	5.7	4.9	5.3	---	---	---
4	1.1	-1.0	.0	5.3	3.0	4.0	6.5	5.2	5.8	---	---	---
5	2.4	.2	1.2	4.7	2.7	3.8	7.0	4.0	5.1	---	---	---
6	1.6	-.7	.8	6.5	3.6	5.0	8.6	3.2	5.4	---	---	---
7	.8	-.3	.2	7.3	2.4	4.5	8.9	4.1	6.3	---	---	---
8	1.3	-.2	.4	4.0	2.1	2.7	10.2	4.2	7.0	---	---	---
9	2.4	.2	1.0	3.5	1.9	2.6	10.6	5.0	7.4	---	---	---
10	3.4	1.1	1.7	5.2	1.2	2.9	10.7	4.6	7.1	---	---	---
11	2.9	.8	1.6	5.8	1.9	3.3	8.7	5.1	6.7	---	---	---
12	2.1	.2	1.1	4.6	1.6	2.8	10.7	5.5	7.6	---	---	---
13	3.3	.8	1.9	6.2	.9	3.0	7.1	5.5	6.3	---	---	---
14	3.8	1.3	2.3	5.0	.7	2.6	8.9	5.5	8.1	---	---	---
15	1.9	.0	1.0	7.1	2.8	4.4	9.1	6.3	7.6	---	---	---
16	1.7	-.4	.4	4.3	.0	2.4	10.3	5.1	7.3	---	---	---
17	2.1	-.2	.8	1.6	.2	.9	11.9	5.2	8.5	---	---	---
18	2.1	.9	1.4	3.3	.7	1.8	12.8	8.1	10.1	---	---	---
19	3.3	.4	1.6	3.8	.8	2.2	15.2	7.9	10.9	---	---	---
20	3.6	.7	2.1	5.0	.0	2.3	14.6	9.2	11.5	e16.3	e13.5	e15.1
21	3.1	2.1	2.5	5.8	1.8	3.4	12.3	7.3	9.5	16.4	12.6	14.4
22	3.6	1.9	2.6	5.4	.5	2.2	15.8	9.1	11.9	14.4	11.1	12.6
23	4.2	1.2	2.4	6.0	.2	2.5	11.8	8.6	10.2	14.3	10.9	12.2
24	3.3	.8	2.0	8.4	1.3	4.3	13.8	8.0	10.2	13.2	11.6	12.1
25	3.7	.6	2.0	7.5	4.0	5.6	12.5	6.3	8.8	12.2	11.1	11.6
26	3.9	.7	2.1	11.6	5.6	7.9	9.6	7.4	8.5	e11.1	e10.5	e10.8
27	3.8	.4	2.1	11.3	6.9	8.3	13.5	9.1	10.7	---	---	---
28	5.2	.8	2.7	7.3	3.7	6.1	13.1	8.3	10.0	---	---	---
29	5.7	1.4	3.1	9.8	3.1	5.6	14.8	7.6	10.8	---	---	---
30	---	---	---	5.8	3.9	4.7	16.4	9.5	12.5	---	---	---
31	---	---	---	5.9	4.2	4.9	---	---	---	---	---	---
MONTH	5.7	-1.0	1.5	11.6	0.0	3.9	16.4	3.2	8.2	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	16.7	14.1	15.5	19.5	18.6	19.0	18.7	16.9	17.8
2	---	---	---	20.9	15.7	18.1	20.0	17.9	18.9	17.4	15.8	16.6
3	---	---	---	17.1	15.5	16.4	20.2	17.6	18.9	18.0	15.4	16.7
4	e15.6	e13.3	e14.6	17.3	14.6	16.2	19.4	18.0	18.8	18.4	16.4	17.3
5	14.4	12.1	13.2	17.3	15.6	16.4	18.9	16.4	18.0	16.6	15.0	16.0
6	14.6	11.9	12.5	17.6	16.1	16.9	17.2	15.6	16.2	16.1	13.6	15.0
7	15.2	11.7	13.1	17.9	15.6	16.9	16.1	14.1	15.3	17.2	14.5	15.9
8	17.0	12.6	14.7	21.0	15.8	17.5	16.5	14.2	15.5	20.0	16.4	18.0
9	18.8	14.9	16.9	20.3	17.6	18.7	17.1	14.5	15.9	20.0	17.8	19.1
10	17.8	14.2	16.1	18.0	16.0	17.1	17.8	15.0	16.5	19.6	16.4	18.3
11	15.1	12.2	13.7	17.6	16.1	16.7	23.9	16.7	18.5	16.9	15.1	16.0
12	14.8	11.4	13.1	17.0	15.4	16.2	23.0	18.3	19.3	16.7	14.0	15.4
13	15.6	12.2	13.9	17.5	15.7	16.2	23.3	19.6	20.8	17.0	15.2	16.1
14	15.1	13.2	14.2	17.2	16.0	16.7	20.3	18.7	19.4	15.7	14.4	15.1
15	17.7	14.6	16.1	17.6	15.8	16.4	20.0	17.8	18.9	15.5	13.6	14.7
16	17.9	15.0	16.5	17.7	15.9	16.9	17.8	17.3	17.5	16.4	15.1	15.7
17	17.2	15.5	16.3	18.5	16.1	17.3	18.6	17.2	17.7	17.6	16.0	16.8
18	18.7	15.8	17.1	18.7	16.5	17.5	18.8	16.6	17.7	19.2	15.4	16.6
19	17.4	15.5	16.2	17.6	16.7	17.1	19.3	17.6	18.4	15.4	13.7	14.5
20	15.5	13.6	14.5	18.7	16.4	17.5	23.5	17.9	19.7	15.2	12.6	13.9
21	15.7	12.9	14.4	18.6	16.3	17.5	22.3	18.9	20.6	15.8	13.7	14.8
22	15.6	13.8	14.7	19.0	16.5	17.9	18.9	16.8	17.7	17.0	14.7	15.8
23	16.8	14.9	15.8	19.5	17.4	18.4	18.6	15.9	17.2	17.0	15.1	16.1
24	16.5	13.7	15.3	22.6	17.8	19.8	17.9	16.3	17.2	16.4	14.4	15.3
25	18.2	14.8	15.6	18.2	16.7	17.5	17.8	15.2	16.5	17.1	14.6	15.9

Table 4. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts.—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
26	17.1	15.3	16.2	17.9	15.7	16.8	17.6	14.9	16.3	16.9	15.2	16.3
27	15.8	13.7	14.9	17.1	15.7	16.4	18.9	16.6	17.6	16.4	13.8	15.2
28	15.5	13.4	14.6	18.0	16.1	16.8	19.9	17.7	18.8	18.2	15.1	16.6
29	16.2	13.9	15.1	18.6	17.0	17.7	20.4	18.4	19.4	17.2	13.6	15.2
30	16.5	14.0	15.3	19.0	16.6	17.8	24.3	18.7	19.9	15.1	12.7	14.0
31	---	---	---	20.4	17.8	19.0	21.1	18.3	20.1	---	---	---
MONTH	---	---	---	22.6	14.1	17.2	24.3	14.1	18.1	20.0	12.6	16.0

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	1,600	1,520	1,560
2	---	---	---	---	---	---	---	---	---	2,410	1,550	1,870
3	---	---	---	---	---	---	---	---	---	2,000	1,380	1,620
4	---	---	---	---	---	---	---	---	---	3,480	1,170	1,810
5	---	---	---	---	---	---	---	---	---	4,350	2,400	3,050
6	---	---	---	---	---	---	---	---	---	2,920	1,920	2,340
7	---	---	---	---	---	---	---	---	---	1,920	1,850	1,880
8	---	---	---	---	---	---	---	---	---	2,160	1,880	1,980
9	---	---	---	---	---	---	---	---	---	2,340	1,970	2,140
10	---	---	---	---	---	---	---	---	---	2,280	2,020	2,130
11	---	---	---	---	---	---	---	---	---	6,310	1,990	2,740
12	---	---	---	---	---	---	---	---	---	6,250	2,710	4,080
13	---	---	---	---	---	---	---	---	---	3,040	2,490	2,680
14	---	---	---	---	---	---	---	---	---	2,590	2,480	2,520
15	---	---	---	---	---	---	---	---	---	2,590	2,460	2,530
16	---	---	---	---	---	---	---	---	---	2,600	2,480	2,530
17	---	---	---	---	---	---	e3,280	e675	e1,780	2,480	2,200	2,360
18	---	---	---	---	---	---	1,510	673	1,250	4,570	2,210	3,630
19	---	---	---	---	---	---	1,630	1,320	1,450	3,070	2,730	2,900
20	---	---	---	---	---	---	1,490	1,370	1,430	2,810	2,640	2,700
21	---	---	---	---	---	---	1,560	1,440	1,500	2,660	2,530	2,600
22	---	---	---	---	---	---	1,580	1,490	1,530	2,600	2,330	2,550
23	---	---	---	---	---	---	1,570	1,380	1,500	2,690	2,560	2,650
24	---	---	---	---	---	---	1,460	428	1,070	2,870	2,660	2,800
25	---	---	---	---	---	---	1,130	827	960	2,950	2,780	2,880
26	---	---	---	---	---	---	1,200	1,070	1,140	e2,890	e2,810	e2,850
27	---	---	---	---	---	---	1,340	1,170	1,250	---	---	---
28	---	---	---	---	---	---	1,380	1,320	1,340	---	---	---
29	---	---	---	---	---	---	1,430	1,360	1,390	e4,240	e3,830	e4,000
30	---	---	---	---	---	---	1,490	1,400	1,440	3,910	3,530	3,700
31	---	---	---	---	---	---	1,550	1,470	1,500	3,650	3,280	3,470
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3,510	3,290	3,400	2,150	1,670	1,970	1,030	331	517	e1,960	e1,890	e1,920
2	3,400	3,250	3,360	1,940	1,520	1,770	1,300	366	921	---	---	---
3	3,410	2,960	3,260	1,940	1,520	1,730	1,470	1,280	1,390	---	---	---
4	24,800	3,110	8,160	2,090	1,830	2,000	1,540	1,410	1,480	---	---	---
5	4,340	3,570	3,920	2,120	2,030	2,080	1,570	1,120	1,410	---	---	---
6	20,800	3,170	7,080	3,060	1,530	1,880	1,720	1,550	1,630	---	---	---
7	13,800	3,350	9,740	2,030	1,760	1,920	1,760	1,660	1,710	---	---	---
8	3,840	3,330	3,650	2,780	1,910	2,210	1,830	1,720	1,780	---	---	---
9	3,920	3,280	3,680	2,580	2,320	2,450	1,910	1,800	1,840	---	---	---
10	3,520	2,440	3,080	2,530	2,310	2,410	1,980	1,890	1,930	---	---	---

Table 4. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts.—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
11	3,030	2,320	2,620	2,370	1,930	2,240	2,030	1,960	1,990	---	---	---
12	3,120	2,930	3,030	2,890	1,950	2,370	2,070	1,670	2,020	---	---	---
13	3,160	2,700	3,010	2,460	2,260	2,360	2,060	305	1,190	---	---	---
14	3,120	2,480	2,890	2,620	2,390	2,480	1,150	318	889	---	---	---
15	3,100	2,640	2,880	2,570	2,190	2,420	1,320	689	1,050	---	---	---
16	3,340	2,920	3,210	2,600	2,260	2,460	1,510	1,300	1,400	---	---	---
17	3,360	3,160	3,270	7,590	2,490	5,450	1,610	1,480	1,540	---	---	---
18	3,270	3,040	3,120	4,990	3,850	4,260	1,690	1,590	1,630	---	---	---
19	3,160	2,810	3,070	4,150	3,290	3,570	2,090	1,640	1,750	---	---	---
20	3,210	2,490	2,950	4,340	2,890	3,320	2,050	1,860	1,940	e2,520	e2,220	e2,340
21	3,130	2,400	2,790	5,500	1,580	2,570	2,110	2,010	2,050	2,680	2,520	2,590
22	2,850	2,060	2,500	2,340	1,780	2,130	2,130	2,010	2,060	2,730	2,360	2,640
23	2,560	1,810	2,240	2,490	2,260	2,380	2,420	691	1,310	3,130	1,080	1,720
24	2,650	2,420	2,510	2,430	2,220	2,320	1,760	1,350	1,570	2,440	1,180	2,000
25	2,840	2,600	2,740	2,330	2,080	2,230	1,900	1,530	1,790	1,970	969	1,480
26	2,880	2,560	2,760	2,210	2,040	2,120	2,000	688	1,220	e2,100	e1,510	e1,960
27	2,910	2,660	2,800	2,770	1,430	1,780	1,460	713	1,110	---	---	---
28	2,930	2,200	2,700	2,130	1,820	1,980	1,670	1,360	1,520	---	---	---
29	2,750	1,910	2,310	2,240	2,070	2,140	1,790	1,650	1,720	---	---	---
30	---	---	---	2,240	2,170	2,210	1,930	1,770	1,840	---	---	---
31	---	---	---	2,480	519	1,630	---	---	---	---	---	---
MONTH	24,800	1,810	3,540	7,590	519	2,410	2,420	305	1,540	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	3,320	2,940	3,150	2,960	2,830	2,910	2,100	1,710	1,930
2	---	---	---	3,280	435	1,610	3,050	2,920	2,990	2,290	2,000	2,130
3	---	---	---	2,620	2,030	2,390	3,120	2,940	3,060	2,370	2,170	2,280
4	e2,510	e2,240	e2,430	2,880	2,560	2,760	3,170	3,090	3,130	2,440	2,250	2,380
5	2,740	2,480	2,610	3,090	2,880	2,980	3,150	793	1,830	2,500	2,350	2,440
6	3,100	953	2,460	3,210	2,990	3,070	2,590	1,960	2,280	2,570	2,370	2,500
7	2,410	1,520	2,000	3,140	2,980	3,050	2,890	2,590	2,770	3,020	2,370	2,740
8	2,750	2,400	2,580	3,470	218	2,290	3,070	2,890	2,970	3,240	824	2,260
9	3,050	965	2,750	1,990	188	1,330	3,160	2,950	3,050	1,590	164	961
10	2,970	1,420	2,070	2,450	1,990	2,230	3,200	2,990	3,090	2,040	1,160	1,750
11	2,790	2,110	2,440	2,700	2,450	2,540	3,480	953	2,570	2,410	2,040	2,200
12	3,170	2,640	2,890	2,820	2,530	2,750	2,280	455	1,960	2,540	2,350	2,440
13	3,340	2,910	3,140	2,980	622	2,370	1,420	96	881	2,640	2,500	2,590
14	3,320	2,950	3,210	1,810	631	1,100	1,940	1,420	1,680	2,790	2,630	2,690
15	3,430	3,080	3,280	2,530	1,810	2,200	1,940	216	958	2,860	2,580	2,770
16	3,460	3,240	3,390	2,760	2,530	2,640	1,450	940	1,180	2,950	2,750	2,840
17	3,560	3,360	3,440	2,880	2,740	2,830	1,460	667	1,090	2,910	2,800	2,850
18	3,540	417	1,680	2,950	2,860	2,910	1,800	1,460	1,640	2,820	149	761
19	2,870	2,030	2,470	3,050	2,920	2,990	1,970	1,750	1,880	1,180	732	985
20	3,110	2,720	2,960	3,090	2,990	3,040	2,150	235	1,690	1,380	1,180	1,280
21	3,280	2,930	3,160	3,070	2,980	3,040	1,150	152	622	1,530	1,380	1,470
22	3,390	3,140	3,300	3,180	2,910	3,090	1,250	620	1,020	1,700	1,530	1,620
23	3,440	3,320	3,380	3,180	2,980	3,100	1,520	1,250	1,400	1,860	1,670	1,770
24	3,420	3,270	3,350	3,100	134	967	1,700	1,510	1,610	1,910	1,780	1,850
25	3,880	1,490	3,320	2,050	1,380	1,750	1,860	1,670	1,780	1,970	1,830	1,900
26	3,880	2,180	2,480	2,450	2,050	2,240	1,980	1,780	1,900	2,080	1,900	1,990
27	2,880	2,500	2,750	2,700	2,400	2,560	2,080	1,860	2,000	2,170	2,000	2,080
28	3,170	2,850	2,990	2,690	673	1,480	2,190	1,970	2,090	2,160	209	1,160
29	3,310	3,030	3,210	2,110	845	1,470	2,290	2,060	2,200	903	289	547
30	3,350	3,050	3,190	2,630	2,110	2,350	2,860	661	2,050	1,180	903	1,070
31	---	---	---	2,860	2,540	2,680	1,710	955	1,430	---	---	---
MONTH	---	---	---	3,470	134	2,420	3,480	96	1,990	3,240	149	1,940

Table 4. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts.—Continued

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS AND PESTICIDES IN WATER SAMPLES

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Date	Time	Turbidity, water, unfiltered, broad band light source (400–680 nm), detectors at multiple angles including 90 ± 30 degrees, NTRU (P63676)	Dissolved oxygen, water, unfiltered (mg/L) (P00300)	pH, water, unfiltered, field, standard units (P00400)	Specific conductance, water, unfiltered (µS/cm at 25°C) (P00095)	Calcium, water, filtered (mg/L) (P00915)	Magnesium, water, filtered (mg/L) (P00925)	Potassium, water, filtered (mg/L) (P00935)	Sodium, water, filtered (mg/L) (P00930)
8-26-2004	1100	1.7	7	6.5	2,230	63.6	7.39	5.56	364

Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, (mg/L as $CaCO_3$) (P29801)	Chloride, water, filtered (mg/L) (P00940)	Sulfate, water, filtered (mg/L) (P00945)	Phosphorus, water, unfiltered (mg/L) (P00665)	Total nitrogen (nitrate + nitrite + ammonia + organic-N), water, unfiltered, analytically determined (mg/L as N) (P62855)	*Escherichia coli*, m-TEC MF method, water (colonies per 100 mL) (P31633)	Cadmium, water, unfiltered (µg/L) (P01027)	Chromium, water, unfiltered, recoverable (µg/L) (P01034)	Copper, water, unfiltered, recoverable (µg/L) (P01042)	Iron, water, unfiltered, recoverable (µg/L) (P01045)
54	658	28.5	0.01	1.63	A260	0.2	<0.8	2.9	360

Lead, water, unfiltered, recoverable (µg/L) (P01051)	Manganese, water, unfiltered, recoverable (µg/L) (P01055)	Nickel, water, unfiltered, recoverable (µg/L) (P01067)	Zinc, water, unfiltered, recoverable, (µg/L) (P01092)	2,4,5-T, surrogate, Schedule 9060/2060, water, filtered, percent recovery (P99958)	2,4-D methyl ester, water, filtered, recoverable (µg/L) (P50470)	2,4-D, water, filtered, recoverable (µg/L) (P39732)	2,4-DB, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38746)	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable (µg/L) (P04040)	2-Chloro-6-ethylamino-4-amino-s-triazine, water, filtered, recoverable (µg/L) (P04038)
1.04	335	4.53	17	112	<0.009	<0.02	<0.02	<0.03	<0.01

2-Hydroxy-4-isopropylamino-6-ethylamino-s-triazine, water, filtered, recoverable (µg/L) (P50355)	3-Hydroxy carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49308)	3-Keto-carbofuran, water, filtered, recoverable (µg/L) (P50295)	9*H*-Fluorene, water, unfiltered, recoverable (µg/L) (P34381)	Acenaphthene, water, unfiltered, recoverable (µg/L) (P34205)	Acenaphthylene, water, unfiltered, recoverable (µg/L) (P34200)	Acifluorfen, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49315)	Aldicarb sulfone, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49313)	Aldicarb sulfoxide, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49314)
<0.008	<0.006	<0.014	<2	<2	<2	<0.007	<0.02	<0.008

Aldicarb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49312)	Anthracene, water, unfiltered, recoverable (µg/L) (P34220)	Atrazine, water, filtered, recoverable (µg/L) (P39632)	Barban, surrogate, Schedules 2060/9060, water, filtered, percent recovery (P90640)	Bendiocarb, water, filtered, recoverable (µg/L) (P50299)	Benomyl, water, filtered, recoverable (µg/L) (P50300)	Bensulfuron, water, filtered, recoverable (µg/L) (P61693)	Bentazon, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38711)	Benzo[*a*]anthracene, water, unfiltered, recoverable (µg/L) (P34526)
<0.04	<2	<0.009	57.9	<0.03	<0.004	<0.02	<0.01	<2

Table 4. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts.—Continued

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS AND PESTICIDES IN WATER SAMPLES—Continued

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Benzo[*a*] pyrene, water, unfiltered, recoverable (µg/L) (P34247)	Benzo[*b*] fluoranthene, water, unfiltered, recoverable (µg/L) (P34230)	Benzo[*g,h,i*] perylene, water, unfiltered, recoverable (µg/L) (P34521)	Benzo[*k*] fluoranthene, water, unfiltered, recoverable (µg/L) (P34242)	Bromacil, water, filtered, recoverable (µg/L) (P04029)	Bromoxynil, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49311)	Caffeine, water, filtered, recoverable (µg/L) (P50305)	Caffeine-13C, surrogate, Schedule 9060/2060, water, filtered, percent recovery (P99959)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49310)	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49309)
<1	<2	<3	<2	<0.03	<0.02	0.0175	117	<0.03	<0.006

Chloramben methyl ester, water, filtered, recoverable (µg/L) (P61188)	Chlorimuron, water, filtered, recoverable (µg/L) (P50306)	Chlorodiamino-s-triazine, water, filtered, recoverable (µg/L) (P04039)	Chlorothalonil, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49306)	Chrysene, water, unfiltered, recoverable (µg/L) (P34320)	Clopyralid, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49305)	Cycloate, water, filtered, recoverable (µg/L) (P04031)	Dacthal monoacid, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49304)	Dibenzo[*a,h*] anthracene, water, unfiltered, recoverable (µg/L) (P34556)
<0.02	<0.010	<0.04	<0.04	<3	<0.01	<0.01	<0.01	<3

Dicamba, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38442)	Dichlorprop, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49302)	Dinoseb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49301)	Diphenamid, water, filtered, recoverable (µg/L) (P04033)	Diuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49300)	Fenuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49297)	Flumetsulam, water, filtered, recoverable (µg/L) (P61694)	Fluometuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38811)	Fluoranthene, water, unfiltered, recoverable (µg/L) (P34376)	Imazaquin, water, filtered, recoverable (µg/L) (P50356)
<0.01	<0.01	<0.01	<0.03	0.02	<0.03	<0.01	<0.03	<2	<0.02

Imazethapyr, water, filtered, recoverable (µg/L) (P50407)	Imidacloprid, water, filtered, recoverable (µg/L) (P61695)	Indeno[1,2,3-*cd*] pyrene, water, unfiltered, recoverable (µg/L) (P34403)	Linuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38478)	MCPA, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38482)	MCPB, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38487)	Metalaxyl, water, filtered, recoverable (µg/L) (P50359)	Methiocarb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38501)	Methomyl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49296)
<0.02	0.021	<3	<0.01	<0.02	<0.01	<0.02	<0.008	<0.004

Metsulfuron, water, filtered, recoverable (µg/L) (P61697)	N-(4-Chloro-phenyl)-N'-methylurea, water, filtered, recoverable (µg/L) (P61692)	Neburon, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49294)	Nicosulfuron, water, filtered, recoverable (µg/L) (P50364)	Nitro-benzene, water, unfiltered, recoverable (µg/L) (P34447)	Norflurazon, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49293)	Oryzalin, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49292)	Oxamyl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38866)	Phenanthrene, water, unfiltered, recoverable (µg/L) (P34461)	Picloram, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49291)
<0.03	<0.02	<0.01	<0.01	<2	<0.02	<0.02	<0.01	<2	<0.02

Table 4. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts.—Continued

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS AND PESTICIDES IN WATER SAMPLES—Continued

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Propham, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49236)	Propicon-azole, water, filtered, recoverable, (µg/L) (P50471)	Propoxur, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38538)	Pyrene, water, unfiltered, recoverable (µg/L) (P34469)	Siduron, water, filtered, recoverable (µg/L) (P38548)	Sulfometuron, water, filtered, recoverable (µg/L) (P50337)	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P82670)	Terbacil, water, filtered, recoverable (µg/L) (P04032)	Triclopyr, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49235)	Naphthalene, water, unfiltered, recoverable (µg/L) (P34696)
<0.010	<0.02	<0.008	<2	E0.01	<0.009	<0.006	<0.010	<0.02	<2

CONCENTRATIONS OF INORGANIC AND ORGANIC CONSTITUENTS IN BED-SEDIMENT SAMPLES

REMARKS.--E, estimated; -LR, laboratory replicate sample; -R, replicate sample; %, parts per hundred; <, value is less than value shown; >, value is greater than value shown; --, no data.

Particle-size composition (mm)	Date	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phos-phorus, total (as P)	Carbon, organic, total (%)	Aluminum (%)	Antimony (ppm)	Arsenic (ppm)	Barium (ppm)
< 0.062	3-31-2003	0.55	0.5	0.13	0.2	0.19	7.34	1.86	<5	22	142
< 0.062 -LR	3-31-2003	.49	.45	.13	.17	.17	7.25	1.67	<5	17	128
0.062 <0.250	3-31-2003	.31	.22	.07	.11	.07	.99	.75	<5	8	41
0.062 < 0.250 -R	3-31-2003	.33	.22	.07	.13	.06	.55	.76	<5	<3	35
0.250 < 2.00	3-31-2003	.16	.18	.05	.13	.03	.19	.55	<5	<3	29
0.250 < 2.00 -R	3-31-2003	.15	.16	.04	.11	.03	.16	.5	<5	<3	27
< 2.00	3-31-2003	.18	.19	.03	.11	.04	--	.58	<5	5	34
< 2.00 -R	3-31-2003	.2	.19	.06	.15	.03	--	.66	<5	5	35

Particle-size composition (mm)	Beryllium (ppm)	Bismuth (ppm)	Cadmium (ppm)	Chromium (ppm)	Cobalt (ppm)	Copper (ppm)	Iron (%)	Lanthanum (ppm)	Lead (ppm)	Lithium (ppm)	Manganese (ppm)	Molyb-denum (ppm)
< 0.062	0.9	<5	2	297	13	95.4	4.13	34.4	277	23	1,220	5
<0 .062 -LR	.8	<5	1	267	12	88.2	3.81	30.2	253	22	1,140	4
0.062 <0.250	<.5	<5	<1	439	5	25.2	1.59	16.6	58	9	526	3
0.062 < 0.250 -R	<.5	<5	<1	601	5	20	1.7	20.8	37	8	546	4
0.250 < 2.00	<.5	<5	<1	387	4	12.1	.98	8.2	20	8	283	3
0.250 < 2.00 -R	<.5	<5	<1	255	3	9.9	.84	8.1	15	7	232	2
< 2.00	<.5	<5	<1	198	4	12.4	.99	11.2	31	9	322	2
< 2.00 -R	<.5	<5	<1	556	4	15.6	1.24	10.8	28	9	342	4

Table 4. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts.—Continued

CONCENTRATIONS OF INORGANIC AND ORGANIC CONSTITUENTS IN BED-SEDIMENT SAMPLES—Continued

REMARKS.--E, estimated; -LR, laboratory replicate sample; -R, replicate sample; %, parts per hundred; <, value is less than value shown; >, value is greater than value shown; --, no data.

Particle-size composition (mm)	Nickel (ppm)	Scandium (ppm)	Silver (ppm)	Strontium (ppm)	Tin (ppm)	Titanium (%)	Tungsten (ppm)	Vanadium (ppm)	Yttrium (ppm)	Zinc (ppm)	Zirconium (ppm)
< 0.062	30	3.5	0.4	41.8	12	0.09	<10	53	19.2	302	3.9
<0 .062 -LR	26	3.1	.3	38.2	<10	.07	<10	47	17.1	270	3.7
0.062 <0.250	20	2.4	<.2	17.1	<10	.06	<10	25	10.1	69.7	3.1
0.062 < 0.250 -R	23	2.8	<.2	18.2	<10	.07	<10	26	12	51.2	4
0.250 < 2.00	15	1.4	<.2	10.6	<10	.04	<10	14	4.7	36.1	3.2
0.250 < 2.00 -R	11	1.3	<.2	9.7	<10	.04	<10	12	4.8	32.7	3.1
< 2.00	11	1.3	<.2	10.8	<10	.04	<10	15	5.4	46.1	2.4
< 2.00 -R	18	1.5	<.2	12.9	<10	.05	<10	16	6	44.6	3.3

CONCENTRATIONS OF SEMIVOLATILE COMPOUNDS IN BED-SEDIMENT SAMPLES

REMARKS.--E, estimated; %-rec, percent of surrogate recovery; <, value is less than value shown; --, no data.

Particle-size composition (mm)	Date	Phenol (ppb)	p-cresol (ppb)	Naphthalene (ppb)	C1-128 isomers, methylated naphthalenes (ppb)	2-ethylnaphthalene (ppb)	2,6-dimethylnaphthalene (ppb)	1,6-dimethylnaphthalene (ppb)	C2-128 isomers, C2-alkyated naphthalenes (ppb)
0.250 < 2.00	3-31-2003	E1.3	E1.0	E1.7	E3.2	<5	E2.2	E1.2	E10.6
< 0.250	3-31-2003	E31.9	E24.9	E52.4	E46.0	E10.7	168	E20.7	E349
Lab Blank	--	<5	<5	<5	<5	<5	<5	<5	<5
Lab Spike	--	E1.39	E14.84	59.22	--	61.53	64.79	58.84	--

Particle-size composition (mm)	Acenaphthylene (ppb)	1,2-dimethylnaphthalene (ppb)	Acenaphthene (ppb)	C3-128, C3-alkylated naphthalenes (ppb)	2,3,6-trimethylnaphthalene (ppb)	9*H*-Fluorene (ppb)	C4-128, C4-alkylated naphthalenes (ppb)	1-methyl-9*H*-Fluorene (ppb)	Phenanthrene (ppb)
0.250 < 2.00	15.6	<5	E2.4	E19.2	E1.1	E4.6	E9.5	E1.9	45.9
< 0.250	185	E22.4	123	E324	E19.8	199	E268	E39.1	3,180
Lab Blank	<5	<5	<5	<5	<5	<5	<5	<5	<5
Lab Spike	64.69	59.02	60.13	--	62.53	64.77	--	71.51	67.26

Particle-size composition (mm)	Anthracene (ppb)	C5-128, C5-alkylated naphthalenes (ppb)	2-methylanthracene (ppb)	4,5-methylenephenanthrene (ppb)	C1-178 isomers, methylated phenanthrene/ anthracenes (ppb)	1-methylphenanthrene (ppb)	C2-178 isomers, C2-alkylated phenanthrene/ anthracenes (ppb)	Fluoranthene (ppb)	Pyrene (ppb)
0.250 < 2.00	19.6	<5	6.3	9.6	E49.8	6.6	E35.2	111	91.1
< 0.250	450	<100	E87.0	427	E1,320	196	E650	7,120	5,180
Lab Blank	<5	<5	<5	<5	<5	<5	<5	<5	<5
Lab Spike	76.48	--	79.89	72.6	--	70.99	--	80.3	79.9

Table 4. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts.—Continued

CONCENTRATIONS OF SEMIVOLATILE COMPOUNDS IN BED-SEDIMENT SAMPLES—Continued

REMARKS.--E, estimated; %-rec, percent of surrogate recovery; <, value is less than value shown; --, no data.

Particle-size composition (mm)	C3-178 isomers, C3-alkylated phenanthrene/ anthracenes (ppb)	C4-178 isomers, C4-alkylated phenanthrene/ anthracenes (ppb)	1-methyl-pyrene (ppb)	C1-202 isomers, methylated fluoranthene/ pyrenes (ppb)	C2-202 isomers, C2-alkylated fluoranthene/ pyrenes (ppb)	C5-178 isomers, C5-alkylated phenanthrene/ anthracenes (ppb)	Benzo[*a*] anthra-cene (ppb)	Chrysene (ppb)	C3-202 isomers, C3-alkylated fluoranthene/ pyrenes (ppb)
0.250 < 2.00	E13.8	<5	8.3	E84.4	<50	<5	53.6	54.9	<30
< 0.250	E197	<100	189	E3,060	<2,290	<100	2,120	3,570	<820
Lab Blank	<5	<5	<5	<5	<5	<5	<5	<5	<5
Lab Spike	--	--	88.86	--	--	--	92.63	75.97	--

Particle-size composition (mm)	C1-228 isomers, methylated benzo[*a*] anthracene/ chrysenes (ppb)	C4-202 isomers, C4-alkylated fluoranthene/ pyrenes (ppb)	C5-202 isomers, C5-alkylated fluoranthene/ pyrenes (ppb)	C2-228 isomers, C2-alkylated benzo[*a*] anthracene/ chrysenes (ppb)	Benzo[*b*] fluoranthene (ppb)	Benzo[*k*] fluoranthene (ppb)	Benzo[*e*] pyrene (ppb)	Benzo[*a*] pyrene (ppb)	Perylene (µg/kg)
0.250 < 2.00	<40	<20	<5	<25	53.7	45.4	37.5	58.6	12.9
< 0.250	<1,370	<950	<250	<575	3,610	3,010	2,560	2,630	660
Lab Blank	<5	<5	<5	<5	<5	<5	<5	<5	<5
Lab Spike	--	--	--	--	76.84	72.89	48.44	79.45	76.02

Particle-size composition (mm)	C1-252 isomers, C1-methylated benzopyrene/ perylenes (ppb)	C3-228 isomers, C3-benzo[*a*] anthracene/ chrysenes (ppb)	C2-252 isomers, C2-alkylated benzopyrene/ perylenes (ppb)	C4-228 isomers, C4-benzo[*a*] anthracene/ chrysenes (ppb)	Benzo[*g,h,i*] perylene (ppb)	Indeno [1,2,3-*cd*] pyrene (ppb)	Dibenzo[*a,h*] anthracene (ppb)	C3-252 isomers, C3-alkylated benzopyrene/ perylenes (ppb)
0.250 < 2.00	E60.0	<5	<50	<5	30.3	43.2	8.4	<30
< 0.250	E2,050	<350	<990	<470	2,510	2,780	463	<500
Lab Blank	<5	<5	<5	<5	0.33	<5	<5	<5
Lab Spike	--	--	--	--	65.19	78.62	76.79	--

Particle-size composition (mm)	C4-252 isomers, C4-alkylated benzopyrene/ perylenes (ppb)	C5-228 isomers, C5-benzo[*a*] anthracene/ chrysenes (ppb)	C5-252 isomers, C5-alkylated benzopyrene/ perylenes (ppb)	Coronene (ppb)	Nitro-benzene-d5 (%-rec)	2-fluoro-biphenyl (%-rec)	terphenyl-d14 (%-rec)
0.250 < 2.00	<15	<5	<15	E4.4	55.75	54.02	95.21
< 0.250	<380	<350	<760	E516	84.05	73.26	112.02
Lab Blank	<5	<5	<5	<5	51.59	50.26	82.56
Lab Spike	--	--	--	E43.58	58.32	53.25	81.23

Table 4. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104415, Cambridge Reservoir, unnamed tributary 2, near Lexington, Massachusetts.—Continued

CONCENTRATIONS OF SELECTED ELEMENTS IN SAMPLES OF SOIL

REMARKS.--Latitude and Longitude: In degrees, minutes, and seconds; -LR, laboratory replicate sample; %, parts per hundred; <, concentration is less than value shown.

Sample identifier	Latitude ° ′ ″	Longitude ° ′ ″	Date	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorus, total, as P (%)	Aluminum (%)	Antimony (ppm)	Arsenic (ppm)
01104415A	42 26 11.5	71 15 38.6	6-11-2003	0.24	0.31	0.04	0.18	0.09	1.81	6	373
01104415A -LR	42 26 11.5	71 15 38.6	6-11-2003	.22	.3	.04	.17	.08	1.74	6	363
01104415B	42 26 48	71 15 38.6	6-11-2003	.16	.22	.04	.15	.11	1.69	<5	50
01104415C	42 26 43.4	71 15 28.8	6-11-2003	.25	.3	.05	.15	.07	1.68	5	29
01104415D	42 26 16.9	71 15 30.5	6-11-2003	.5	.43	.04	.19	.08	1.72	<5	11
01104415E	42 26 22.9	71 15 25.8	6-11-2003	.78	.83	.07	.25	.07	1.86	<5	9

Sample identifier	Barium (ppm)	Beryllium (ppm)	Bismuth (ppm)	Cadmium (ppm)	Chromium (ppm)	Cobalt (ppm)	Copper (ppm)	Iron (%)	Lanthanum (ppm)	Lead (ppm)	Lithium (ppm)	Manganese (ppm)
01104415A	44	0.5	<5	<1	576	7	82.3	2.46	19.6	114	16	311
01104415A -LR	41	.5	<5	<1	556	7	80.8	2.38	18.5	111	16	293
01104415B	45	.5	<5	<1	512	4	31	1.73	20.2	155	15	202
01104415C	43	.5	<5	<1	683	5	24.7	1.93	16.7	40	14	274
01104415D	54	.6	<5	<1	280	7	19.4	1.95	21.2	27	15	369
01104415E	69	.8	<5	<1	281	12	33.3	2.69	21.3	41	20	564

Sample identifier	Molybdenum (ppm)	Nickel (ppm)	Scandium (ppm)	Silver (ppm)	Strontium (ppm)	Tin (ppm)	Titanium (%)	Tungsten (ppm)	Vanadium (ppm)	Yttrium (ppm)	Zinc (ppm)	Zirconium (ppm)
01104415A	5	26	3.1	4.4	13.5	<10	0.09	<10	32	10.4	82.3	3.9
01104415A -LR	5	25	2.8	4.1	12.4	<10	.09	<10	31	9.7	78.4	3.2
01104415B	4	23	2.1	<0.2	10.4	<10	.07	<10	34	7.9	41.5	2
01104415C	5	28	2.4	<.2	16.3	<10	.09	<10	31	8.1	44.9	2.6
01104415D	3	21	3.6	<.2	25.7	<10	.12	<10	37	12.8	57	4.1
01104415E	3	29	6.1	<.2	41.2	<10	.21	<10	65	16.8	69.6	5.5

PARTICLE-SIZE DISTRIBUTION IN COMPOSITED SAMPLES OF SOIL, BY PERCENT

REMARKS.--<, Actual value is less than value shown; >, actual value is greater than value shown

Size range in millimeters			
<0.063	0.250 > 0.063	2.00 > 0.250	>2.00
31.4	33.1	27.5	8.0

Table 5. Discharge, reservoir altitude and capacity, precipitation, air temperature, water temperature, and specific conductance for U.S. Geological Survey station number 01104430, Cambridge Reservoir near Kendal Green, Massachusetts.

PERIOD OF RECORD.--July 1997 to current year.

PERIOD OF DAILY RECORD.—

DISCHARGE: July 1997 to current year.
RESERVOIR ALTITUDE AND CAPACITY: October 2001 to current year.
PRECIPITATION: October 2001 to current year.
AIR TEMPERATURE: October 2001 to current year.
WATER TEMPERATURE: July 1997 to current year.
SPECIFIC CONDUCTANCE: July 1997 to current year.

GAGE.--Datum of gage is 181.34 ft (city of Cambridge datum). Add 10.34 ft to elevations to adjust to National Geodetic Vertical Datum of 1929.

REMARKS.—Records for discharge are good except those for estimated daily discharge, which are fair. Flow affected by regulation of dam 300 ft upstream at outflow of Cambridge Reservoir. Records for specific conductance and water temperature are good; records for air temperature are good; records for precipitation are excellent except for measurements made during high wind which are poor. e, estimated.

EXTREMES FOR PERIOD OF RECORD.—

DISCHARGE: Maximum discharge, 29.7 Mgal/d, Sept. 17, 18, 20, 2002; minimum, no flow, many days for period of record.
RESERVOIR ALTITUDE AND CAPACITY: Maximum level, 182.17 ft, 2,647 Mgal, June 24, 2003; minimum, 169.78, 758 Mgal, Nov. 10, 2002.
PRECIPITATION: Maximum recorded, 0.72 in/15-minute interval, Sept. 23, 2003.
AIR TEMPERATURE: Maximum recorded, 35.2, Apr. 17, 2002; minimum, -23.1, Feb. 14, 2003.
WATER TEMPERATURE: Maximum recorded, 26.5°C, June 26, 2001; minimum, 0.2°C, Jan. 18, 2001.
SPECIFIC CONDUCTANCE: Maximum recorded, 1,940 µS/cm, Mar. 20, 2001; minimum, 163 µS/cm, Nov. 26, 2000.

EXTREMES FOR CURRENT YEAR.—

DISCHARGE: Maximum discharge, 25.8 Mgal/d, Oct. 7–11; minimum, 0.03 Mgal/d, Dec. 4–11; minimum daily, 0.03 Mgal/d, Dec. 5.
RESERVOIR ALTITUDE AND CAPACITY: Maximum level, 182.07 ft, 2,636 Mgal, Jan. 23; minimum, 176.77, 1707 Mgal, Oct. 14.
PRECIPITATION: Maximum recorded, 0.52 in/15-minute interval, July 24.
AIR TEMPERATURE: Maximum recorded, 32.3, June 9; minimum, -22.7, Jan. 16.
WATER TEMPERATURE: Maximum recorded, 24.0°C, Aug. 24 and Sept. 4; minimum, 0.7°C, Dec. 6.
SPECIFIC CONDUCTANCE: Maximum recorded, 1,150 µS/cm, Mar. 13; minimum, 600 µS/cm, Dec. 11 and 12.

DISCHARGE, MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY TOTAL VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	3.1	0.28	3.3	10	7.1	0.97	13	5.0	16	5.1	11
2	10	3.0	.26	3.1	9.7	7.1	4.9	12	4.8	14	5.0	14
3	10	2.3	.26	3.3	9.7	5.8	19	12	5.6	14	7.1	14
4	10	1.8	.21	3.7	9.7	3.7	25	16	5.2	14	10	14
5	9.7	1.8	.17	4.4	9.7	3.3	27	14	4.5	14	10	14
6	9.7	1.6	.06	4.3	7.1	3.1	25	13	4.1	14	10	12
7	9.7	1.6	.01	4.3	5.5	3.0	21	12	3.7	14	10	9.7
8	9.7	1.6	.01	4.4	5.5	3.0	19	9.7	3.3	14	12	4.5
9	9.7	1.7	.01	4.3	5.5	2.9	17	9.0	3.0	14	13	.71
10	12	1.6	.01	4.3	5.4	2.5	16	9.0	3.5	14	14	.71
11	13	1.3	.02	4.3	5.4	2.5	14	8.4	3.0	14	16	2.8
12	13	1.2	.03	4.5	5.4	2.5	15	7.8	2.3	14	16	8.4
13	11	.97	.05	4.5	5.4	2.1	17	7.8	1.7	14	5.6	11
14	7.1	.97	.08	4.4	5.4	1.7	29	6.5	1.5	14	.51	10
15	4.0	1.0	.15	4.3	5.4	1.4	34	6.1	1.4	13	.54	10
16	4.1	1.0	.14	4.0	5.6	1.5	31	6.1	1.3	13	.56	10
17	4.3	.90	.18	4.1	5.6	1.5	26	5.9	2.1	13	.56	10
18	4.4	.78	.26	4.1	5.6	1.5	23	5.4	2.8	13	.58	5.9
19	4.5	.90	.30	4.1	5.6	1.5	19	5.8	5.7	13	.55	.23
20	5.0	.78	.37	4.1	4.4	1.2	17	5.1	7.1	13	.58	.23
21	4.6	.57	.40	5.4	3.8	1.2	15	4.5	7.1	16	.71	.23
22	3.4	.52	.44	6.4	3.7	1.2	14	4.3	7.1	16	.78	6.2
23	2.8	.50	1.9	6.3	3.7	1.2	16	4.3	7.1	16	.78	9.0
24	6.1	.29	3.1	6.5	3.7	1.2	17	4.2	9.7	16	.78	9.0
25	11	.18	3.2	6.4	3.7	1.2	15	4.6	16	9.0	.71	9.0

Table 5. Discharge, reservoir altitude and capacity, precipitation, air temperature, water temperature, and specific conductance for U.S. Geological Survey station number 01104430, Cambridge Reservoir near Kendal Green, Massachusetts.—Continued

DISCHARGE, MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY TOTAL VALUES—Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
26	7.8	0.19	3.3	6.5	3.6	1.2	16	4.5	18	5.3	0.71	7.1
27	3.4	.21	3.3	6.5	5.9	1.1	20	5.8	18	5.3	.71	5.9
28	3.4	.23	3.2	4.7	7.1	.61	20	7.1	17	5.2	.71	5.9
29	3.4	.25	3.2	2.5	7.1	.43	17	7.1	17	5.2	3.7	2.4
30	3.3	.27	3.3	6.5	---	.44	15	6.3	17	5.1	6.2	.63
31	3.2	---	3.3	9.7	---	.52	---	5.5	---	5.2	6.3	---
TOTAL	223.3	33.11	31.50	149.2	173.9	69.20	564.87	242.8	205.6	380.3	159.77	218.54
MEAN	7.20	1.10	1.02	4.81	6.00	2.23	18.8	7.83	6.85	12.3	5.15	7.28
MAX	13	3.1	3.3	9.7	10	7.1	34	16	18	16	16	14
MIN	2.8	0.18	0.01	2.5	3.6	0.43	0.97	4.2	1.3	5.1	0.51	0.23
MED	7.1	0.97	0.26	4.3	5.5	1.5	17	6.5	4.9	14	3.7	8.7
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, WATER YEAR (WY)												
MEAN	9.5	5.28	4.00	2.28	2.06	2.53	8.66	6.06	6.45	9.11	9.37	9.69
MAX	19.2	15.5	12.3	4.74	6.01	10.4	18.9	11.6	13.0	15.5	16.8	14.5
(WY)	2001	1999	2001	2000	2000	2000	2000	2000	2003	1998	1998	2001
MIN	0.48	0.27	0.05	0.03	0.21	0.15	1.08	1.78	2.75	2.10	2.90	1.05
(WY)	2000	2000	2003	2002	1999	1999	1999	2002	2000	2000	1999	1999

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	2176.4		2444.9			
ANNUAL MEAN	5.97		6.66		6.26	
HIGHEST ANNUAL MEAN					8.27	1998
LOWEST ANNUAL MEAN					3.97	1999
HIGHEST DAILY MEAN	23.9	Jun 2	33.6	Apr 15	33.6	Sep 18 2002
LOWEST DAILY MEAN	0.01	Dec 7	0.01	Dec 7	0.00	Jan 5 2002
10 PERCENT EXCEEDS	13.6		14.9		16.8	
50 PERCENT EXCEEDS	4.9		5.1		3.49	
90 PERCENT EXCEEDS	0.23		0.52		0.19	

RESERVOIR ALTITUDE, FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177.57	177.45	177.96	180.24	180.04	179.61	180.74	e181.74	e181.57	e180.40	179.17	179.40
2	177.49	177.50	177.95	180.25	179.99	179.59	181.45	e181.70	e181.56	e180.35	179.06	179.19
3	177.42	177.51	177.94	180.28	179.94	179.59	181.80	e181.68	e181.58	e180.30	179.03	179.21
4	177.35	177.53	177.94	180.33	179.96	179.62	181.91	e181.78	e181.58	e180.34	178.84	179.12
5	177.34	177.55	177.94	180.39	179.92	179.63	181.98	e181.74	e181.55	e180.14	178.81	178.97
6	177.27	177.64	178.01	180.45	179.90	179.66	181.91	e181.71	e181.52	e180.05	178.70	179.00
7	177.19	177.68	178.10	180.46	179.96	179.70	181.85	e181.68	e181.54	e179.92	178.70	179.01
8	177.11	177.69	178.11	180.45	179.98	179.72	181.79	e181.65	e181.50	e178.85	178.72	179.00
9	177.06	177.65	178.12	180.44	179.96	179.74	181.77	e181.63	e181.48	e178.87	178.67	179.11
10	177.00	177.64	178.13	180.43	179.94	179.74	181.73	e181.63	e181.48	e178.62	178.56	179.15
11	176.91	177.64	178.21	180.41	179.93	179.75	181.71	e181.62	e181.46	e177.88	178.44	179.17
12	176.85	177.66	178.44	180.42	179.91	179.78	181.68	e181.61	e181.46	e177.88	178.29	179.22
13	176.83	177.69	178.57	180.41	179.89	179.79	181.70	e181.60	e181.45	e177.92	178.54	179.17
14	176.77	177.70	178.63	180.40	179.87	179.78	181.91	e181.59	e181.43	e178.21	178.64	179.04
15	176.85	177.68	178.89	180.39	179.86	179.78	182.07	e181.58	e181.42	178.56	178.68	179.04
16	176.94	177.66	179.02	180.38	179.83	179.79	182.02	e181.56	e181.41	178.96	178.88	e178.91
17	176.92	177.67	179.12	180.37	179.80	179.86	181.88	e181.57	e181.40	179.14	179.06	e178.75
18	176.91	177.68	179.36	180.36	179.77	179.86	181.86	e181.55	e181.44	178.97	179.16	e178.69
19	176.92	177.67	179.52	180.36	179.75	e180.00	181.77	e181.55	e181.40	178.74	179.20	e178.64
20	176.89	177.74	179.61	180.35	179.74	e180.00	181.86	e181.54	e181.38	178.73	179.21	e178.54
21	176.89	177.83	179.66	180.33	179.73	e180.00	e181.84	e181.54	e181.30	178.59	179.36	e178.41
22	176.94	177.85	179.72	180.28	179.73	180.02	e181.74	e181.55	e181.24	178.71	179.63	e178.26
23	176.99	177.85	179.76	e180.27	179.72	180.05	e181.77	e181.55	e181.18	178.85	179.73	e178.20
24	177.01	177.84	179.82	184.41	179.72	180.08	e181.79	e181.55	e181.15	178.90	179.73	178.06
25	176.93	177.84	179.99	184.33	179.71	180.09	e181.80	e181.55	e181.05	179.08	179.72	178.01
26	176.85	177.85	180.09	e180.22	179.70	180.12	e181.84	e181.55	e180.98	179.09	179.75	177.94
27	176.94	177.86	180.14	180.16	179.68	180.19	e181.85	e181.56	e180.87	179.09	179.81	177.87
28	177.04	177.87	180.17	180.14	179.65	180.24	e181.84	e181.62	e180.75	179.10	179.79	177.92
29	177.21	177.95	180.18	180.14	179.63	180.24	e181.80	e181.62	e180.64	179.22	179.69	178.18
30	177.37	177.97	180.20	180.13	---	180.25	e181.77	e181.60	e180.52	179.23	179.58	178.35
31	177.41	---	180.22	180.09	---	180.32	---	e181.58	---	179.23	179.38	---

Table 5. Discharge, reservoir altitude and capacity, precipitation, air temperature, water temperature, and specific conductance for U.S. Geological Survey station number 01104430, Cambridge Reservoir near Kendal Green, Massachusetts.—Continued

RESERVOIR ALTITUDE, FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES—Continued

TOTAL	5489.17	5331.34	5549.52	5598.07	5215.21	5576.59	5453.43	5629.98	5439.29	5551.92	5552.53	5361.53
MEAN	177.07	177.71	179.02	180.58	179.83	179.89	181.78	181.61	181.31	179.09	179.11	178.72
MAX	177.57	177.97	180.22	184.41	180.04	180.32	182.07	181.78	181.58	180.40	179.81	179.40
MIN	176.77	177.45	177.94	180.09	179.63	179.59	180.74	181.54	180.52	177.88	178.29	177.87
MED	176.99	177.68	179.02	180.36	179.86	179.79	181.80	181.60	181.43	178.97	179.06	178.94

RESERVOIR CAPACITY (MILLIONS OF GALLONS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004)
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,831	1,812	1,895	2,306	2,272	2,190	2,395	e2,664	e2,709	e2,108	2,108	2,150
2	1,818	1,820	1,894	2,309	2,264	2,186	2,524	e2,651	e2,714	e2,097	2,087	2,111
3	1,806	1,821	1,892	2,314	2,255	2,186	2,591	e2,625	e2,719	e2,049	2,081	2,114
4	1,795	1,825	1,891	2,322	2,258	2,191	2,612	e2,532	e2,704	e2,026	2,048	2,098
5	1,794	1,828	1,891	2,333	2,249	2,193	2,627	e2,520	e2,685	e2,033	2,042	2,071
6	1,783	1,842	1,904	2,343	2,246	2,200	2,614	e2,524	e2,668	e2,018	2,023	2,076
7	1,771	1,849	1,919	2,345	2,258	2,207	2,601	e2,514	e2,662	e1,956	2,022	2,078
8	1,758	1,850	1,920	2,344	2,261	2,211	2,591	e2,418	e2,673	e1,917	2,025	2,076
9	1,750	1,845	1,921	2,342	2,258	2,215	2,585	e2,433	e2,675	e1,911	2,017	2,096
10	1,742	1,842	1,923	2,339	2,254	2,216	2,579	e2,444	e2,654	e1,901	1,998	2,104
11	1,728	1,842	1,938	2,336	2,252	2,217	2,574	e2,438	e2,629	e1,878	1,977	2,108
12	1,718	1,846	1,977	2,337	2,248	2,222	2,568	e2,417	e2,587	e1,888	1,951	2,116
13	1,715	1,851	1,999	2,337	2,244	2,224	2,572	e2,314	e2,573	e1,904	1,993	2,107
14	1,706	1,852	2,010	2,334	2,241	2,223	2,612	e2,303	e2,569	e1,956	2,012	2,083
15	1,719	1,848	2,056	2,332	2,238	2,223	2,638	e2,304	e2,559	1,998	2,019	2,083
16	1,732	1,845	2,079	2,330	2,232	2,225	2,631	e2,248	e2,520	2,070	2,054	e2,060
17	1,729	1,847	2,097	2,328	2,225	2,237	2,607	e2,372	e2,506	2,103	2,088	e2,031
18	1,727	1,848	2,143	2,327	2,221	2,238	2,603	e2,631	e2,498	2,071	2,105	e2,020
19	1,729	1,847	2,173	2,327	2,218	e2,238	2,585	e2,582	e2,485	2,030	2,113	e2,012
20	1,724	1,858	2,190	2,325	2,214	e2,238	2,604	e2,550	e2,424	2,028	2,114	e1,994
21	1,724	1,873	2,200	2,322	2,214	e2,253	e2,645	e2,515	e2,415	2,004	2,142	e1,972
22	1,732	1,876	2,210	2,314	2,213	2,268	e2,672	e2,419	e2,452	2,024	2,194	e1,976
23	1,739	1,877	2,219	e2,761	2,211	2,274	e2,432	e2,488	e2,461	2,048	2,213	e1,935
24	1,742	1,875	2,231	2,946	2,210	2,278	e2,251	e2,549	e2,307	2,059	2,214	1,912
25	1,731	1,876	2,263	2,932	2,209	2,281	e2,354	e2,563	e2,375	2,090	2,211	1,904
26	1,719	1,876	2,281	e2,321	2,207	2,286	e2,571	e2,647	e2,335	2,093	2,216	1,892
27	1,732	1,878	2,290	2,293	2,203	2,297	e2,690	e2,691	e2,261	2,093	2,229	1,881
28	1,747	1,880	2,294	2,290	2,198	2,306	e2,691	e2,712	e2,208	2,095	2,224	1,889
29	1,773	1,893	2,296	2,290	2,194	2,307	e2,683	e2,727	e2,168	2,116	2,205	1,932
30	1,798	1,896	2,299	2,288	---	2,309	e2,674	e2,725	e2,137	2,118	2,185	1,961
31	1,806	---	2,303	2,281	---	2,321	---	e2,726	---	2,118	2,146	---
TOTAL	54,318	55,618	64,598	73,648	64,767	69,460	77,376	78,246	75,332	62,800	65,056	60,842
MEAN	1,752	1,854	2,084	2,376	2,233	2,241	2,579	2,524	2,511	2,026	2,099	2,028
MAX	1,831	1,896	2,303	2,946	2,272	2,321	2,691	2,727	2,719	2,118	2,229	2,150
MIN	1,706	1,812	1,891	2,281	2,194	2,186	2,251	2,248	2,137	1,878	1,951	1,881
MED	1,739	1,849	2,079	2,328	2,238	2,225	2,602	2,524	2,540	2,033	2,088	2,066

PRECIPITATION TOTAL, INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.03	0.00	3.11	0.00	0.13	0.03	0.01	0.00
2	.00	.01	.00	.07	.04	.00	.32	.01	.30	.19	.00	.00
3	.00	.16	.00	.15	.51	.00	.00	.47	.04	.00	.00	.00
4	.42	.01	.00	.21	.09	.12	.17	.39	.00	.00	.00	.00
5	.00	.75	.00	.24	.00	.01	.10	.00	.00	.18	.47	.00
6	.00	.00	.00	.04	.47	.16	.00	.00	.18	.00	.00	.00
7	.00	.00	.00	.00	.43	.00	.00	.02	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.14	.00	.00	.00	.37	.00	.54
9	.00	.00	.04	.00	.05	.12	.00	.26	.34	.25	.00	.77
10	.00	.00	.24	.00	.05	.01	.00	.00	.11	.00	.00	.02

Table 5. Discharge, reservoir altitude and capacity, precipitation, air temperature, water temperature, and specific conductance for U.S. Geological Survey station number 01104430, Cambridge Reservoir near Kendal Green, Massachusetts.—Continued

PRECIPITATION TOTAL, INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES—Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
11	0.00	0.13	1.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
12	.73	.02	.00	.00	.00	.09	.04	.00	.00	.00	1.03	.00
13	.00	.08	.00	.08	.00	.01	2.22	.00	.00	.49	1.55	.00
14	.00	.00	.08	.00	.00	.00	.22	.00	.00	.16	.00	.00
15	1.44	.00	1.43	.00	.00	.00	.34	.00	.00	.00	.98	.00
16	.00	.00	.03	.00	.00	.00	.00	.19	.00	.00	.52	.09
17	.00	.02	1.03	.00	.00	.00	.00	.00	.02	.00	.12	.00
18	.02	.00	.01	.07	.00	.11	.00	.19	.31	.01	.00	3.01
19	.00	.00	.00	.00	.00	.09	.00	.00	.02	.02	.00	.00
20	.00	.42	.00	.00	.00	.47	.00	.00	.00	.00	.93	.00
21	.04	.24	.00	.00	.01	.36	.00	.00	.00	.00	1.17	.00
22	.03	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00
23	.09	.00	.00	.00	.00	.00	.83	.21	.00	.00	.00	.00
24	.00	.00	.42	.00	.00	.00	.01	.22	.00	2.88	.00	.00
25	.00	.15	.13	.00	.00	.00	.47	.01	.17	.00	.00	.01
26	.01	.00	.00	.00	.00	.00	.75	.12	.07	.00	.00	.00
27	1.08	.00	.00	.00	.00	.29	.32	.38	.00	.01	.00	.00
28	.02	.27	.00	.00	.00	.00	.00	.42	.00	.64	.00	1.50
29	1.98	.14	.00	.00	.00	.00	.00	.00	.07	.00	.00	.84
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.01	.11	.09
31	.00	---	.00	.00	---	1.78	---	.00	---	.00	.09	---
TOTAL	5.86	2.40	5.27	0.86	1.68	3.76	8.90	2.94	1.76	5.24	7.15	6.87
MAX	1.98	0.75	1.86	0.24	0.51	1.78	3.11	0.47	0.34	2.88	1.55	3.01

AIR TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.2	5.7	10.8	26.0	10.3	17.1	9.7	-1.3	4.9	6.3	-1.1	2.9
2	16.7	4.0	10.9	16.5	9.9	13.1	.0	-9.5	-3.7	1.0	-3.9	-.6
3	14.0	2.4	7.8	19.5	11.9	13.9	-1.8	-10.3	-6.5	6.5	.4	2.2
4	14.6	3.8	9.8	12.4	6.3	8.4	2.9	-9.0	-4.1	9.5	.9	5.6
5	13.9	3.9	8.9	9.4	3.6	6.0	-.3	-10.7	-4.9	.9	-1.3	.0
6	14.3	2.9	7.8	12.8	9.2	11.2	-2.4	-6.8	-5.1	.9	-7.4	-2.1
7	15.5	1.5	8.1	12.7	3.5	8.8	-2.3	-4.0	-2.9	-5.8	-11.3	-8.0
8	21.7	5.8	13.2	8.3	-3.4	2.8	2.1	-10.4	-3.1	-7.2	-14.2	-10.1
9	23.4	10.6	15.9	3.4	-6.2	-2.0	2.7	-14.0	-5.0	-13.9	-18.8	-16.3
10	19.4	11.4	14.6	9.0	-6.6	-.4	4.4	-2.1	1.7	-11.4	-20.2	-16.2
11	19.7	9.7	13.3	7.8	-4.3	2.5	10.9	3.7	7.4	-5.0	-18.3	-11.0
12	15.0	10.2	12.8	12.1	4.5	8.4	5.0	-5.0	1.6	-.4	-7.0	-3.5
13	20.1	8.2	14.6	14.3	3.8	9.7	-1.0	-8.1	-4.0	4.5	-14.5	-3.9
14	17.6	5.0	11.7	4.0	.0	1.8	2.4	-9.8	-5.0	-14.1	-21.1	-17.2
15	17.4	11.1	14.8	6.1	-1.5	1.4	3.6	-2.1	.0	-14.5	-21.9	-17.9
16	15.8	5.1	10.3	8.6	-4.5	1.9	5.0	-5.9	-1.9	-10.8	-22.7	-16.4
17	14.0	2.9	8.4	5.5	-.8	2.7	12.4	-5.0	6.6	2.4	-11.8	-4.8
18	13.0	3.7	8.0	11.6	-1.4	4.6	4.4	-1.1	1.9	.8	-3.7	-1.0
19	6.8	.6	3.9	15.7	4.7	11.7	4.3	-4.2	-1.2	-3.3	-9.4	-6.3
20	11.8	-2.2	4.7	17.0	5.7	10.6	2.1	-4.7	-1.2	-4.6	-10.6	-8.1
21	20.0	5.1	14.5	10.6	1.1	6.4	.7	-8.1	-2.5	-2.4	-11.9	-8.2
22	13.1	2.8	6.1	12.2	-.2	4.6	9.5	-3.0	2.0	1.9	-14.5	-4.8
23	4.3	.3	2.4	10.1	-1.2	3.6	12.4	-.3	5.0	-6.6	-17.5	-11.5
24	7.3	-1.8	2.5	9.7	-2.6	4.2	14.3	4.3	10.7	-8.3	-15.9	-12.5
25	13.6	-3.0	5.0	8.7	-2.8	4.2	12.5	1.2	6.6	-9.6	-18.9	-14.7
26	17.9	8.9	14.4	7.7	-4.0	2.0	3.5	-.2	1.9	-8.2	-17.3	-11.9
27	18.9	13.5	16.5	10.5	.6	5.0	8.7	-3.8	2.2	-5.2	-12.7	-8.5
28	16.2	7.3	11.2	17.6	4.6	9.9	11.6	-6.2	-.2	-2.4	-6.4	-4.4
29	20.7	9.0	13.6	17.5	2.9	7.9	14.5	-4.3	3.5	-2.8	-8.9	-5.6
30	14.6	3.6	8.7	8.6	1.1	4.7	12.4	-.7	6.2	-3.7	-11.8	-7.6
31	20.1	2.5	11.1	---	---	---	7.8	-1.0	3.8	-3.2	-12.1	-7.7
MONTH	23.4	-3.0	10.2	26.0	-6.6	6.2	14.5	-14.0	0.5	9.5	-22.7	-7.4

Table 5. Discharge, reservoir altitude and capacity, precipitation, air temperature, water temperature, and specific conductance for U.S. Geological Survey station number 01104430, Cambridge Reservoir near Kendal Green, Massachusetts.—Continued

AIR TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.5	-13.6	-5.4	12.2	-1.7	5.8	6.9	3.8	5.0	26.9	12.0	19.7
2	3.7	-11.1	-4.3	18.8	2.6	9.6	4.5	3.3	3.7	24.0	15.5	18.7
3	3.3	-8.8	-1.9	12.6	.0	7.3	5.4	3.4	4.2	19.2	10.6	16.1
4	6.0	-2.9	2.0	9.8	-.1	4.3	8.1	3.8	5.7	14.1	4.2	9.4
5	2.2	-5.2	-1.3	7.7	-1.0	4.4	5.0	-1.0	1.6	19.4	1.2	10.9
6	.7	-3.1	-1.0	14.9	3.9	9.4	10.2	-1.6	4.0	21.3	6.3	14.6
7	4.5	-3.6	.6	8.7	1.2	4.3	13.5	-.8	6.9	28.4	11.3	19.8
8	-3.4	-10.3	-6.1	3.0	-2.3	-.1	15.2	-1.4	7.1	16.6	6.4	11.5
9	6.6	-9.2	.2	.8	-4.5	-1.4	15.4	.6	8.5	13.9	8.0	10.0
10	8.0	-3.9	1.4	4.8	-4.5	.5	14.2	-1.0	7.4	20.1	6.2	13.6
11	3.3	-4.8	-1.1	8.7	-2.8	1.6	11.8	2.8	6.7	29.1	12.5	20.7
12	2.5	-8.9	-2.9	9.4	-3.2	.6	12.0	3.3	6.7	30.2	13.1	20.7
13	4.8	-4.3	.6	5.5	-2.2	1.0	6.4	4.6	5.2	18.7	8.8	14.0
14	5.4	-2.6	1.5	6.2	-7.1	.6	15.9	6.4	13.5	26.1	8.2	15.9
15	-1.8	-12.6	-7.8	10.9	1.8	6.0	12.7	5.5	8.0	31.1	16.0	23.5
16	-2.2	-15.0	-8.2	3.0	-3.7	-.8	12.9	1.8	6.7	19.9	11.1	15.9
17	-1.3	-11.8	-5.8	-1.6	-4.8	-3.1	24.9	-.7	12.7	20.2	11.2	15.1
18	.0	-3.7	-2.0	.1	-5.7	-3.2	17.6	10.2	14.5	24.3	12.2	18.4
19	4.8	-7.1	-.3	1.1	-7.6	-1.8	31.2	8.2	19.4	20.8	10.0	17.2
20	6.3	-4.9	.4	7.2	-9.6	-.3	22.3	7.0	16.0	24.4	8.3	16.6
21	4.1	.5	2.2	9.9	-1.9	4.1	18.5	4.2	10.6	26.1	12.5	19.1
22	5.2	-.2	2.8	-1.2	-8.0	-4.0	27.7	10.3	18.6	18.5	8.6	11.8
23	6.4	-3.7	1.0	5.3	-9.3	-1.2	19.6	5.9	8.8	19.9	9.2	12.4
24	3.9	-4.6	-.5	12.4	-4.7	3.3	18.1	5.2	11.5	13.6	9.7	11.5
25	4.5	-5.9	-.7	13.5	3.2	8.1	13.0	2.9	6.7	12.8	9.3	10.5
26	4.8	-3.9	.0	21.5	6.6	12.3	11.8	3.9	8.0	12.2	8.2	10.0
27	7.4	-5.6	.7	17.7	8.9	11.3	19.8	8.1	12.7	20.9	9.8	13.8
28	11.2	-4.7	3.4	8.9	.4	5.1	14.4	4.1	9.7	17.1	11.6	14.1
29	12.0	-4.4	4.4	7.4	-.4	2.4	25.4	3.0	15.1	16.2	8.3	13.0
30	---	---	---	4.8	.0	2.0	27.8	11.9	19.5	20.6	5.6	14.8
31	---	---	---	5.2	3.1	4.1	---	---	---	20.3	6.9	15.0
MONTH	12.0	-15.0	-1.0	21.5	-9.6	3.0	31.2	-1.6	9.5	31.1	1.2	15.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13.4	9.3	10.9	28.0	14.4	21.5	27.2	22.2	25.0	25.8	15.7	20.5
2	21.4	9.3	14.6	28.2	16.5	21.9	29.3	20.4	24.3	22.5	14.4	18.5
3	22.3	11.2	15.6	26.1	14.4	21.0	30.4	19.6	24.9	25.9	12.5	19.6
4	22.5	8.4	15.7	27.0	14.2	21.5	27.2	19.7	23.5	27.6	16.9	21.0
5	20.2	10.6	15.6	21.8	17.5	20.0	22.9	15.8	19.0	19.2	12.0	16.7
6	15.5	10.3	12.4	27.5	18.6	22.5	21.5	14.7	18.0	21.6	9.5	15.8
7	23.3	10.2	15.1	27.3	17.2	22.2	22.2	11.2	17.0	26.1	12.9	20.0
8	30.0	12.3	22.1	24.3	18.1	20.9	24.1	12.1	17.9	23.6	19.5	21.4
9	32.3	18.1	25.4	24.8	17.6	20.7	26.2	13.6	20.1	26.8	18.3	22.1
10	21.2	13.2	18.2	26.7	15.0	21.2	28.4	15.3	22.2	23.8	14.9	20.0
11	21.2	7.5	16.2	24.7	15.3	20.4	26.8	20.2	22.5	21.8	12.3	16.7
12	21.8	6.9	15.8	24.1	14.6	19.4	28.4	19.9	23.8	23.7	9.1	16.7
13	24.5	9.3	17.5	19.8	17.0	18.1	25.6	21.3	23.2	24.4	14.3	19.0
14	22.4	13.7	18.4	19.3	16.5	17.6	27.6	19.8	23.3	19.3	12.2	15.7
15	29.9	18.3	23.5	25.5	16.4	20.3	21.4	17.1	18.8	20.5	10.2	15.8
16	29.4	17.2	23.3	25.9	16.6	21.4	18.9	16.7	17.8	21.2	15.9	18.5
17	28.7	18.5	22.9	28.6	18.2	23.5	23.3	15.6	18.8	25.9	19.0	21.9
18	20.5	17.4	19.1	28.3	18.2	23.1	26.3	15.1	20.6	21.8	12.0	15.5
19	26.2	16.7	20.7	22.8	19.3	20.5	27.4	19.0	23.4	15.6	7.6	11.9
20	21.4	10.4	16.8	28.8	19.3	23.4	30.5	20.4	24.3	19.5	7.7	13.2
21	24.2	10.5	18.1	30.0	17.2	23.6	25.3	15.9	21.3	21.1	12.3	16.5
22	23.1	13.1	19.3	30.0	18.4	24.1	22.4	12.4	17.4	25.7	13.6	19.8
23	27.3	15.9	21.8	29.0	20.4	24.2	26.0	12.1	19.1	23.4	13.4	19.0
24	27.1	11.8	20.2	22.8	17.0	19.9	22.4	14.2	19.1	21.8	12.5	16.6
25	23.6	15.9	19.8	22.6	15.3	18.7	24.3	12.2	18.2	24.4	12.4	18.6

Table 5. Discharge, reservoir altitude and capacity, precipitation, air temperature, water temperature, and specific conductance for U.S. Geological Survey station number 01104430, Cambridge Reservoir near Kendal Green, Massachusetts.—Continued

AIR TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
26	22.4	14.0	18.9	24.2	13.5	19.2	24.7	10.3	17.9	23.1	13.4	19.0
27	23.6	10.1	17.9	22.7	14.5	19.1	27.3	17.7	22.4	24.0	9.9	16.9
28	24.1	11.6	18.3	18.8	15.1	17.3	30.7	20.8	25.3	18.2	15.0	16.8
29	23.3	14.4	17.9	26.5	17.8	21.4	30.5	20.8	25.3	17.5	7.8	12.8
30	26.5	13.4	20.0	28.4	16.7	23.2	29.8	21.1	24.9	18.9	6.3	13.0
31	---	---	---	30.0	21.4	25.6	25.7	18.1	23.1	---	---	---
MONTH	32.3	6.9	18.4	30.0	13.5	21.2	30.7	10.3	21.4	27.6	6.3	17.6
YEAR	32.3	-22.7	9.6									

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.8	19.0	19.3	12.4	11.8	12.0	7.0	6.2	6.7	3.0	2.7	2.8
2	19.5	18.6	19.1	13.1	12.1	12.4	6.3	4.6	5.7	3.0	2.8	2.8
3	18.7	17.9	18.3	12.9	12.3	12.5	4.6	3.8	4.2	2.9	2.5	2.7
4	18.0	17.4	17.7	13.3	12.4	12.9	4.5	3.5	4.0	3.0	2.7	2.8
5	17.7	16.8	17.2	12.8	12.1	12.4	3.6	2.8	3.3	3.0	2.1	2.5
6	16.9	16.3	16.6	12.4	11.9	12.2	2.9	.7	1.6	2.6	2.0	2.4
7	16.7	15.9	16.2	12.4	11.9	12.1	1.5	1.0	1.3	2.7	2.1	2.5
8	16.1	15.7	15.9	11.9	10.8	11.4	2.4	1.1	1.6	2.2	1.2	1.9
9	16.3	15.7	16.0	10.9	10.2	10.5	2.4	1.0	1.8	1.9	1.2	1.5
10	16.7	15.9	16.4	10.2	9.4	9.9	3.3	2.3	2.8	1.4	1.0	1.2
11	16.8	16.2	16.5	9.5	9.2	9.3	4.7	3.1	3.9	1.4	1.1	1.2
12	16.6	16.2	16.4	9.4	9.1	9.3	3.5	2.0	2.7	1.6	1.1	1.3
13	16.7	15.9	16.2	9.3	8.6	9.1	2.2	1.4	1.9	1.7	1.4	1.5
14	16.4	15.7	16.0	8.7	7.5	8.0	2.0	1.3	1.6	1.8	1.5	1.7
15	16.1	15.5	15.9	7.6	6.9	7.3	2.2	1.3	1.8	1.9	1.7	1.8
16	15.6	14.8	15.2	7.0	6.5	6.7	2.0	1.4	1.6	2.1	1.8	1.9
17	14.9	14.3	14.6	6.9	6.6	6.8	2.4	1.4	2.0	2.2	1.9	2.1
18	14.5	14.1	14.3	7.0	6.6	6.8	2.3	1.8	2.1	2.3	2.1	2.2
19	14.3	13.5	13.9	7.1	6.8	6.9	2.2	1.9	2.1	2.3	2.1	2.2
20	13.6	12.9	13.2	7.6	6.9	7.3	2.3	2.0	2.1	2.4	2.1	2.3
21	13.3	12.8	13.1	7.6	7.2	7.4	2.3	1.9	2.1	2.5	2.2	2.3
22	13.2	12.4	12.8	7.8	7.2	7.4	2.6	2.2	2.4	2.5	2.1	2.4
23	12.5	11.8	12.2	7.7	7.1	7.4	2.8	2.4	2.6	3.0	1.9	2.3
24	11.9	11.3	11.6	7.8	7.2	7.4	2.8	2.5	2.7	3.4	2.4	2.9
25	11.4	10.8	11.1	7.6	7.0	7.4	2.9	2.6	2.8	3.7	2.6	3.2
26	11.2	10.8	11.0	7.2	6.8	7.0	2.9	2.5	2.7	2.9	2.7	2.8
27	11.4	11.0	11.2	7.3	6.8	7.0	2.7	2.4	2.5	2.9	2.7	2.8
28	12.0	11.3	11.5	7.6	7.1	7.3	2.8	2.5	2.7	3.0	2.7	2.8
29	12.4	11.6	12.0	7.7	7.0	7.2	2.9	2.6	2.8	3.0	2.8	2.9
30	12.1	11.7	11.9	7.2	6.7	6.9	3.0	2.6	2.8	3.0	2.7	2.8
31	12.1	11.5	11.7	---	---	---	3.0	2.7	2.9	3.0	2.7	2.9
MONTH	19.8	10.8	14.7	13.3	6.5	8.9	7.0	0.7	2.7	3.7	1.0	2.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.1	2.8	2.9	4.7	4.3	4.5	6.3	6.0	6.2	13.9	13.0	13.5
2	3.2	3.0	3.0	4.7	4.4	4.6	6.2	5.8	6.0	14.9	13.9	14.3
3	3.2	3.0	3.1	4.9	4.5	4.7	6.0	5.7	5.9	15.6	14.7	15.1
4	3.2	3.0	3.1	5.0	4.6	4.8	6.3	5.8	6.0	15.8	14.9	15.3
5	3.3	3.0	3.1	5.0	4.7	4.9	6.2	5.6	5.9	15.4	14.5	14.8
6	3.4	3.1	3.2	5.1	4.8	4.9	6.5	5.3	5.9	16.6	14.4	15.4
7	3.5	3.2	3.4	5.2	4.8	5.0	6.4	5.8	6.1	16.6	14.8	15.6
8	3.5	3.3	3.4	5.1	4.7	4.9	7.1	5.8	6.3	16.7	15.4	16.0
9	3.6	3.4	3.5	5.0	4.7	4.8	7.6	6.0	6.7	15.4	14.9	15.1
10	3.7	3.4	3.6	5.1	4.7	4.9	8.0	6.8	7.4	17.0	14.7	15.6

Table 5. Discharge, reservoir altitude and capacity, precipitation, air temperature, water temperature, and specific conductance for U.S. Geological Survey station number 01104430, Cambridge Reservoir near Kendal Green, Massachusetts. —Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
11	3.8	3.5	3.6	5.2	4.7	4.9	8.4	7.4	7.9	17.8	15.1	16.3
12	3.8	3.6	3.7	5.1	4.5	4.9	8.5	8.0	8.2	19.8	17.0	18.1
13	3.9	3.6	3.7	5.2	4.6	4.9	8.6	8.0	8.2	19.9	18.3	19.0
14	3.9	3.7	3.8	5.1	4.6	4.9	9.0	8.1	8.3	18.9	17.2	18.3
15	3.9	3.6	3.8	5.5	4.8	5.1	8.9	8.2	8.6	19.1	17.1	17.8
16	3.8	3.6	3.7	5.0	3.8	4.7	9.6	8.0	8.6	20.0	19.0	19.6
17	3.9	3.6	3.7	3.9	3.4	3.6	9.1	8.4	8.8	20.6	18.0	19.5
18	3.9	3.6	3.8	3.9	3.3	3.6	11.2	8.4	9.8	18.9	17.9	18.4
19	4.0	3.6	3.8	3.9	3.5	3.7	10.3	8.8	9.4	20.2	18.8	19.4
20	4.0	3.7	3.9	4.1	3.4	3.8	12.8	9.4	11.3	20.1	18.2	19.2
21	4.1	3.8	3.9	4.8	3.9	4.2	13.2	11.7	12.3	21.2	18.3	19.5
22	4.1	3.8	4.0	4.8	3.6	4.1	13.2	11.8	12.2	21.2	19.4	20.3
23	4.2	3.9	4.0	4.4	3.5	4.0	13.5	12.8	13.1	20.1	18.7	19.2
24	4.2	4.0	4.1	5.1	4.1	4.6	13.6	12.5	13.0	19.3	18.4	18.8
25	4.3	4.0	4.1	5.0	4.4	4.6	13.8	12.3	12.9	18.5	17.5	18.0
26	4.4	4.1	4.2	5.4	4.8	5.1	12.4	12.0	12.2	17.7	16.9	17.3
27	4.5	4.2	4.3	6.6	5.1	5.8	13.2	12.2	12.6	19.0	16.8	17.6
28	4.5	4.2	4.4	6.5	5.9	6.2	13.4	12.3	12.8	17.9	16.8	17.1
29	4.6	4.3	4.4	7.0	5.7	6.2	13.0	12.3	12.6	17.8	16.5	17.1
30	---	---	---	6.6	6.2	6.3	13.2	12.6	12.9	18.0	16.4	17.2
31	---	---	---	6.5	6.1	6.3	---	---	---	18.9	17.2	17.9
MONTH	4.6	2.8	3.7	7.0	3.3	4.8	13.8	5.3	9.3	21.2	13.0	17.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.6	17.0	17.3	19.1	18.3	18.7	20.8	20.3	20.5	23.6	22.2	22.8
2	17.4	16.8	17.1	19.4	18.4	18.8	21.4	20.1	20.6	23.5	22.9	23.2
3	18.6	16.9	17.6	19.5	18.2	18.9	22.0	20.4	21.0	23.3	22.8	23.0
4	19.0	17.5	18.1	19.4	18.5	19.0	22.5	21.1	21.8	24.0	22.9	23.3
5	19.4	17.9	18.6	19.4	18.7	19.1	22.1	21.5	21.8	23.8	23.2	23.5
6	19.1	18.2	18.6	20.1	19.0	19.4	22.1	21.6	21.9	23.4	22.7	23.0
7	19.0	17.7	18.2	20.0	19.2	19.5	22.2	21.7	21.9	23.0	22.5	22.8
8	19.5	18.0	18.6	20.0	19.3	19.7	22.5	21.7	22.1	23.0	22.5	22.7
9	21.6	18.0	19.1	20.2	19.4	19.8	22.6	22.1	22.3	23.2	22.3	22.7
10	21.6	20.2	21.2	20.7	19.7	20.0	22.7	22.3	22.5	23.0	22.3	22.6
11	22.3	20.6	21.4	20.7	19.4	20.2	22.8	22.4	22.5	22.9	22.0	22.4
12	22.4	19.2	21.3	20.5	19.7	20.2	23.0	22.4	22.7	22.6	22.1	22.4
13	20.0	18.8	19.3	21.3	20.1	20.8	23.4	22.5	23.0	22.7	21.9	22.3
14	19.6	18.8	19.3	21.3	20.6	20.9	23.9	22.6	23.1	22.7	22.2	22.4
15	21.0	19.5	20.1	20.8	20.2	20.6	23.8	22.9	23.4	22.4	21.7	22.1
16	22.7	21.0	21.7	20.8	20.2	20.5	23.4	22.8	23.1	22.0	21.6	21.8
17	22.4	18.2	20.0	21.2	20.5	20.7	23.5	22.5	22.8	22.0	21.6	21.8
18	19.5	18.2	19.1	21.1	20.4	20.8	23.2	22.3	22.7	22.2	20.2	21.2
19	18.4	16.6	17.5	21.5	20.6	20.9	23.2	22.4	22.8	20.4	19.0	19.7
20	17.6	16.7	17.0	21.5	20.6	20.9	23.7	22.7	23.0	20.4	18.7	19.4
21	17.3	16.8	17.1	21.7	20.6	21.2	23.5	22.8	23.1	20.4	18.9	19.6
22	17.3	16.8	17.0	21.6	21.0	21.4	23.9	22.4	23.2	20.0	19.0	19.6
23	17.7	16.8	17.1	22.1	21.0	21.4	23.3	22.4	22.9	20.1	19.7	19.9
24	18.0	17.1	17.5	22.8	21.3	22.2	24.0	22.5	23.2	20.0	19.7	19.9
25	18.6	17.4	17.9	22.3	20.3	21.1	23.5	22.6	23.1	20.1	19.7	19.8
26	19.0	18.0	18.2	21.1	19.8	20.4	23.3	22.4	22.9	20.5	19.8	20.0
27	18.8	17.7	18.2	20.8	20.1	20.4	23.3	22.5	22.9	20.3	19.8	20.1
28	18.9	18.1	18.5	20.6	20.1	20.3	23.7	22.7	23.3	20.4	19.9	20.2
29	19.3	18.2	18.8	20.9	20.0	20.3	23.7	21.9	22.8	20.3	18.7	19.4
30	19.3	18.5	18.8	20.7	20.1	20.4	22.8	22.0	22.3	19.3	18.4	18.8
31	---	---	---	21.0	19.8	20.4	22.7	22.0	22.3	---	---	---
MONTH	22.7	16.6	18.7	22.8	18.2	20.3	24.0	20.1	22.5	24.0	18.4	21.4
YEAR	24.0	0.7	12.2									

Table 5. Discharge, reservoir altitude and capacity, precipitation, air temperature, water temperature, and specific conductance for U.S. Geological Survey station number 01104430, Cambridge Reservoir near Kendal Green, Massachusetts. —Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	811	793	802	776	766	771	731	724	728	804	798	801
2	814	805	810	781	766	772	728	715	722	805	800	802
3	812	798	806	776	766	771	782	714	768	807	802	804
4	805	797	802	776	765	771	784	777	780	807	802	805
5	802	795	799	774	760	766	783	777	780	807	799	801
6	801	787	796	767	760	763	780	771	776	807	798	804
7	797	787	793	768	756	762	783	772	777	810	804	807
8	795	785	789	763	751	757	785	779	782	814	808	811
9	798	785	791	756	747	752	790	782	785	818	810	815
10	799	791	795	753	742	747	788	783	786	827	815	823
11	801	792	796	748	741	744	789	600	755	831	824	827
12	803	791	797	747	738	742	777	759	771	833	827	830
13	797	787	792	745	736	740	778	770	774	834	828	831
14	814	789	802	739	732	736	789	772	780	832	828	830
15	812	798	804	737	730	734	776	763	772	831	827	830
16	802	793	798	734	726	729	789	746	778	836	829	832
17	800	793	796	734	728	731	784	768	776	838	833	836
18	799	793	796	735	727	731	782	767	773	840	834	837
19	798	791	794	737	730	733	780	774	777	845	836	840
20	798	787	793	739	725	734	782	776	779	845	840	843
21	797	791	793	737	727	732	785	780	782	846	841	844
22	798	790	795	740	729	734	788	781	785	985	841	844
23	794	788	792	740	731	734	795	784	789	996	985	989
24	791	786	788	739	731	735	800	792	796	1020	995	1000
25	788	781	785	740	727	732	800	791	795	1020	849	1020
26	789	781	786	735	727	730	802	788	792	852	847	850
27	790	784	787	733	726	730	797	789	792	859	849	855
28	789	775	784	737	728	732	798	792	795	864	856	860
29	786	769	777	738	726	732	800	796	798	866	798	819
30	777	766	772	733	725	728	802	796	799	807	800	804
31	776	764	770	---	---	---	803	797	800	809	803	807
MONTH	814	764	793	781	725	744	803	600	779	1020	798	842

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	814	806	811	997	982	990	978	961	968	743	738	740
2	818	810	814	1000	988	994	980	926	963	747	740	743
3	824	811	819	1040	995	1020	e926	e880	e907	748	738	744
4	830	818	824	1050	1030	1040	e900	e887	e893	747	736	742
5	835	825	830	1050	1040	1040	e887	e880	e884	745	739	742
6	840	826	834	1060	1040	1050	e884	e879	e875	751	738	744
7	850	836	844	1070	1050	1060	e881	e862	e866	747	739	743
8	862	848	856	1060	1030	1040	e862	e851	e857	750	737	743
9	872	858	866	1060	1040	1050	e852	e840	e848	739	728	733
10	879	869	874	1080	1040	1050	e840	e829	e839	742	726	732
11	889	876	883	1100	1030	1050	e830	e820	e830	743	726	735
12	899	886	892	1110	1040	1070	e820	e811	e823	753	738	745
13	907	897	902	1150	1020	1070	e816	e810	e814	756	743	750
14	914	905	910	1120	1030	1080	e811	e798	e805	757	744	751
15	921	911	917	1100	1050	1070	e798	e782	e796	755	743	749
16	930	916	922	1060	941	1010	e783	e775	e787	760	754	757
17	935	923	929	942	909	922	e775	e766	e778	762	748	757
18	943	932	937	914	907	910	e766	e754	e769	755	748	751
19	953	939	945	913	881	898	e754	e751	e760	761	749	754
20	973	947	962	893	881	888	e765	e752	e755	758	745	752
21	979	968	974	901	891	896	759	747	752	760	746	752
22	984	974	980	905	891	899	754	746	750	759	752	756
23	992	979	986	906	897	900	754	741	746	758	747	752
24	996	987	992	911	900	905	752	741	747	752	744	748
25	1000	989	995	914	903	908	754	746	750	750	740	746

Table 5. Discharge, reservoir altitude and capacity, precipitation, air temperature, water temperature, and specific conductance for U.S. Geological Survey station number 01104430, Cambridge Reservoir near Kendal Green, Massachusetts. —Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

26	1010	996	1000	920	906	914	748	739	744	750	743	746
27	1010	972	987	939	915	925	744	736	740	753	738	746
28	990	975	983	955	936	946	745	738	741	749	739	744
29	991	979	985	972	952	962	742	736	739	748	739	743
30	---	---	---	977	969	973	742	736	739	750	739	744
31	---	---	---	981	967	975	---	---	---	754	740	747
MONTH	1010	806	912	1150	881	984	980	736	809	762	726	746

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	746	737	741	764	752	758	748	743	745	752	741	746
2	744	733	739	757	741	750	751	745	747	750	740	745
3	747	734	741	757	737	746	752	746	749	746	739	743
4	750	741	745	753	732	741	754	747	751	750	739	743
5	754	743	748	741	717	734	755	750	752	750	737	743
6	753	745	749	743	726	733	756	751	753	748	739	744
7	753	745	749	734	723	729	756	751	754	748	740	744
8	754	746	750	730	718	725	757	751	754	752	739	743
9	757	746	751	727	714	721	759	752	755	750	732	741
10	760	753	756	727	715	721	767	755	761	756	737	747
11	764	755	759	727	713	719	774	758	763	749	731	742
12	766	753	760	728	713	720	764	756	760	750	723	741
13	758	749	754	738	720	729	780	751	765	756	732	741
14	758	750	755	742	719	731	783	754	765	755	741	746
15	763	754	758	748	732	739	784	746	770	751	742	746
16	767	759	762	748	741	745	750	740	743	753	745	749
17	766	752	757	748	742	745	752	743	746	764	744	755
18	759	751	755	749	742	746	756	744	748	759	730	747
19	754	742	747	750	743	747	758	751	755	748	735	742
20	748	742	745	750	743	747	761	735	754	748	737	742
21	748	742	745	751	744	748	755	740	749	748	737	743
22	748	741	744	750	744	747	752	741	746	745	739	741
23	749	743	746	750	744	747	749	743	746	744	735	740
24	750	743	746	749	736	742	753	744	749	743	736	739
25	747	740	744	743	738	740	752	746	749	741	734	738
26	745	737	742	744	731	740	753	747	749	741	732	738
27	746	732	742	743	737	741	753	747	750	741	732	736
28	767	740	761	743	737	741	752	746	749	738	728	733
29	768	760	764	744	738	740	757	747	751	731	723	726
30	766	759	763	745	738	742	757	746	751	731	719	726
31	---	---	---	747	741	744	755	744	750	---	---	---
MONTH	768	732	751	764	713	739	784	735	753	764	719	742
YEAR	1150	600	798									

Table 6. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104433, Hobbs Brook, unnamed tributary 1, near Kendal Green, Massachusetts.

PERIOD OF RECORD.--October 1997 to September 1998, March 2003 to current year.

PERIOD OF DAILY RECORD.--

DISCHARGE: June 2004, to current year.

WATER TEMPERATURE: June 2004, to current year.

SPECIFIC CONDUCTANCE: June 2004, to current year.

REMARKS.--Records are excellent except those for estimated temperature and specific conductance. e, estimated.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum recorded, 6.4 Mgal/d, Aug. 13, 2004; minimum, 0.006 Mgal/d, July 5 and 8, 2004.

WATER TEMPERATURE: Maximum recorded, 24.4°C, Aug. 11, 2004; minimum, 13.6°C, Sept. 30, 2004.

SPECIFIC CONDUCTANCE: Maximum recorded, 2,210 µS/cm, July 3, 2004; minimum, 63 µS/cm, Aug. 13, 2004.

DISCHARGE, IN MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY TOTAL VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	0.10	0.11	0.11
2	---	---	---	---	---	---	---	---	---	.08	.12	.10
3	---	---	---	---	---	---	---	---	---	.20	.10	.09
4	---	---	---	---	---	---	---	---	---	.06	.10	.09
5	---	---	---	---	---	---	---	---	---	.17	.61	.08
6	---	---	---	---	---	---	---	---	---	.14	.11	.08
7	---	---	---	---	---	---	---	---	---	.08	.09	.08
8	---	---	---	---	---	---	---	---	---	.18	.08	.78
9	---	---	---	---	---	---	---	---	---	.34	.08	1.0
10	---	---	---	---	---	---	---	---	---	.06	.09	.18
11	---	---	---	---	---	---	---	---	---	.06	.26	.13
12	---	---	---	---	---	---	---	---	---	.05	.23	.13
13	---	---	---	---	---	---	---	---	---	.36	4.3	.13
14	---	---	---	---	---	---	---	---	---	.36	.39	.10
15	---	---	---	---	---	---	---	---	---	.08	1.9	.09
16	---	---	---	---	---	---	---	---	---	.08	.62	.16
17	---	---	---	---	---	---	---	---	---	.06	.71	.11
18	---	---	---	---	---	---	---	---	---	.05	.37	3.0
19	---	---	---	---	---	---	---	---	---	.06	.31	1.4
20	---	---	---	---	---	---	---	---	---	.06	.97	.23
21	---	---	---	---	---	---	---	---	---	.05	2.5	.18
22	---	---	---	---	---	---	---	---	---	.05	1.0	.16
23	---	---	---	---	---	---	---	---	---	.05	.43	.14
24	---	---	---	---	---	---	---	---	---	2.8	.37	.13
25	---	---	---	---	---	---	---	---	---	.56	.32	.12
26	---	---	---	---	---	---	---	---	---	.12	e.28	.12
27	---	---	---	---	---	---	---	---	---	.12	e.23	.11
28	---	---	---	---	---	---	---	---	0.17	.57	e.21	1.5
29	---	---	---	---	---	---	---	---	.08	.53	e.17	1.7
30	---	---	---	---	---	---	---	---	.14	.17	e.19	.36
31	---	---	---	---	---	---	---	---	---	.12	e.21	---
TOTAL	---	---	---	---	---	---	---	---	---	7.77	17.46	12.59
MEAN	---	---	---	---	---	---	---	---	---	0.25	0.56	0.42
MAX	---	---	---	---	---	---	---	---	---	2.8	4.3	3.0
MIN	---	---	---	---	---	---	---	---	---	0.05	0.08	0.08
MED	---	---	---	---	---	---	---	---	---	0.10	0.26	0.13
MGDSM	---	---	---	---	---	---	---	---	---	0.62	1.37	1.05
IN.	---	---	---	---	---	---	---	---	---	1.11	2.45	1.81

Table 6. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104433, Hobbs Brook, unnamed tributary 1, near Kendal Green, Massachusetts.—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	19.9	15.2	17.1	21.3	19.9	20.6	20.8	17.8	19.2
2	---	---	---	20.6	15.7	17.9	21.9	19.2	20.4	19.5	16.9	18.2
3	---	---	---	21.2	17.1	19.6	22.8	18.9	20.7	20.6	16.0	18.3
4	---	---	---	21.4	16.2	18.8	22.0	19.4	20.5	21.0	17.7	19.0
5	---	---	---	21.4	17.8	18.8	19.7	18.0	18.9	18.4	15.9	17.5
6	---	---	---	21.3	18.4	19.3	18.9	16.7	17.6	18.5	14.2	16.4
7	---	---	---	22.0	18.1	20.2	18.6	14.8	16.8	19.9	15.5	17.8
8	---	---	---	21.2	17.6	18.8	19.5	15.1	17.1	21.1	18.6	20.0
9	---	---	---	20.9	18.6	19.8	20.4	15.7	17.9	20.2	18.8	19.6
10	---	---	---	20.9	17.0	19.0	21.3	16.6	18.8	20.0	17.3	19.1
11	---	---	---	20.6	17.5	18.9	24.4	18.8	19.8	18.8	16.1	17.3
12	---	---	---	19.6	16.5	18.0	22.8	20.1	21.3	19.2	14.7	16.9
13	---	---	---	18.4	17.3	17.7	22.7	21.0	22.1	19.4	16.6	17.8
14	---	---	---	18.2	17.1	17.7	21.8	19.8	20.6	18.1	15.6	16.6
15	---	---	---	19.9	17.0	18.1	20.4	18.6	19.5	17.7	14.3	16.1
16	---	---	---	20.0	17.2	18.6	18.9	18.1	18.5	18.2	16.6	17.4
17	---	---	---	21.9	17.7	19.6	19.4	18.0	18.5	20.2	17.8	18.8
18	---	---	---	21.7	18.1	19.8	20.3	17.3	18.7	19.4	15.1	16.8
19	---	---	---	19.5	18.4	18.8	20.7	18.4	19.5	16.0	14.2	15.1
20	---	---	---	21.9	18.2	19.7	24.3	18.8	20.5	16.7	13.7	15.1
21	---	---	---	22.4	17.9	20.0	22.1	20.2	21.2	17.2	14.7	15.9
22	---	---	---	23.2	18.4	20.6	20.2	17.9	19.0	18.8	15.5	16.9
23	---	---	---	22.7	19.5	20.9	20.2	16.9	18.5	18.5	16.1	17.3
24	---	---	---	22.8	18.9	20.3	19.4	17.2	18.3	18.2	15.3	16.6
25	---	---	---	19.8	17.5	18.8	19.7	16.2	17.8	18.9	15.3	17.0
26	---	---	---	20.2	16.7	18.2	e19.5	e15.5	e17.5	18.9	16.2	17.6
27	---	---	---	19.1	16.6	17.8	---	---	---	18.6	14.4	16.5
28	19.4	14.9	17.0	18.8	17.7	18.0	---	---	---	18.4	16.3	17.4
29	19.1	14.4	16.8	20.0	18.2	18.9	---	---	---	17.9	14.2	15.5
30	18.9	15.6	17.0	20.6	17.7	19.2	---	---	---	16.4	13.6	15.0
31	---	---	---	22.7	18.9	20.5	e21.3	e19.1	e20.6	---	---	---
MONTH	---	---	---	23.2	15.2	19.0	---	---	---	21.1	13.6	17.3

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	1,850	1,690	1,730	1,660	1,540	1,600	1,400	1,280	1,310
2	---	---	---	1,950	1,700	1,760	1,870	1,660	1,760	1,500	1,290	1,380
3	---	---	---	2,210	641	1,510	1,940	1,840	1,900	1,670	1,490	1,590
4	---	---	---	1,410	630	1,090	2,010	1,900	1,960	1,780	1,670	1,730
5	---	---	---	1,550	1,170	1,470	2,030	274	958	1,860	1,780	1,820
6	---	---	---	1,170	789	931	1,110	523	839	1,920	1,840	1,880
7	---	---	---	1,440	975	1,270	1,440	1,110	1,250	1,990	1,910	1,950
8	---	---	---	1,730	763	1,430	1,660	1,440	1,530	1,970	962	1,510
9	---	---	---	1,090	399	532	1,830	1,660	1,750	962	190	493
10	---	---	---	1,220	650	945	1,980	1,830	1,920	962	493	747
11	---	---	---	1,530	1,200	1,350	2,100	1,080	1,840	1,290	962	1,100
12	---	---	---	1,740	1,530	1,620	1,080	888	940	1,590	1,290	1,420
13	---	---	---	1,800	328	1,520	1,000	63	268	1,640	1,580	1,620
14	---	---	---	567	310	436	1,130	559	932	1,650	1,590	1,610
15	---	---	---	1,080	567	805	1,210	108	531	1,790	1,650	1,710
16	---	---	---	1,450	1,080	1,270	902	584	790	1,870	1,700	1,810
17	---	---	---	1,640	1,430	1,540	964	597	694	1,770	1,600	1,680
18	---	---	---	1,770	1,470	1,670	1,210	665	974	1,610	79	416
19	---	---	---	1,790	1,640	1,750	1,430	1,190	1,310	1,050	102	629
20	---	---	---	1,850	1,770	1,820	1,550	154	1,210	1,380	1,050	1,230

Table 6. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104433, Hobbs Brook, unnamed tributary 1, near Kendal Green, Massachusetts.—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
21	---	---	---	1,950	1,810	1,880	545	120	351	1,570	1,370	1,470
22	---	---	---	2,000	1,850	1,930	883	235	640	1,690	1,540	1,610
23	---	---	---	1,990	1,930	1,960	1,300	883	1,110	1,750	1,670	1,700
24	---	---	---	1,990	101	491	1,460	1,240	1,350	1,810	1,740	1,780
25	---	---	---	1,060	239	788	1,600	1,450	1,530	1,890	1,810	1,840
26	---	---	---	1,380	1,050	1,210	e1,540	e1,530	e1,530	1,920	1,860	1,890
27	---	---	---	1,730	194	1,550	---	---	---	1,980	1,920	1,950
28	1,250	974	1,120	1,730	478	730	---	---	---	1,980	98	984
29	1,520	1,240	1,370	765	268	511	---	---	---	564	138	309
30	1,730	1,520	1,630	1,260	765	1,040	---	---	---	1,140	564	905
31	---	---	---	1,570	1,250	1,400	e1,500	e1,400	e1,450	---	---	---
MONTH	---	---	---	2,210	101	1,290	---	---	---	1,990	79	1,400

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS, AND PESTICIDES

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Date	Time	Turbidity, water, unfiltered, broad band light source (400–680 nm), detectors at multiple angles including 90 ± 30 degrees, NTRU (P63676)	Dissolved oxygen, water, unfiltered (mg/L) (P00300)	pH, water, unfiltered, field, standard units (P00400)	Specific conductance, water, unfiltered, microsiemens per centimeter (µS/cm at 25°C) (P00095)	Calcium, water, filtered (mg/L) (P00915)	Magnesium, water, filtered (mg/L) (P00925)	Potassium, water, filtered (mg/L) (P00935)	Sodium, water, filtered (mg/L) (P00930)
8-27-2004	0915	2.7	6	6.4	1,990	85.7	14.1	8.23	255

Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory (mg/L as $CaCO_3$) (P29801)	Chloride, water, filtered (mg/L) (P00940)	Sulfate, water, filtered (mg/L) (P00945)	Phosphorus, water, unfiltered (mg/L) (P00665)	Total nitrogen (nitrate + nitrite + ammonia + organic-N), water, unfiltered, analytically determined (mg/L as N) (P62855)	*Escherichia coli*, m-TEC MF method, water (colonies per 100 mL) (P31633)	Cadmium, water, unfiltered (µg/L) (P01027)	Chromium, water, unfiltered, recoverable (µg/L) (P01034)	Copper, water, unfiltered, recoverable, (µg/L) (P01042)	Iron, water, unfiltered, recoverable (µg/L) (P01045)
78	544	34.9	0.02	2.64	380	0.18	<0.8	5.4	490

Lead, water, unfiltered, recoverable (µg/L) (P01051)	Manganese, water, unfiltered, recoverable (µg/L) (P01055)	Nickel, water, unfiltered, recoverable (µg/L) (P01067)	Zinc, water, unfiltered, recoverable (µg/L) (P01092)	2,4,5-T, surrogate, Schedule 9060/2060, water, filtered, percent recovery (P99958)	2,4-D methyl ester, water, filtered, recoverable, (µg/L) (P50470)	2,4-D, water, filtered, recoverable (µg/L) (P39732)	2,4-DB, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38746)	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable (µg/L) (P04040)	2-Chloro-6-ethylamino-4-amino-s-triazine, water, filtered, recoverable (µg/L) (P04038)
0.51	338	6.37	54	91.9	<0.009	<0.02	<0.02	<0.03	<0.01

Table 6. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104433, Hobbs Brook, unnamed tributary 1, near Kendal Green, Massachusetts.—Continued

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS, AND PESTICIDES—Continued

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

2-Hydroxy-4-isopropylamino-6-ethylamino-s-triazine, water, filtered, recoverable (µg/L) (P50355)	3-Hydroxy carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49308)	3-Ketocarbofuran, water, filtered, recoverable (µg/L) (P50295)	9*H*-Fluorene, water, unfiltered, recoverable (µg/L) (P34381)	Acenaphthene, water, unfiltered, recoverable (µg/L) (P34205)	Acenaphthylene, water, unfiltered, recoverable (µg/L) (P34200)	Acifluorfen, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49315)	Aldicarb sulfone, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49313)	Aldicarb sulfoxide, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49314)	Aldicarb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49312)
<0.008	<0.006	<0.014	<2	<2	<2	<0.007	<0.02	<0.008	<0.04

Anthracene, water, unfiltered, recoverable (µg/L) (P34220)	Atrazine, water, filtered, recoverable (µg/L) (P39632)	Barban, surrogate, Schedules 2060/9060, water, filtered, percent recovery (P90640)	Bendiocarb, water, filtered, recoverable (µg/L) (P50299)	Benomyl, water, filtered, recoverable (µg/L) (P50300)	Bensulfuron, water, filtered, recoverable (µg/L) (P61693)	Bentazon, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38711)	Benzo[*a*] anthracene, water, unfiltered, recoverable (µg/L) (P34526)	Benzo[*a*] pyrene, water, unfiltered, recoverable (µg/L) (P34247)	Benzo[*b*] fluoranthene, water, unfiltered, recoverable (µg/L) (P34230)	Benzo[*g,h,i*] perylene, water, unfiltered, recoverable (µg/L) (P34521)
<2	<0.009	E50.3	<0.03	<0.004	<0.02	<0.01	<2	<1	<2	<3

Benzo[*k*] fluoranthene, water, unfiltered, recoverable (µg/L) (P34242)	Bromacil, water, filtered, recoverable (µg/L) (P04029)	Bromoxynil, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49311)	Caffeine, water, filtered, recoverable (µg/L) (P50305)	Caffeine-13C, surrogate, Schedule 9060/2060, water, filtered, percent recovery (P99959)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49310)	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49309)	Chloramben methyl ester, water, filtered, recoverable (µg/L) (P61188)	Chlorimuron, water, filtered, recoverable (µg/L) (P50306)	Chlorodiamino-s-triazine, water, filtered, recoverable (µg/L) (P04039)
<2	<0.03	<0.02	E0.2201	E122	<0.03	<0.006	<0.02	<0.010	<0.04

Chlorothalonil, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49306)	Chrysene, water, unfiltered, recoverable (µg/L) (P34320)	Clopyralid, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49305)	Cycloate, water, filtered, recoverable (µg/L) (P04031)	Dacthal monoacid, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49304)	Dibenzo[*a,h*] anthracene, water, unfiltered, recoverable (µg/L) (P34556)	Dicamba, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38442)	Dichlorprop, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49302)	Dinoseb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49301)	Diphenamid, water, filtered, recoverable (µg/L) (P04033)
<0.04	<3	<0.01	<0.01	<0.01	<3	<0.01	<0.01	<0.01	<0.03

Table 6. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104433, Hobbs Brook, unnamed tributary 1, near Kendal Green, Massachusetts.—Continued

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS, AND PESTICIDES—Continued

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Diuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49300)	Fenuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49297)	Flumetsulam, water, filtered, recoverable (µg/L) (P61694)	Fluometuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38811)	Fluoranthene, water, unfiltered, recoverable (µg/L) (P34376)	Imazaquin, water, filtered, recoverable (µg/L) (P50356)	Imazethapyr, water, filtered, recoverable (µg/L) (P50407)	Imidacloprid, water, filtered, recoverable (µg/L) (P61695)	Indeno[1,2,3-*cd*] pyrene, water, unfiltered, recoverable (µg/L) (P34403)	Linuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38478)
E0.02	<0.03	<0.01	<0.03	M	<0.02	<0.02	E0.037	<3	<0.01

MCPA, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38482)	MCPB, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38487)	Metalaxyl, water, filtered, recoverable (µg/L) (P50359)	Methiocarb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38501)	Methomyl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49296)	Metsulfuron, water, filtered, recoverable (µg/L) (P61697)	N-(4-Chlorophenyl)-N'-methylurea, water, filtered, recoverable (µg/L) (P61692)	Neburon, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49294)	Nicosulfuron, water, filtered, recoverable (µg/L) (P50364)
<0.02	<0.01	<0.02	<0.008	<0.004	E0.18	<0.02	<0.01	<0.01

Nitrobenzene, water, unfiltered, recoverable (µg/L) (P34447)	Norflurazon, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49293)	Oryzalin, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49292)	Oxamyl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38866)	Phenanthrene, water, unfiltered, recoverable (µg/L) (P34461)	Picloram, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49291)	Propham, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49236)	Propiconazole, water, filtered, recoverable (µg/L) (P50471)
<2	<0.02	<0.02	<0.01	<2	<0.02	<0.010	<0.02

Propoxur, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38538)	Pyrene, water, unfiltered, recoverable (µg/L) (P34469)	Siduron, water, filtered, recoverable (µg/L) (P38548)	Sulfometuron, water, filtered, recoverable, (µg/L) (P50337)	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, (µg/L) (P82670)	Terbacil, water, filtered, recoverable (µg/L) (P04032)	Triclopyr, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49235)	Naphthalene, water, unfiltered, recoverable (µg/L) (P34696)
<0.008	M	<0.02	<0.009	<0.006	<0.010	<0.02	<2

Table 6. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104433, Hobbs Brook, unnamed tributary 1, near Kendal Green, Massachusetts.—Continued

CONCENTRATIONS OF INORGANIC AND ORGANIC CONSTITUENTS IN BED-SEDIMENT SAMPLES

REMARKS.-- E, estimated; -LR, laboratory replicate sample; -R, replicate sample; %, parts per hundred; <, value is less than value shown; >, value is greater than value shown; --, no data.

Particle-size composition (mm)	Date	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorus, total, as P (%)	Carbon, organic, total (%)	Aluminum (%)	Antimony (ppm)	Arsenic (ppm)	Barium (ppm)
<0.062 mm	4-03-2003	0.68	0.72	0.14	0.28	0.16	7.69	1.62	<5	11	132
0.062 < 0.250	4-03-2003	.34	.31	.08	.19	.06	3.51	.76	<5	4	64
0.250 < 2.00	4-03-2003	.19	.18	.04	.11	.02	.75	.43	<5	<3	28
< 2.00	4-03-2003	.17	.15	.04	.14	.02	--	.45	<5	4	28
< 2.00 -LR	4-03-2003	.17	.15	.04	.14	.02	--	.45	<5	4	28

Particle-size composition (mm)	Beryllium (ppm)	Bismuth (ppm)	Cadmium (ppm)	Chromium (ppm)	Cobalt (ppm)	Copper (ppm)	Iron (%)	Lanthanum (ppm)	Lead (ppm)	Lithium (ppm)	Manganese (ppm)	Molybdenum (ppm)
<0.062 mm	0.8	<5	2	307	11	119	3.46	25.7	181	23	375	11
0.062 < 0.250	<.5	<5	<1	578	6	51.3	1.78	12.3	67	11	227	7
0.250 < 2.00	<.5	<5	<1	328	3	22.7	.98	7.6	16	5	127	2
< 2.00	<.5	<5	<1	614	2	13.1	1.12	9	14	5	145	5
< 2.00 -LR	<.5	<5	<1	628	2	13.4	1.16	9.1	14	6	144	5

Particle-size composition (mm)	Nickel (ppm)	Scandium (ppm)	Silver (ppm)	Strontium (ppm)	Tin (ppm)	Titanium (%)	Tungsten (ppm)	Vanadium (ppm)	Yttrium (ppm)	Zinc (ppm)	Zirconium (ppm)
<0.062 mm	36	3.5	0.3	46.5	12	0.11	<10	57	20.7	471	7.3
0.062 < 0.250	27	2.1	.2	22.7	<10	.07	<10	31	9.6	210	4.3
0.250 < 2.00	16	1.1	<.2	24.6	<10	.04	<10	14	4.4	48.3	3.7
< 2.00	21	1	<.2	13.3	<10	.04	<10	14	4.6	40	5
< 2.00 -LR	21	1	<.2	13.2	<10	.04	<10	14	4.7	40.4	4.9

CONCENTRATIONS OF SEMIVOLATILE COMPOUNDS IN BED-SEDIMENT SAMPLES

REMARKS.--E, estimated; %-rec, percent of surrogate recovery; <, value is less than value shown; --, no data.

Particle-size composition (mm)	Date	Phenol (ppb)	p-cresol (ppb)	Naphthalene (ppb)	C1-128 isomers, methylated naphthalenes (ppb)	2-ethyl-naph-thalene (ppb)	2,6-dimethyl-naphthalene (ppb)	1,6-dimethyl-naphthalene (ppb)	C2-128 isomers, C2-alkyated naphthalenes (ppb)	Acenaph-thylene (ppb)
0.250 < 2.00	4-01-2003	E2.4	E4.6	E12.2	E41.6	E6.4	E13.0	E21.8	E85.1	181
< 0.250	4-01-2003	E73.3	E54.4	E96.0	E158	E18.9	123	E45.6	E227	463

Particle-size composition (mm)	1,2-dimethyl-naphthalene (ppb)	Acenaph-thene (ppb)	C3-128, C3-alkylated naphthalenes (ppb)	2,3,6-trimethyl-naphthalene (ppb)	9*H*-Fluorene (ppb)	C4-128, C4-alkylated naphthalenes (ppb)	1-methyl-9*H*-Fluorene (ppb)	Phenan-threne (ppb)	Anthra-cene (ppb)	C5-128, C5-alkylated naphthalenes (ppb)
0.250 < 2.00	E7.0	E39.7	E179	E12.6	63.8	E78.0	E21.6	928	228	<50
< 0.250	E22.3	254	E440	E31.4	439	E123	E75.4	7,360	1,060	<100

Table 6. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104433, Hobbs Brook, unnamed tributary 1, near Kendal Green, Massachusetts.—Continued

CONCENTRATIONS OF SEMIVOLATILE COMPOUNDS IN BED-SEDIMENT SAMPLES—Continued

REMARKS.--E, estimated; %-rec, percent of surrogate recovery; <, value is less than value shown; --, no data.

Particle-size composition (mm)	2-methyl-anthracene (ppb)	4,5-methyl-enephenan-threne (ppb)	C1-178 isomers, methylated phenanthrene/ anthracenes (ppb)	1-methyl-phenant-hrene (ppb)	C2-178 isomers, C2-alkylated phenanthrene/ anthracenes (ppb)	Fluoranthene (ppb)	Pyrene (ppb)	C3-178 isomers, C3-alkylated phenanthrene/ anthracenes (ppb)	C4-178 isomers, C4-alkylated phenanthrene/ anthracenes (ppb)	1-methyl-pyrene (ppb)
0.250 < 2.00	61.5	153	E607	113	E377	1,820	1,380	E74.9	<50	93.7
< 0.250	175	1,140	E2,870	479	E1,350	E20,900	E14,400	E660	<450	480

Particle-size composition (mm)	C1-202 isomers, methylated fluoranthene/ pyrenes (ppb)	C2-202 isomers, C2-alkylated fluoranthene/ pyrenes (ppb)	C5-178 isomers, C5-alkylated phenanthrene/ anthracenes (ppb)	Benzo[*a*] anthracene (ppb)	Chrysene (ppb)	C3-202 isomers, C3-alkylated fluoranthene/ pyrenes (ppb)	C1-228 isomers, methylated benzo[*a*] anthracene/ chrysenes (ppb)	C4-202 isomers, C4-alkylated fluoranthene/ pyrenes (ppb)	C5-202 isomers, fluoranthene/ pyrenes (ppb)
0.250 < 2.00	E965	<635	<50	639	838	<300	<515	<215	<80
< 0.250	E7,810	<6,080	<400	5,930	11,200	<2,430	<3,600	<1,540	<480

Particle-size composition (mm)	C2-228 isomers, C2-alkylated benzo[*a*] anthracene/ chrysenes (ppb)	Benzo[*b*] fluoranthene (ppb)	Benzo[*k*] fluor-anthene (ppb)	Benzo[*e*] pyrene (ppb)	Benzo[*a*] pyrene (ppb)	Perylene (ppb)	C1-252 isomers, C1-methylated benzopyrene/ perylenes (ppb)	C3-228 isomers, C3-benzo[*a*] anthracene/ chrysenes (ppb)	C2-252 isomers, C2-alkylated benzopyrene/ perylenes (ppb)	C4-228 isomers, C4-benzo[*e*] anthracene/ chrysenes (ppb)
0.250 < 2.00	<180	680	685	529	628	171	E539	<80	<315	<100
< 0.250	<1,220	11,600	10,300	8,190	8,260	2,000	E5,540	<570	<1,380	<1,350

Particle-size composition (mm)	Benzo [*g,h,i*] perylene (ppb)	Indeno [1,2,3-*cd*] pyrene (ppb)	Dibenzo [*a,h*] anthracene (ppb)	C3-252 isomers, C3-alkylated benzopyrene/ perylenes (ppb)	C4-252 isomers, C4-alkylated benzopyrene/ perylenes (ppb)	C5-228 isomers, C5-benzo(*a*) anthracene/ chrysenes (ppb)	C5-252 isomers, C5-alkylated benzopyrene/ perylenes (ppb)	Coro-nene (ppb)	Nitro-benzene-d5 (%-rec)	2-fluoro-biphenyl (%-rec)	terphenyl -d14 (%-rec)
0.250 < 2.00	464	573	130	<120	<60	<100	<200	E93.4	37.54	57.06	108
< 0.250	7,790	9,080	1,690	<619	<415	<470	<2,970	E1,900	65.8	71.58	164.71

Table 6. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104433, Hobbs Brook, unnamed tributary 1, near Kendal Green, Massachusetts.—Continued

CONCENTRATIONS OF ELEMENTS IN SAMPLES OF SOIL

REMARKS.--Latitude and Longitude: In degrees, minutes, and seconds; -LR, laboratory replicate sample; %, parts per hundred; <, concentration is less than value shown.

Sample identifier	Latitude ° ′ ″	Longitude ° ′ ″	Date	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorus, total, as P (%)	Aluminum (%)	Antimony (ppm)	Arsenic (ppm)
01104433A	42 23 51.3	71 16 03.3	6-11-2003	0.27	0.43	0.05	0.17	0.06	2.56	<5	10
01104433B	42 23 51.8	71 16 00.6	6-11-2003	.27	.26	.03	.12	.06	1.07	<5	6
01104433C	42 23 27.9	71 16 19.7	6-11-2003	.14	.2	.03	.11	.03	2.46	<5	7
01104433C-R	42 23 27.9	71 16 19.7	6-11-2003	.15	.21	.03	.13	.04	2.57	<5	5
01104433D	42 23 25.4	71 16 17.5	6-11-2003	.16	.27	.04	.15	.04	2.07	<5	8
01104433E	42 23 25.3	71 16 15.1	6-11-2003	1.12	1.23	.08	.23	.14	2.93	<5	3

Sample identifier	Barium (ppm)	Beryllium (ppm)	Bismuth (ppm)	Cadmium (ppm)	Chromium (ppm)	Cobalt (ppm)	Copper (ppm)	Iron (%)	Lanthanum (ppm)	Lead (ppm)	Lithium (ppm)	Manganese (ppm)	Molybdenum (ppm)
01104433A	44	0.7	<5	<1	531	7	20.4	2.45	26.7	15	15	263	4
01104433B	58	<.5	<5	<1	300	4	21	1.22	23.6	45	13	208	3
01104433C	36	.8	<5	<1	329	5	15.4	1.66	26	11	16	158	2
01104433C-R	39	.8	<5	<1	428	6	16.1	1.85	27.5	10	15	182	3
01104433D	27	<.5	<5	<1	552	4	11	1.49	27.6	9	13	184	4
01104433E	86	1.9	<5	<1	333	17	15.4	4.14	26.4	18	31	499	5

Sample identifier	Nickel (ppm)	Scandium (ppm)	Silver (ppm)	Strontium (ppm)	Tin (ppm)	Titanium (%)	Tungsten (ppm)	Vanadium (ppm)	Yttrium (ppm)	Zinc (ppm)	Zirconium (ppm)
01104433A	27	3.5	<0.2	15.6	<10	0.15	<10	44	13.5	41.6	6.1
01104433B	20	2.9	<.2	14.7	<10	.08	<10	34	13.3	38.3	3.7
01104433C	16	2.8	<.2	9.9	<10	.08	<10	33	12	24.9	4
01104433C-R	20	3.1	<.2	11.2	<10	.09	<10	36	12.4	26.2	4.8
01104433D	22	2.6	<.2	10.6	<10	.1	<10	25	9.6	24.8	5.3
01104433E	25	6.6	<.2	47.3	<10	.46	<10	117	29.3	89.3	14.8

PARTICLE-SIZE DISTRIBUTION OF COMPOSITED SAMPLES OF SOIL BY PERCENT COMPOSITION

REMARKS.--<, Actual value is less than value shown; >, actual value is greater than value shown

Size range in millimeters			
<0.063	0.250 > 0.063	2.00 > 0.250	>2.00
36.7	38.2	23.4	1.7

Table 7. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts.

PERIOD OF RECORD.--October 1997 to September 1998; October 2000 to current year.

PERIOD OF DAILY RECORD.—

DISCHARGE: October 1997 to September 1998; October 2000 to current year.

WATER TEMPERATURE: October 2000 to current year.

SPECIFIC CONDUCTANCE: October 2000 to current year.

REMARKS.--Records for discharge are good except those for estimated daily discharge, which are fair. Records for water temperature and specific conductance are good. e, estimated.

EXTREMES FOR PERIOD OF RECORD.—

DISCHARGE: Maximum discharge, 76.9 Mgal/d, June 17, 2001 and Aug. 13, 2004, 0.08 Mgal/d, Sept. 26, 2001; minimum daily, 0.05 Mgal/d, Oct. 1, 1997.

WATER TEMPERATURE: Maximum recorded, 27.1°C, Aug. 22, 2003; minimum, 0.1°C, Jan. 13, 2002.

SPECIFIC CONDUCTANCE: Maximum recorded, 72,700 µS/cm, Jan. 20, 2002; minimum, 13.0 µS/cm, Dec. 24, 2001

EXTREMES FOR CURRENT YEAR.—

DISCHARGE: Maximum discharge, 72.4 Mgal/d, Aug. 13; minimum, 0.08 Mgal/d, Oct. 4.

WATER TEMPERATURE: Maximum recorded, 26.6°C, Aug. 11; minimum, 0.6°C, Dec. 15.

SPECIFIC CONDUCTANCE: Maximum recorded, 30,600 µS/cm, Dec. 7; minimum, 21.0 µS/cm, Aug. 13.

DISCHARGE, IN MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY TOTAL VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.10	0.17	0.15	0.54	0.15	0.17	9.0	0.78	0.33	0.13	0.11	0.13
2	.10	.16	.15	.53	.16	.19	9.7	.78	.52	.32	.11	.13
3	.10	.39	.14	.64	.78	.22	3.7	1.4	.23	.13	.11	.13
4	.71	.15	.14	.78	.63	.25	2.1	1.7	.20	.13	.11	.13
5	.10	1.2	.16	.97	.28	.19	2.0	.78	.19	.40	.61	.13
6	.10	.21	.16	.61	1.1	.38	1.4	.71	.32	.12	.11	.13
7	.10	.17	.22	.48	1.2	.21	1.2	.71	.19	.12	.11	.14
8	.10	.16	.21	.42	.34	.28	1.1	1.2	.18	.16	.11	1.2
9	.10	.15	.17	.35	.34	.22	1.0	2.1	.55	.21	.11	1.2
10	.10	.15	.19	.32	.36	.21	.90	.78	.24	.12	.10	.13
11	.10	.24	4.1	.34	.33	.22	.78	.52	.17	.12	.31	.13
12	1.2	.15	1.0	.37	.32	.29	.71	.48	.16	.12	1.0	.12
13	.10	.22	.65	.32	.32	.23	5.4	.43	.16	.41	4.7	.12
14	.10	.17	.65	.28	.30	.19	2.6	.40	.16	.22	.12	.12
15	2.6	.16	4.2	.27	.21	.21	2.5	.37	.15	.12	1.6	.12
16	.12	.13	1.2	.25	.17	.21	1.6	.58	.15	.11	.24	.14
17	.11	.13	3.3	.23	.18	.28	1.4	.34	.15	.11	.34	.12
18	.11	.14	2.9	.28	.17	.25	1.2	.52	.32	.10	.13	6.1
19	.11	.16	2.0	.23	.17	.26	1.1	.36	.16	.11	.12	e.40
20	.11	.57	1.7	.21	.16	.50	.97	.26	.16	.10	1.4	e.27
21	.12	.71	1.4	.20	.16	.90	.84	.26	.15	.12	1.9	e.32
22	.12	.15	1.3	.19	.17	.42	.78	.34	.15	.12	.30	e.27
23	.12	.14	1.2	.19	.16	.39	2.1	.44	.15	.12	.21	e.23
24	.10	.14	2.3	.17	.14	.40	.90	.65	.15	4.6	.16	.28
25	.10	.29	1.4	.18	.15	.43	.78	.37	.25	.12	.14	.11
26	.11	.14	1.0	.17	.14	.43	1.8	.36	.32	.14	.13	.11
27	1.5	.14	.84	.17	.15	.78	1.6	.84	.13	.12	.16	.11
28	.19	.36	.78	.19	.14	.45	.97	.90	.13	.61	.12	2.5
29	3.9	.43	.71	.17	.17	.43	.84	.31	.17	.17	.12	1.7
30	.23	.16	.65	.16	---	.43	.78	.28	.12	.12	.12	.45
31	.19	---	.60	.16	---	3.3	---	.23	---	.11	.20	---
TOTAL	12.95	7.64	35.57	10.37	9.05	13.32	61.75	20.18	6.41	9.71	15.11	17.17
MEAN	0.42	0.25	1.15	0.33	0.31	0.43	2.06	0.65	0.21	0.31	0.49	0.57
MAX	3.9	1.2	4.2	0.97	1.2	3.3	9.7	2.1	0.55	4.6	4.7	6.1
MIN	0.10	0.13	0.14	0.16	0.14	0.17	0.71	0.23	0.12	0.10	0.10	0.11
MED	0.11	0.16	0.78	0.27	0.17	0.28	1.2	0.52	0.17	0.12	0.13	0.13
MGDSM	0.87	0.53	2.39	0.70	0.65	0.90	4.29	1.36	0.45	0.65	1.02	1.19
IN.	1.54	0.91	4.27	1.25	1.09	1.60	7.44	2.41	0.77	1.16	1.82	2.06

Table 7. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts.—Continued

DISCHARGE, IN MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY TOTAL VALUES—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, WATER YEAR (WY)												
MEAN	0.31	0.43	0.61	0.57	0.62	1.07	1.05	0.72	0.90	0.31	0.31	0.30
MAX	0.59	0.76	1.15	0.98	1.23	2.20	2.06	1.33	2.06	0.53	0.49	0.57
(WY)	1999	1998	2003	1999	1998	2001	2004	1998	1998	1998	2004	2004
MIN	0.11	0.19	0.15	0.25	0.27	0.43	0.51	0.36	0.21	0.19	0.20	0.16
(WY)	1998	2002	1999	2002	2002	2004	2002	2001	2004	2002	2002	2001

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	224.7		219.5			
ANNUAL MEAN	0.61		0.60		0.54	
HIGHEST ANNUAL MEAN					0.63	2003
LOWEST ANNUAL MEAN					0.34	2002
HIGHEST DAILY MEAN	4.2	Dec 15	9.7	Apr 2	32.3	Jun 13 1998
LOWEST DAILY MEAN	0.10	Aug 27	0.10	Oct 1	0.05	Oct 1 1997
ANNUAL RUNOFF (MGDSM)	1.28		1.25		1.12	
ANNUAL RUNOFF (INCHES)	26.94		26.32		23.64	
10 PERCENT EXCEEDS	1.4		1.3		1.2	
50 PERCENT EXCEEDS	0.34		0.22		0.26	
90 PERCENT EXCEEDS	0.10		0.11		0.12	

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.5	13.1	13.3	14.0	13.3	13.6	11.7	10.8	11.4	9.9	9.5	9.7
2	13.5	13.0	13.4	13.8	13.5	13.6	11.1	10.0	10.7	9.7	9.0	9.5
3	13.3	12.8	13.0	13.9	13.4	13.7	10.3	9.7	10.1	9.8	8.1	9.4
4	15.1	12.9	13.7	13.6	12.8	13.2	10.9	9.8	10.2	10.4	8.2	9.5
5	13.9	12.9	13.3	12.9	8.4	11.5	10.5	9.2	10.1	8.8	5.7	7.5
6	13.2	12.7	13.0	13.2	11.3	12.7	10.6	9.1	9.8	8.9	7.2	8.5
7	13.2	12.5	12.9	13.1	12.7	12.9	10.3	8.0	9.4	8.3	8.0	8.2
8	13.3	12.8	13.1	12.8	11.4	12.1	10.0	9.3	9.6	8.2	7.9	8.0
9	13.4	13.1	13.3	11.6	11.0	11.3	10.1	8.8	9.6	8.0	7.4	7.7
10	13.4	13.2	13.3	11.9	10.8	11.3	---	---	10.2	8.1	7.3	7.7
11	13.4	13.1	13.3	11.9	9.8	11.2	10.2	4.6	7.2	8.6	7.7	8.1
12	15.7	13.1	14.1	12.7	11.6	12.2	8.1	6.2	7.4	9.2	7.6	8.6
13	14.2	13.2	13.7	13.0	11.9	12.5	8.4	8.0	8.1	9.6	8.1	9.0
14	13.4	12.9	13.2	11.9	10.8	11.2	8.7	0.8	7.8	8.1	7.2	7.7
15	16.5	13.4	14.7	11.2	10.7	11.0	6.8	0.6	4.4	8.1	7.3	7.7
16	13.6	13.1	13.3	11.6	10.8	11.2	8.1	6.8	7.6	7.9	7.2	7.5
17	13.2	12.7	13.0	11.7	11.3	11.5	8.7	6.5	7.8	9.0	7.7	8.4
18	13.2	12.8	13.0	12.1	11.3	11.7	8.0	6.3	7.4	9.3	7.2	8.7
19	12.8	12.5	12.6	12.5	11.8	12.2	8.6	7.8	8.1	9.1	8.6	8.8
20	12.8	12.0	12.5	13.3	8.1	12.3	9.0	8.3	8.6	8.7	8.4	8.6
21	13.3	12.6	13.1	11.8	7.5	10.4	8.9	8.2	8.6	9.0	8.2	8.6
22	13.3	12.7	13.0	12.1	11.1	11.5	9.6	8.7	9.1	9.5	8.5	8.9
23	12.8	12.1	12.4	11.7	10.9	11.3	10.0	9.2	9.6	9.0	8.1	8.6
24	12.6	11.9	12.3	11.9	10.8	11.4	11.9	9.1	9.8	8.7	8.0	8.3
25	12.6	11.7	12.1	11.9	9.4	11.1	10.0	9.1	9.6	8.4	7.7	8.0
26	13.2	12.5	12.9	11.5	10.8	11.2	9.4	8.9	9.1	8.5	7.8	8.2
27	16.5	13.2	14.8	11.9	11.3	11.6	9.7	9.0	9.2	8.9	8.3	8.6
28	14.9	13.3	13.6	14.3	10.4	11.7	9.9	8.8	9.3	9.1	7.6	8.7
29	17.6	12.5	14.2	14.9	11.4	12.6	10.2	9.1	9.6	9.1	8.7	8.9
30	14.0	13.0	13.4	11.7	11.1	11.4	10.6	9.6	9.9	8.9	8.5	8.8
31	13.6	12.7	13.2	---	---	---	10.1	9.6	9.8	9.0	8.5	8.8
MONTH	17.6	11.7	13.2	14.9	7.5	11.9	---	---	9.0	10.4	5.7	8.5

Table 7. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts.—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	9.2	8.3	8.9	9.7	8.7	9.2	7.0	5.4	6.1	13.7	11.6	12.5
2	9.5	8.5	9.0	10.0	9.2	9.5	6.6	5.5	6.1	13.5	12.2	12.8
3	9.6	1.0	8.3	9.6	9.0	9.3	7.4	6.4	7.0	17.9	12.5	13.8
4	8.5	1.6	6.7	9.5	7.7	8.9	8.3	7.2	7.8	14.5	11.5	12.4
5	9.1	8.4	8.8	9.4	8.9	9.1	8.5	6.3	7.4	12.5	10.9	11.7
6	9.1	1.2	5.8	9.8	7.6	9.3	9.3	6.8	7.8	13.3	11.4	12.2
7	6.3	2.6	4.0	9.4	8.5	8.9	9.9	7.7	8.5	14.0	12.0	12.7
8	7.4	6.3	6.9	9.1	6.9	8.2	10.4	8.0	9.0	13.3	11.3	12.0
9	8.5	7.4	7.9	8.7	8.2	8.5	10.3	8.6	9.4	13.1	11.6	12.3
10	8.8	7.8	8.4	9.3	8.4	8.7	10.6	8.6	9.4	13.1	11.6	12.3
11	8.8	8.3	8.5	9.3	8.4	8.8	10.2	9.0	9.5	13.7	12.1	12.7
12	9.0	8.1	8.5	9.0	7.1	8.2	10.7	9.1	9.7	13.6	12.3	12.9
13	9.2	8.6	8.8	8.9	8.0	8.4	9.6	6.5	8.1	12.8	12.0	12.5
14	9.3	8.7	9.0	8.8	7.8	8.3	13.0	7.3	9.7	13.0	11.8	12.2
15	8.9	8.0	8.5	9.5	8.6	9.0	10.3	8.5	9.2	13.4	12.3	12.8
16	8.9	7.7	8.3	8.9	6.2	8.2	10.6	8.0	9.1	18.0	12.6	13.9
17	9.1	8.0	8.6	8.0	5.3	7.1	11.6	8.5	9.9	13.0	12.4	12.6
18	9.2	8.8	9.0	8.6	7.8	8.1	12.1	10.2	10.9	20.0	12.3	12.9
19	9.2	8.6	9.0	8.6	7.8	8.2	12.7	10.2	11.3	19.1	12.5	13.8
20	9.5	8.8	9.1	8.9	5.2	7.7	12.8	10.9	11.7	13.4	12.1	12.4
21	9.5	9.3	9.4	8.8	4.2	6.9	12.2	10.4	11.1	12.7	12.2	12.4
22	9.4	9.1	9.3	7.7	6.2	6.8	13.4	10.9	11.9	14.9	12.0	12.5
23	9.2	8.7	9.0	8.5	6.5	7.4	14.1	10.7	11.8	13.1	11.9	12.5
24	9.3	8.5	8.9	9.3	7.4	8.2	12.8	10.5	11.3	14.8	12.1	12.9
25	9.1	8.4	8.8	9.3	8.3	8.7	11.9	9.8	10.7	13.3	12.1	12.5
26	9.1	8.5	8.8	10.6	8.8	9.4	11.8	8.9	10.6	12.4	12.0	12.1
27	9.3	8.5	8.8	10.6	8.9	9.7	12.9	10.8	11.7	13.0	12.0	12.6
28	9.5	8.5	9.0	9.4	8.3	9.0	12.2	10.5	11.2	15.9	12.4	13.7
29	9.5	8.6	9.0	10.1	8.1	8.9	13.2	10.3	11.5	13.4	12.2	12.5
30	---	---	---	9.7	8.4	8.7	13.6	11.2	12.2	12.5	11.9	12.2
31	---	---	---	8.9	5.5	7.7	---	---	---	12.2	11.8	12.1
MONTH	9.6	1.0	8.4	10.6	4.2	8.5	14.1	5.4	9.7	20.0	10.9	12.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13.4	11.9	12.4	12.6	12.4	12.5	13.8	13.5	13.7	14.8	14.4	14.6
2	19.9	11.9	13.7	20.2	12.5	14.1	13.6	13.4	13.5	14.5	14.1	14.3
3	13.9	12.4	12.9	12.8	12.6	12.6	13.6	13.4	13.5	14.5	14.0	14.2
4	12.7	11.9	12.3	12.8	12.5	12.6	13.5	13.4	13.4	14.4	14.2	14.3
5	12.3	12.0	12.1	22.7	12.5	15.1	20.5	13.4	15.7	14.2	13.8	14.0
6	17.4	11.9	12.8	13.6	12.8	13.1	13.8	13.4	13.5	14.0	13.5	13.8
7	12.7	12.1	12.3	12.9	12.7	12.8	13.4	13.2	13.3	14.2	13.7	13.9
8	12.6	12.1	12.3	18.5	12.6	13.7	13.3	13.1	13.2	23.8	14.0	18.5
9	25.0	12.2	13.6	20.8	12.9	14.5	13.3	13.2	13.2	20.1	15.5	18.2
10	20.0	12.8	14.7	12.9	12.8	12.8	13.4	13.2	13.3	16.0	14.7	15.3
11	12.8	12.2	12.4	12.8	12.6	12.7	26.6	13.3	15.8	14.7	14.3	14.4
12	12.3	11.9	12.1	12.7	12.6	12.6	25.2	13.6	14.7	14.4	13.9	14.2
13	12.4	12.0	12.2	19.4	12.6	14.5	24.9	17.4	20.2	14.4	14.1	14.3
14	12.3	12.1	12.2	17.6	13.2	15.2	17.4	15.7	16.5	14.2	13.9	14.0
15	12.7	12.2	12.4	13.2	12.9	13.0	22.6	15.5	18.8	14.0	13.6	13.8
16	12.6	12.3	12.4	---	---	12.8	18.8	15.7	16.6	16.9	13.9	14.5
17	12.5	12.3	12.4	12.8	12.7	12.8	19.0	15.3	16.4	14.3	14.1	14.2
18	20.8	12.4	13.8	12.8	12.7	12.7	15.5	14.9	15.2	20.8	14.2	16.9
19	12.7	12.5	12.6	13.0	12.7	12.8	15.0	14.8	14.9	16.5	14.9	15.5
20	12.6	12.2	12.3	12.8	12.7	12.7	24.6	14.6	16.4	15.2	14.5	14.8
21	12.5	12.1	12.3	12.8	12.7	12.7	24.4	17.3	20.3	15.0	14.7	14.8
22	12.4	12.2	12.3	13.0	12.6	12.7	19.3	16.4	17.3	14.9	14.6	14.7
23	12.7	12.3	12.4	13.0	12.6	12.8	16.4	15.8	16.1	14.9	14.5	14.8
24	12.6	12.2	12.4	24.5	12.6	19.1	15.8	15.0	15.4	14.6	14.3	14.4
25	21.1	12.3	13.1	15.7	13.8	14.4	15.1	14.6	14.8	14.6	14.2	14.4

Table 7. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts.—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
26	23.3	12.7	15.0	15.5	13.4	14.3	15.3	14.3	14.6	16.1	14.3	14.5
27	14.1	12.6	12.9	13.8	13.4	13.5	16.9	14.5	15.2	14.4	13.9	14.2
28	12.6	12.4	12.5	20.4	13.4	15.6	14.9	14.6	14.7	19.5	14.1	17.0
29	16.1	12.4	13.2	19.6	13.7	14.9	15.3	14.8	15.0	18.1	15.2	16.0
30	12.6	12.4	12.5	13.7	13.6	13.6	16.0	14.6	14.8	16.9	14.8	15.4
31	---	---	---	14.1	13.5	13.7	21.4	14.7	16.2	---	---	---
MONTH	25.0	11.9	12.8	---	---	13.6	26.6	13.1	15.4	23.8	13.5	14.9

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1,200	1,190	1,200	1,140	1,080	1,110	1,170	1,120	1,150	1,060	1,040	1,050
2	1,200	1,190	1,190	1,160	1,080	1,130	1,210	1,170	1,190	9,300	1,060	2,180
3	1,200	1,190	1,190	1,190	146	811	1,240	1,210	1,220	3,170	985	1,250
4	1,350	68	765	1,170	1,090	1,150	1,270	1,240	1,250	1,260	678	940
5	1,150	642	1,050	1,180	88	680	1,290	1,270	1,280	10,300	718	3,020
6	1,170	1,150	1,160	964	408	739	17,400	1,290	4,220	5,780	1,060	2,060
7	1,180	1,170	1,170	1,110	964	1,050	30,600	1,540	10,400	2,460	1,120	1,290
8	1,180	1,170	1,170	1,160	1,110	1,140	17.900	4,960	10,400	1,160	1,130	1,150
9	1,180	1,170	1,170	1,200	1,160	1,180	4,960	2,290	3,340	1,230	1,160	1,200
10	1,170	1,170	1,170	1,220	1,200	1,210	---	---	4,680	1,270	1,230	1,250
11	1,170	1,160	1,170	1,260	902	1,150	8,160	643	4,010	1,280	1,160	1,250
12	1,170	44	626	1,090	906	991	1,260	1,000	1,170	21,000	1,160	6,990
13	1,100	549	954	1,110	961	1,040	1,250	1,190	1,220	4,040	1,310	1,500
14	1,130	1,100	1,120	1,210	1,060	1,150	14,000	1,140	1,650	1,320	1,300	1,310
15	1,140	41	534	1,210	1,200	1,210	13,500	791	1,690	1,560	1,300	1,360
16	1,040	882	987	1,230	1,210	1,220	970	782	931	1,370	1,330	1,350
17	1,140	1,010	1,100	1,260	1,230	1,250	1,350	262	845	1,360	1,320	1,340
18	1,220	1,070	1,150	1,270	1,260	1,270	949	435	884	15,700	1,320	4,810
19	1,260	1,150	1,240	1,260	1,250	1,260	970	934	953	3,110	1,430	1,760
20	1,270	1,220	1,260	1,250	184	716	996	969	982	1,430	1,390	1,400
21	1,280	1,190	1,260	793	146	381	1,010	995	1,010	1,440	1,380	1,390
22	1,260	1,200	1,250	1,030	793	947	1,020	1,010	1,010	1,390	1,370	1,380
23	1,270	1,040	1,180	1,100	1,030	1,060	1,030	999	1,010	1,380	1,320	1,370
24	1,260	1,170	1,240	1,180	1,100	1,140	1,120	133	836	1,380	1,360	1,360
25	1,260	1,250	1,260	1,210	465	756	903	459	790	1,400	1,370	1,380
26	1,260	1,250	1,260	1,220	1,040	1,160	947	903	930	1,390	1,380	1,380
27	1,260	58	508	1,240	1,220	1,230	977	947	962	1,500	1,370	1,390
28	1,130	139	823	1,260	394	974	990	977	984	21,600	1,380	9,410
29	1,140	54	361	916	192	514	1,000	987	994	11,400	1,710	4,990
30	983	694	880	1,120	916	1,040	1,030	991	1,000	1,720	1,490	1,570
31	1,080	983	1,040	---	---	---	1,040	1,030	1,040	1,510	1,410	1,470
MONTH	1,350	41	1,050	1,270	88	1,020	---	---	2,070	21,600	678	2,110

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1,480	1,390	1,460	1,320	1,250	1,290	905	525	632	1,070	1,030	1,050
2	1,460	1,430	1,440	1,300	1,180	1,260	953	610	843	1,080	1,040	1,060
3	20,300	1,430	2,280	1,260	1,180	1,220	1,100	953	1,040	1,080	236	827
4	3,580	1,440	2,000	5,560	1,200	1,920	1,150	982	1,120	1,040	120	664
5	1,440	1,370	1,410	1,290	1,240	1,270	1,180	918	1,080	978	907	952
6	28,100	1,370	7,890	2,760	822	1,110	1,210	1,180	1,190	1,020	978	995
7	14,000	1,450	5,280	1,250	1,140	1,220	1,220	1,210	1,220	1,070	1,010	1,030
8	1,550	1,470	1,510	3,190	1,240	1,850	1,240	1,220	1,230	1,080	468	774
9	1,470	1,380	1,420	2,110	1,160	1,490	1,250	1,240	1,240	678	217	458
10	1,410	1,200	1,350	1,320	1,170	1,280	1,280	1,250	1,270	1,050	678	859

Table 7. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts.—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
11	1,370	1,340	1,360	1,290	1,260	1,280	1,300	1,280	1,290	1,090	1,050	1,070
12	1,400	1,370	1,390	4,710	1,260	1,720	1,310	1,300	1,310	1,120	1,080	1,100
13	1,390	1,370	1,390	1,600	1,230	1,330	1,320	501	800	1,160	1,120	1,130
14	1,390	1,380	1,390	1,320	1,280	1,310	886	565	775	1,170	1,140	1,160
15	1,430	1,380	1,400	1,310	1,270	1,290	955	683	838	1,210	1,160	1,180
16	1,440	1,420	1,430	23,000	1,280	5,930	1,040	955	999	1,210	359	983
17	1,450	1,430	1,440	29,800	7,820	19,100	1,080	1,040	1,060	1,200	1,100	1,160
18	1,450	1,450	1,450	7,820	1,950	3,080	1,120	1,080	1,100	1,210	251	1,160
19	1,450	1,440	1,450	1,950	1,380	1,530	1,140	1,120	1,120	1,190	260	987
20	1,440	1,430	1,440	5,320	942	1,840	1,150	1,130	1,140	1,230	1,180	1,200
21	1,430	1,390	1,420	2,280	863	1,200	1,160	1,140	1,150	1,260	1,210	1,230
22	1,410	1,370	1,390	1,450	1,290	1,410	1,170	1,140	1,150	1,260	559	1,090
23	1,390	1,380	1,380	1,470	1,410	1,450	1,220	193	674	1,210	387	958
24	1,380	1,360	1,370	1,430	1,180	1,370	1,050	924	992	1,170	243	851
25	1,380	1,370	1,380	1,400	1,340	1,370	1,090	1,040	1,070	1,100	244	854
26	1,380	1,370	1,380	1,350	1,320	1,340	1,070	170	633	1,120	678	987
27	1,400	1,370	1,380	1,810	704	1,170	890	270	682	1,110	131	771
28	1,390	1,370	1,380	1,350	1,260	1,320	985	749	923	1,070	156	665
29	1,370	1,280	1,340	1,360	1,350	1,360	1,010	979	995	1,080	802	962
30	---	---	---	1,380	1,320	1,360	1,040	1,000	1,020	1,160	1,070	1,090
31	---	---	---	1,640	511	1,030	---	---	---	1,250	1,160	1,200
MONTH	28,100	1,200	1,810	29,800	511	2,150	1,320	170	1,020	1,260	120	982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1,250	632	981	1,240	1,180	1,200	1,160	1,150	1,150	1,220	1,210	1,220
2	1,190	202	887	1,260	425	898	1,160	1,150	1,160	1,230	1,220	1,220
3	1,130	643	1,000	1,240	1,160	1,210	1,160	1,140	1,150	1,230	1,220	1,220
4	1,230	1,130	1,200	1,270	1,240	1,260	1,330	1,100	1,180	1,220	1,210	1,220
5	1,290	1,230	1,270	1,290	217	869	1,330	71	895	1,210	1,210	1,210
6	1,310	720	1,120	1,200	921	1,130	1,310	1,270	1,300	1,210	1,200	1,210
7	1,220	768	1,090	1,240	1,200	1,220	1,330	1,290	1,320	1,220	1,200	1,200
8	1,280	1,220	1,260	1,260	1,070	1,200	1,330	1,300	1,320	1,220	54	625
9	1,310	197	1,180	1,130	431	835	1,330	1,310	1,320	1,050	36	553
10	1,170	335	887	1,190	1,130	1,170	1,330	1,310	1,320	1,110	985	1,070
11	1,300	1,170	1,260	1,230	1,190	1,210	1,330	146	1,080	1,120	1,100	1,110
12	1,340	1,300	1,320	1,270	1,230	1,260	1,290	25	1,170	1,120	1,110	1,120
13	1,340	1,330	1,340	1,280	343	1,040	1,010	21	625	1,120	1,110	1,110
14	1,330	1,320	1,330	980	343	589	1,200	1,010	1,100	1,120	1,110	1,120
15	1,330	1,320	1,330	1,110	980	1,080	1,220	38	623	1,120	1,120	1,120
16	1,360	1,320	1,340	---	---	1,120	1,130	383	933	1,120	765	1,040
17	1,360	1,320	1,340	1,230	1,140	1,190	1,190	198	885	1,110	1,080	1,110
18	1,330	276	935	1,240	1,230	1,240	1,250	1,190	1,220	1,110	25	353
19	1,260	1,200	1,230	1,250	1,240	1,240	1,290	1,250	1,270	940	589	798
20	1,310	1,260	1,300	1,240	1,230	1,240	1,300	45	1,080	990	931	958
21	1,300	1,300	1,300	1,240	1,230	1,230	965	41	489	1,080	981	1,020
22	1,300	1,280	1,290	1,230	1,210	1,220	989	551	844	1,130	1,070	1,100
23	1,300	1,280	1,290	1,220	1,170	1,190	1,110	983	1,040	1,120	1,080	1,100
24	1,300	1,290	1,290	1,180	25	539	1,200	1,110	1,150	1,150	1,120	1,140
25	1,300	400	1,230	1,130	950	1,080	1,220	1,190	1,200	1,160	1,150	1,160
26	1,190	298	780	1,290	928	1,100	1,240	1,090	1,220	1,380	1,160	1,180
27	1,210	594	1,080	1,160	1,120	1,150	1,250	608	1,100	1,160	1,160	1,160
28	1,250	1,210	1,240	1,160	84	797	1,240	1,230	1,240	1,160	40	540
29	1,250	1,060	1,130	1,130	137	910	1,250	1,170	1,200	687	76	369
30	1,180	1,110	1,160	1,160	1,130	1,140	1,240	1,160	1,230	830	475	745
31	---	---	---	1,160	1,150	1,160	1,220	385	1,020	---	---	---
MONTH	1,360	197	1,180	---	---	1,090	1,330	21	1,090	1,380	25	1,000

Table 7. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts.—Continued

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS, AND PESTICIDES

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Date	Time	Turbidity, water, unfiltered, broad band light source (400–680 nm), detectors at multiple angles including 90 ± 30 degrees, NTRU P63676()	Dissolved oxygen, water, unfiltered (mg/L) (P00300)	pH, water, unfiltered, field, standard units (mg/L) (P00400)	Specific conductance, water, unfiltered (µS/cm at 25°C) (P00095)	Calcium, water, filtered (mg/L) (P00915)	Magnesium, water, filtered (mg/L) (P00925)	Potassium, water, filtered (mg/L) (P00935)	Sodium, water, filtered (mg/L) (P00930)
8-27-2004	1315	2.8	8.4	6.5	1,440	56.9	10.4	3.56	196

Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, (mg/L as $CaCO_3$) (P29801)	Chloride, water, filtered (mg/L) (P00940)	Sulfate, water, filtered (mg/L) (P00945)	Phosphorus, water, unfiltered, (mg/L) (P00665)	Total nitrogen (nitrate + nitrite + ammonia + organic-N), water, unfiltered, analytically determined (mg/L as N) (P62855)	*Escherichia coli*, m-TEC MF method, water, colonies per 100 mL (P31633)	Cadmium, water, unfiltered (µg/L) (P01027)	Chromium, water, unfiltered, recoverable (µg/L) (P01034)	Copper, water, unfiltered, recoverable (µg/L) (P01042)	Iron, water, unfiltered, recoverable (µg/L) (P01045)
51	386	30.2	<0.01	2.45	58	0.15	<0.8	2.5	70

Lead, water, unfiltered, recoverable (µg/L) (P01051)	Manganese, water, unfiltered, recoverable (µg/L) (P01055)	Nickel, water, unfiltered, recoverable (µg/L) (P01067)	Zinc, water, unfiltered, recoverable (µg/L) (P01092)	2,4,5-T, surrogate, Schedule 9060/2060, water, filtered, percent recovery (P99958)	2,4-D methyl ester, water, filtered, recoverable (µg/L) (P50470)	2,4-D, water, filtered, recoverable (µg/L) (P39732)	2,4-DB, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38746)	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable (µg/L) (P04040)	2-Chloro-6-ethylamino-4-amino-s-triazine, water, filtered, recoverable, (µg/L) (P04038)
0.16	287	3.8	21	106	<0.009	<0.02	<0.02	<0.03	<0.01

2-Hydroxy-4-isopropylamino-6-ethylamino-s-triazine, water, filtered, recoverable (µg/L) (P50355)	3-Hydroxy carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49308)	3-Keto-carbofuran, water, filtered, recoverable (µg/L) (P50295)	9*H*-Fluorene, water, unfiltered, recoverable, (µg/L) (P34381)	Acenaph-thene, water, unfiltered, recoverable (µg/L) (P34205)	Acenapht-hylene, water, unfiltered, recoverable (µg/L) (P34200)	Acifluorfen, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49315)	Aldicarb sulfone, water, filtered (0.7 micron glass fiber filter), recoverable, (µg/L) (P49313)	Aldicarb sulfoxide, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49314)
<0.008	<0.006	<0.014	<2	<2	<2	<0.007	<0.02	<0.008

Table 7. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts.—Continued

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS, AND PESTICIDES—Continued

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Aldicarb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49312)	Anthracene, water, unfiltered, recoverable (µg/L) (P34220)	Atrazine, water, filtered, recoverable (µg/L) (P39632)	Barban, surrogate, Schedules 2060/9060, water, filtered, percent recovery (P90640)	Bendiocarb, water, filtered, recoverable (µg/L) (P50299)	Benomyl, water, filtered, recoverable (µg/L) (P50300)	Bensul furon, water, filtered, recoverable (µg/L) (P61693)	Bentazon, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38711)	Benzo[*a*] anthracene, water, unfiltered, recoverable (µg/L) (P34526)	Benzo[*a*] pyrene, water, unfiltered, recoverable (µg/L) (P34247)
<0.04	<2	<0.009	71.9	<0.03	<0.004	<0.02	<0.01	<2	<1

Benzo[*b*] fluoranthene, water, unfiltered, recoverable (µg/L) (P34230)	Benzo[*g,h,i*] perylene, water, unfiltered, recoverable (µg/L) (P34521)	Benzo[*k*] fluoranthene, water, unfiltered, recoverable (µg/L) (P34242)	Bromacil, water, filtered, recoverable (µg/L) (P04029)	Bromoxynil, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49311)	Caffeine, water, filtered, recoverable (µg/L) (P50305)	Caffeine-13C, surrogate, Schedule 9060/2060, water, filtered, percent recovery (P99959)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49310)	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49309)
<2	<3	<2	<0.03	<0.02	<0.0096	101	<0.03	<0.006

Chloramben methyl ester, water, filtered, recoverable (µg/L) (P61188)	Chlori-muron, water, filtered, recoverable (µg/L) (P50306)	Chloro-diamino-s-triazine, water, filtered, recoverable (µg/L) (P04039)	Chloro-thalonil, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49306)	Chrysene, water, unfiltered, recoverable (µg/L) (P34320)	Clopyralid, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49305)	Cycloate, water, filtered, recoverable (µg/L) (P04031)	Dacthal monoacid, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49304)	Dibenzo[*a,h*] anthracene, water, unfiltered, recoverable (µg/L) (P34556)	Dicamba, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38442)
<0.02	<0.010	E0.01	<0.04	<3	<0.01	<0.01	<0.01	<3	<0.01

Dichlorprop, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49302)	Dinoseb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49301)	Diphenamid, water, filtered, recoverable (µg/L) (P04033)	Diuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49300)	Fenuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49297)	Flumet-sulam, water, filtered, recoverable (µg/L) (P61694)	Fluometuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38811)	Fluoranthene, water, unfiltered, recoverable (µg/L) (P34376)	Imazaquin, water, iltered, recoverable (µg/L) (P50356)
<0.01	<0.01	<0.03	E0.01	<0.03	<0.01	<0.03	<2	<0.02

Table 7. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts.—Continued

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS, AND PESTICIDES—Continued

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Imaze-thapyr, water, filtered, recoverable (µg/L) (P50407)	Imida-cloprid, water, filtered, recoverable (µg/L) (P61695)	Indeno [1,2,3-*cd*] pyrene, water, unfiltered, recoverable (µg/L) (P34403)	Linuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38478)	MCPA, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38482)	MCPB, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38487)	Metalaxyl, water, filtered, recoverable (µg/L) (P50359)	Methiocarb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38501)	Methomyl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49296)	Metsul-furon, water, filtered, recoverable (µg/L) (P61697)
<0.02	<0.007	<3	<0.01	<0.02	<0.01	<0.02	<0.008	<0.004	<0.03

N-(4-Chloro-phenyl)-N'-methylurea, water, filtered, recoverable (µg/L) (P61692)	Neburon, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49294)	Nico-sulfuron, water, filtered, recoverable (µg/L) (P50364)	Nitro-benzene, water, unfiltered, recoverable (µg/L) (P34447)	Norflur-azon, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49293)	Oryzalin, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49292)	Oxamyl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38866)	Phenan-threne, water, unfiltered, recoverable (µg/L) (P34461)	Picloram, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49291)	Propham, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49236)
<0.02	<0.01	<0.01	<2	E0.11	<0.02	<0.01	<2	<0.02	<0.010

Propiconazole, water, filtered, recoverable (µg/L) (P50471)	Propoxur, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38538)	Pyrene, water, unfiltered, recoverable (µg/L) (P34469)	Siduron, water, filtered, recoverable (µg/L) (P38548)	Sulfo-meturon, water, filtered, recoverable (µg/L) (P50337)	Tebuthiuron, water, filtered (0.7 micron glass fiber filter) (µg/L) (P82670)	Terbacil, water, filtered, recoverable (µg/L) (P04032)	Triclopyr, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49235)	Naphthalene, water, unfiltered, recoverable (µg/L) (P34696)
<0.02	<0.008	<2	<0.02	0.012	<0.006	<0.010	<0.02	<2

CONCENTRATIONS OF INORGANIC AND ORGANIC CONSTITUENTS IN BED-SEDIMENT SAMPLES

REMARKS.--E, estimated; -LR, laboratory replicate sample; -R, replicate sample; %, parts per hundred; <, value is less than value shown; >, value is greater than value shown; --, no data.

Particle-size composition (mm)	Date	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorus, total, as P (%)	Carbon, organic, total (%)	Aluminum (%)	Antimony (ppm)	Arsenic (ppm)	Barium (ppm)
< 0.062	3-28-2003	0.68	0.95	0.1	0.31	0.12	6.7	1.73	<5	19	179
0.062 < 0.250	3-28-2003	.28	.26	.05	.13	.05	1.24	.6	<5	4	44
0.250 < 2.00	3-28-2003	.13	.15	.03	.09	.02	.31	.38	<5	<3	23
< 2.00	3-28-2003	.15	.17	.04	.11	.02	.96	.43	<5	<3	37
<2.00 -R	3-28-2003	.2	.21	.03	.11	.03	--	[651]	<5	7	41

Table 7. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts.—Continued

CONCENTRATIONS OF INORGANIC AND ORGANIC CONSTITUENTS IN BED-SEDIMENT SAMPLES—Continued

REMARKS.--E, estimated; -LR, laboratory replicate sample; -R, replicate sample; %, parts per hundred; <, value is less than value shown; >, value is greater than value shown; --, no data.

Particle-size composition (mm)	Beryllium (ppm)	Bismuth (ppm)	Cadmium (ppm)	Chromium (ppm)	Cobalt (ppm)	Copper (ppm)	Iron (%)	Lanthanum (ppm)	Lead (ppm)	Lithium (ppm)	Manganese (ppm)	Molybdenum (ppm)
< 0.062	0.7	<5	<1	265	13	194	3.27	28.1	206	30	598	7
0.062 < 0.250	<.5	<5	<1	297	6	46.2	1.76	13.7	74	8	300	3
0.250 < 2.00	<.5	<5	<1	232	3	19.3	1.1	7.4	35	6	156	2
< 2.00	<.5	<5	<1	377	3	25.6	1.18	7.9	64	6	181	3
<2.00 -R	<.5	<5	<1	197	4	27.5	1.49	10.5	47	8	206	3

Particle-size composition (mm)	Nickel (ppm)	Scandium (ppm)	Silver (ppm)	Strontium (ppm)	Tin (ppm)	Titanium (%)	Tungsten (ppm)	Vanadium (ppm)	Yttrium (ppm)	Zinc (ppm)	Zirconium (ppm)
< 0.062	42	4.3	0.7	41.3	13	0.11	<10	67	16.3	412	11.2
0.062 < 0.250	21	1.9	.3	17.4	<10	.06	<10	28	7.7	104	4.8
0.250 < 2.00	12	1	<.2	10	<10	.03	<10	14	3.8	49.6	3.6
< 2.00	16	1	<.2	12.2	<10	.03	<10	15	3.8	70.9	3.7
<2.00 -R	15	1.3	<.2	15.2	<10	.05	<10	20	5.1	67.7	4.5

CONCENTRATIONS OF SEMIVOLATILE COMPOUNDS IN BED-SEDIMENT SAMPLES

REMARKS.--E, estimated; %-rec, percent of surrogate recovery; <, value is less than value shown; --, no data.

Particle-size composition (mm)	Date	Phenol (ppb)	p-cresol (ppb)	Naphthalene (ppb)	C1-128 isomers, methylated naphthalenes (ppb)	2-ethylnaphthalene (ppb)	2,6-dimethylnaphthalene (ppb)	1,6-dimethylnaphthalene (ppb)	C2-128 isomers, C2-alkyated naphthalenes (ppb)	Acenaphthylene (ppb)	1,2-dimethylnaphthalene (ppb)
0.250 < 2.00	3-28-2003	<50	E1.2	E10.2	E23.3	E3.6	E7.1	E6.2	E36.7	E20.5	E4.0
< 0.250	3-28-2003	E75.8	E87.0	159	E158	E31.2	164	E58.5	E486	245	E32.7

Particle-size composition (mm)	Acenaphthene (ppb)	C3-128, C3-alkylated naphthalenes (ppb)	2,3,6-trimethylnaphthalene (ppb)	9*H*-Fluorene (ppb)	C4-128, C4-alkylated naphthalenes (ppb)	1-methyl-9*H*-Fluorene (ppb)	Phenanthrene (ppb)	Anthracene (ppb)	C5-128, C5-alkylated naphthalenes (ppb)	2-methylanthracene (ppb)
0.250 < 2.00	66.5	E58.3	E5.6	97	E11.1	E11.6	964	158	<50	E25.9
< 0.250	747	E728	E42.4	1,180	E431	129	12,400	1,200	<230	222

Table 7. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts.—Continued

CONCENTRATIONS OF SEMIVOLATILE COMPOUNDS IN BED-SEDIMENT SAMPLES—Continued

REMARKS.--E, estimated; %-rec, percent of surrogate recovery; <, value is less than value shown; --, no data.

Particle-size composition (mm)	4,5-methyl-enephenan-threne (ppb)	C1-178 isomers, methylated phenanthrene/ anthracenes (ppb)	1-methyl-phenan-threne (ppb)	C2-178 isomers, C2-alkylated phenanthrene/ anthracenes (ppb)	Fluoran-thene (ppb)	Pyrene (ppb)	C3-178 isomers, C3-alkylated phenanthrene/ anthracenes (ppb)	C4-178 isomers, C4-alkylated phenanthrene/ anthracenes (ppb)	1-methyl-pyrene (ppb)	C1-202 isomers, methylated fluoranthene/ pyrenes (ppb)
0.250 < 2.00	123	E326	50	E131	1,650	1,150	E29.0	<50	E44.7	E700
< 0.250	1,380	E4,640	612	E1,990	21,100	14,800	E520	<220	553	E8,960

Particle-size composition (mm)	C2-202 isomers, C2-alkylated fluoranthene/ pyrenes (ppb)	C5-178 isomers, C5-alkylated phenanthrene/ anthracenes (ppb)	Benzo[*a*] anthracene (ppb)	Chrysene (ppb)	C3-202 isomers, C3-alkylated fluoranthene/ pyrenes (ppb)	C1-228 isomers, methylated benzo[*a*] anthracene/ chrysenes (ppb)	C4-202 isomers, C4-alkylated fluoranthene/ pyrenes (ppb)	C5-202 isomers, C5-alkylated fluoranthene/ pyrenes (ppb)	C2-228 isomers, C2-alkylated benzo[*a*] anthracene/ chrysenes (ppb)
0.250 < 2.00	<390	<50	572	715	<170	<270	<100	<60	<120
< 0.250	<8,350	<220	6,220	10,600	<2,350	<4,620	<1,830	<800	<2,200

Particle-size composition (mm)	Benzo[*b*] fluoranthene (ppb)	Benzo[*k*] fluoranthene (ppb)	Benzo[*e*] pyrene (ppb)	Benzo[*a*] pyrene (ppb)	Perylene (ppb)	C1-252 isomers, C1-methylated benzopyrene/ perylenes (ppb)	C3-228 isomers, C3-benzo[*a*] anthracene/ chrysenes (ppb)	C2-252 isomers, C2-alkylated benzopyrene/ perylenes (ppb)	C4-228 isomers, C4-benzo[*a*] anthracene/ chrysenes (ppb)	Benzo [*g,h,i*] perylene (ppb)
0.250 < 2.00	659	550	456	565	158	E368	<60	<160	<90	395
< 0.250	9,170	7,300	6,540	7,130	1,790	E5,780	<930	<3,370	<1,340	5,930

Particle-size composition (mm)	Indeno [1,2,3-*cd*] pyrene (ppb)	Dibenzo [*a,h*] anthracene (ppb)	C3-252 isomers, C3-alkylated benzopyrene/ perylenes (ppb)	C4-252 isomers, C4-alkylated benzopyrene/ perylenes (ppb)	C5-228 isomers, C5-benzo[*a*] anthracene/ chrysenes (ppb)	C5-252 isomers, C5-alkylated benzopyrene/ perylenes (ppb)	Coronene (ppb)	Nitro-benzene-d5 (%-rec)	2-fluoro-biphenyl (%-rec)	Terphenyl-d14 (%-rec)
0.250 < 2.00	486	84.4	<90	<90	<50	<120	E63.3	76.67	71.94	103.33
< 0.250	6,890	1,140	<1,210	<730	<850	<1,950	E1,450	76.33	60.56	136.25

Table 7. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104455, Stony Brook, unnamed tributary 1, near Waltham, Massachusetts.—Continued

CONCENTRATIONS OF ELEMENTS IN SAMPLES OF SOIL

REMARKS.--Latitude and Longitude: In degrees, minutes, and seconds; -LR, laboratory replicate sample; %, parts per hundred; <, concentration is less than value shown.

Sample identifier	Latitude ° ′ ″	Longitude ° ′ ″	Date	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorus, total, as P (%)	Aluminum (%)	Antimony (ppm)	Arsenic (ppm)
01104455A	42 22 13	71 16 13	6-10-2003	0.14	0.32	0.03	0.13	0.07	2.15	<5	9
01104455B	42 22 56.4	71 15 49.3	6-10-2003	.56	.62	.04	.15	.08	2.42	<5	5
01104455C	42 23 02.3	71 15 46.7	6-10-2003	.65	.65	.06	.23	.08	2.27	<5	7
01104455C-R	42 22 49.2	71 15 57.4	6-10-2003	.64	.72	.06	.22	.08	2.32	<5	6
01104455D	42 22 49.2	71 15 57.4	6-10-2003	.44	.73	.03	.14	.08	2.91	<5	5
01104455E	42 23 18.2	71 15 37.8	6-10-2003	.38	.43	.04	.12	.06	3.12	<5	4

Sample identifier	Barium (ppm)	Beryllium (ppm)	Bismuth (ppm)	Cadmium (ppm)	Chromium (ppm)	Cobalt (ppm)	Copper (ppm)	Iron (%)	Lanthanum (ppm)	Lead (ppm)	Lithium (ppm)	Manganese (ppm)
01104455A	44	0.8	<5	<1	330	6	14.1	1.87	30.7	10	16	234
01104455B	46	.6	<5	<1	258	10	20.5	2.53	22	50	14	366
01104455C	54	.7	<5	<1	368	12	36.2	2.99	21.8	43	16	393
01104455C-R	51	.7	<5	<1	490	15	35.9	3.49	21.7	45	17	429
01104455D	63	1.2	<5	<1	226	11	17.2	2.82	21.8	117	18	528
01104455E	50	1.4	<5	<1	341	8	17.8	2.54	28	22	14	327

Sample identifier	Molyb-denum (ppm)	Nickel (ppm)	Scandium (ppm)	Silver (ppm)	Strontium (ppm)	Tin (ppm)	Titanium (%)	Tungsten (ppm)	Vanadium (ppm)	Yttrium (ppm)	Zinc (ppm)	Zirconium (ppm)
01104455A	3	21	3.7	<0.2	12.7	<10	0.11	<10	31	11.8	36.4	7
01104455B	3	27	4.2	<.2	42.5	<10	.16	<10	66	12.9	73.2	5.5
01104455C	3	31	5.6	<.2	40.5	<10	.17	<10	67	14.8	80.8	7.1
01104455C-R	3	36	5.8	<.2	49.3	<10	.18	<10	73	14.6	85	6.4
01104455D	2	30	5	.3	33.4	<10	.19	<10	73	15.5	85.9	5.4
01104455E	3	27	3.5	<.2	23.6	<10	.18	<10	55	22.6	53.2	6.7

PARTICLE-SIZE DISTRIBUTION OF COMPOSITED SAMPLES OF SOIL BY PERCENT

REMARKS.--<, Actual value is less than value shown; >, actual value is greater than value shown

Size range in millimeters			
<0.063	0.250 > 0.063	2.00 > 0.250	>2.00
34.4	31.2	26.9	7.5

Table 8. Discharge, water temperature, specific conductance, pH, and turbidity for U.S. Geological Survey station number 01104460, Stony Brook at Route 20 at Waltham, Massachusetts.

PERIOD OF RECORD.--October 1997 to September 1998, August 2002 to current year.

PERIOD OF DAILY RECORD.--

DISCHARGE: October 1997 to September 1998, August 2002 to current year.

WATER TEMPERATURE: October 1997 to September 1998, August 2002 to current year.

SPECIFIC CONDUCTANCE: October 1997 to September 1998, August 2002 to current year.

PH: August 2002 to current year.

TURBIDITY: October 2002 to current year.

REMARKS.—Discharge records are good, water temperature records are good, specific conductance records and pH records are excellent, turbidity records are poor.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum recorded, 276.6 Mgal/d, June 14, 1998; minimum, 2.2 Mgal/d, Sept. 11, 2002.

WATER TEMPERATURE: Maximum recorded, 26.7°C, Aug. 17, 2002; minimum, -0.1°C, Feb. 14–18, 2003, Dec. 6, 2003, and Jan. 14, 23–26, 2004.

SPECIFIC CONDUCTANCE: Maximum recorded, 3,420 µS/cm, Feb. 3, 2004; minimum, 45 µS/cm, June 15, 1998.

pH: Maximum recorded, 7.0 units, Oct. 8–15, 22, 24–25, 30–31, 2002; minimum, 6.0 units, June 04, 2004.

TURBIDITY: Maximum recorded, 270 FNMUs, Feb. 3, 2004; minimum, 0.6 FNMUs, Feb. 14 and June 4.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum recorded, 189.4 Mgal/d, April 2; minimum, 6.27 Mgal/d, June 17.

WATER TEMPERATURE: Maximum recorded, 24.8°C, Aug. 3–4; minimum, -0.1°C, Dec. 6, Jan. 14, 23–26.

SPECIFIC CONDUCTANCE: Maximum recorded, 3,420 µS/cm, Feb. 3; minimum, 188 µS/cm, Aug. 20.

pH: Maximum recorded, 6.9 unit, Sept. 7; minimum, 6.0 units, June 4.

TURBIDITY: Maximum recorded, 270 FMNUs, Feb. 3; minimum, 0.6 FMNUs, Feb. 14, June 4, and Sept. 7.

DISCHARGE, IN MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY TOTAL VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	16	7.1	17	10	10	63	27	10	12	6.3	10.0
2	9.0	12	6.3	16	10	11	117	25	10	12	6.3	14
3	8.4	12	5.4	17	11	13	103	26	12	11	5.8	13
4	9.7	9.0	5.0	18	14	12	85	36	9.7	10	8.4	13
5	9.0	11	5.0	21	12	11	75	32	8.4	11	10	12
6	8.4	15	5.4	21	12	12	61	28	7.8	11	9.0	12
7	8.4	12	5.8	18	15	12	49	25	7.8	10	8.4	9.7
8	7.8	10	5.4	15	12	11	43	21	7.1	10	9.0	10
9	7.8	9.0	5.4	12	10	9.7	39	21	7.1	12	10	10
10	8.4	7.8	5.8	10	10	9.0	35	20	7.8	11	10	7.8
11	10	7.8	17	9.0	10	8.4	31	19	7.1	11	12	5.8
12	12	7.8	32	9.7	9.0	9.0	30	17	5.8	10	12	8.4
13	12	7.8	27	10	9.0	8.4	39	15	5.4	11	39	11
14	9.0	7.8	19	9.7	9.0	7.8	82	15	5.0	12	21	10
15	18	6.5	35	9.0	9.0	7.8	83	14	5.0	11	21	10
16	12	6.5	31	7.8	7.8	7.1	67	13	4.6	11	16	10
17	9.0	6.3	30	7.8	7.8	7.8	53	12	5.0	10	14	10
18	7.8	6.3	49	8.4	7.8	7.8	45	12	6.5	10	9.7	36
19	6.5	6.3	42	8.4	7.8	7.1	39	13	6.5	10	7.8	35
20	6.5	7.1	32	8.4	7.1	7.1	36	11	7.8	9.7	8.4	21
21	6.3	9.0	26	8.4	6.5	12	32	10	7.8	10	22	12
22	5.8	7.8	23	9.0	7.1	12	29	9.0	7.1	12	30	10
23	5.4	7.1	22	9.0	7.1	10	36	9.7	7.1	11	21	13
24	6.3	6.5	25	9.0	7.1	9.7	38	9.7	7.8	32	12	12
25	9.0	6.5	34	8.4	7.1	9.0	33	11	11	26	8.4	12
26	10	6.3	32	7.8	6.5	9.7	36	11	15	14	7.8	10
27	9.7	5.8	26	7.8	7.8	12	45	16	15	9.0	7.1	7.8
28	12	6.3	23	7.8	9.0	12	42	17	14	9.0	6.3	16
29	30	9.0	20	6.3	9.0	10	35	17	14	9.7	6.3	30
30	34	7.8	19	7.8	---	9.0	30	14	14	7.8	8.4	24
31	23	---	18	10	---	16	---	11	---	6.5	9.0	---
TOTAL	340.2	256.1	638.6	344.5	267.5	310.4	1531.0	537.4	259.2	362.7	382.4	415.5
MEAN	11.0	8.5	20.6	11.1	9.2	10.0	51.0	17.3	8.6	11.7	12.3	13.9
MAX	34.0	16.0	49.0	21.0	15.0	16.0	117.0	36.0	15.0	32.0	39.0	36.0
MIN	5.4	5.8	5.0	6.3	6.5	7.1	29.0	9.0	4.6	6.5	5.8	5.8
MED	9.0	7.8	22.0	9.0	9.0	9.7	40.5	15.0	7.8	11.0	9.0	11.5

Table 8. Discharge, water temperature, specific conductance, pH, and turbidity for U.S. Geological Survey station number 01104460, Stony Brook at Route 20 at Waltham, Massachusetts.—Continued

DISCHARGE, IN MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY TOTAL VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, WATER YEAR (WY)												
MEAN	25.6	24.5	30.8	35.1	37.6	49.5	70.2	46.2	52.3	30.4	28.1	24.1
MAX	30.2	34.5	53.1	51.4	65.0	74.2	82.2	76.1	109	48.7	37.0	26.3
(WY)	2003	1999	2003	1998	1998	1998	2003	1998	1998	1998	1998	1998
MIN	17.0	13.2	15.7	17.2	14.4	15.6	49.5	26.7	13.4	18.3	19.2	21.6
(WY)	2004	2004	1999	2004	2004	2004	1998	2004	2004	2004	2004	2004

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004		
ANNUAL TOTAL	8614.9		5659.5				
ANNUAL MEAN	23.6		15.5		24.8		
HIGHEST ANNUAL MEAN					32.7		1998
LOWEST ANNUAL MEAN					15.5		2004
HIGHEST DAILY MEAN	94.4	Mar 31	117	Apr 2	256	Jun 15	1998
LOWEST DAILY MEAN	5.0	Dec 4	4.6	Jun 16	2.46	Sep 10	2002
10 PERCENT EXCEEDS	49.8		31.7		49.1		
50 PERCENT EXCEEDS	18.1		10.3		18.7		
90 PERCENT EXCEEDS	7.76		6.46		8.40		

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.6	15.1	15.9	12.8	10.4	11.6	5.8	4.1	5.0	3.4	2.1	2.7
2	16.9	15.1	16.0	13.0	12.0	12.5	4.1	.8	2.8	2.6	1.9	2.2
3	15.2	13.4	14.4	13.6	12.3	12.9	.8	.0	.4	3.2	2.6	2.8
4	14.4	13.2	13.8	13.2	10.5	12.0	1.0	.1	.5	3.9	3.1	3.5
5	14.6	13.2	13.8	10.5	8.9	9.8	1.0	.1	.6	3.5	2.5	2.8
6	14.1	11.9	13.0	10.4	9.4	10	.7	-.1	.1	2.7	1.3	2.2
7	13.9	11.6	12.8	10.8	9.6	10.1	.4	.0	.2	1.3	.4	.8
8	14.9	12.2	13.5	9.6	5.9	8.0	.6	.2	.3	.8	.3	.5
9	16.0	13.8	14.9	5.9	4.0	4.9	.6	.1	.3	.6	.2	.3
10	16.1	14.8	15.2	5.1	3.0	4.1	1.2	.4	.8	.6	.2	.3
11	16.2	14.3	15.2	5.2	3.2	4.1	3.6	1.2	1.9	.6	.1	.3
12	15.4	14.4	14.8	6.7	5.1	5.9	1.5	.4	1.0	.6	.3	.5
13	15.6	14.1	14.8	8.2	6.2	7.4	.8	.2	.4	1.0	.1	.6
14	14.6	12.8	13.9	6.2	3.3	4.6	.5	.1	.3	.2	-.1	.1
15	14.8	13.0	14.1	3.8	2.4	3.1	.7	.3	.4	.3	.0	.1
16	13.0	11.3	12.1	3.8	2.0	3.0	1.2	.3	.7	.2	.0	.1
17	11.4	10.0	10.9	4.6	3.4	4.1	3.2	.6	1.7	.4	.0	.2
18	11.6	10.5	11.0	5.6	3.8	4.7	2.5	.7	1.1	.5	.2	.3
19	10.6	8.7	9.5	7.7	4.8	6.0	1.3	.4	.8	.6	.1	.3
20	9.6	7.2	8.5	9.3	7.7	8.5	1.6	.5	1.0	.4	.0	.2
21	11.8	8.6	10.2	8.1	7.0	7.5	1.4	.4	1.0	.5	.0	.2
22	11.5	9.3	10.5	7.1	5.7	6.4	2.3	1.1	1.6	.7	.0	.3
23	9.3	7.7	8.5	6.0	4.6	5.3	3.0	1.7	2.3	.5	-.1	.2
24	7.8	6.7	7.3	5.7	4.0	4.9	6.0	2.2	3.3	.3	-.1	.1
25	8.8	6.0	7.4	6.5	4.8	5.9	4.3	2.5	3.6	.2	-.1	.0
26	11.2	8.8	10.1	4.8	3.5	4.3	2.5	1.7	2.1	.2	-.1	.0
27	13.7	11.2	12.5	5.8	4.4	5.0	2.6	1.6	2.1	.3	.0	.2
28	12.9	11.5	12.1	8.1	5.4	6.2	2.5	1.1	1.8	.6	.2	.4
29	12.8	11.5	12.2	10.4	5.6	7.9	3.0	1.3	2.1	.5	.0	.3
30	12.2	10.3	11.2	5.6	4.7	5.2	3.9	2.1	3.0	.4	.0	.1
31	11.1	9.1	10.2	---	---	---	3.3	2.3	2.7	.8	.0	.3
MONTH	16.9	6.0	12.3	13.6	2.0	6.9	6.0	-0.1	1.5	3.9	-0.1	0.7

Table 8. Discharge, water temperature, specific conductance, pH, and turbidity for U.S. Geological Survey station number 01104460, Stony Brook at Route 20 at Waltham, Massachusetts.—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.1	0.1	0.5	6.4	2.8	4.4	5.0	4.3	4.6	18.6	14.5	16.6
2	1.9	.3	.9	6.7	3.7	4.8	4.3	3.9	4.1	18.3	15.9	17.2
3	1.7	.6	1.1	5.8	3.4	4.5	4.7	3.9	4.3	17.3	15.8	16.7
4	2.8	1.1	1.6	4.9	3.2	4.0	5.5	4.3	4.9	16.2	13.6	14.8
5	2.2	.1	1.4	4.0	2.9	3.5	6.2	4.2	5.1	14.8	12.0	13.6
6	1.6	.5	1.2	5.2	3.6	4.3	7.5	3.3	5.3	17.1	12.6	14.7
7	2.3	1.0	1.5	5.5	2.2	3.8	8.4	4.9	6.5	19.7	14.8	17.0
8	1.1	.1	.6	4.2	2.5	3.2	9.7	5.3	7.5	17.3	14.0	15.7
9	2.4	.3	1.2	3.2	2.1	2.6	10.0	6.8	8.5	15.4	13.3	13.9
10	3.3	1.3	2.2	4.5	1.6	2.9	10.5	6.6	8.5	16.3	12.2	14.2
11	2.9	.9	1.7	5.0	2.4	3.6	9.5	7.5	8.5	19.2	14.6	16.9
12	2.5	.4	1.4	3.9	2.4	3.1	10.5	7.4	9.0	21.0	16.6	18.6
13	3.4	1.1	2.0	5.3	1.3	3.1	9.4	7.0	8.1	20.0	17.2	18.8
14	3.6	1.4	2.3	4.2	1.3	2.9	9.4	7.0	8.5	19.5	15.6	17.4
15	2.1	.2	1.3	6.6	3.2	4.6	10.1	8.2	8.9	22.4	17.7	20.0
16	1.6	.0	.7	4.5	1.2	3.2	11.0	6.9	8.8	21.1	17.4	19.3
17	2.2	.2	1.1	1.7	.7	1.2	12.7	7.5	10.0	19.6	16.4	17.7
18	2.3	1.3	1.7	3.2	.9	1.9	13.9	10.6	12.2	18.8	16.9	17.9
19	3.6	.7	1.9	3.2	1.3	2.1	15.6	11.2	13.4	19.5	17.6	18.5
20	3.8	1.0	2.4	4.6	.4	2.6	16.7	13.2	14.8	19.6	15.5	17.6
21	3.3	2.5	2.9	6.0	3.2	4.4	15.1	11.9	13.5	20.2	16.7	18.5
22	3.7	2.5	3.0	4.6	1.4	2.9	17.6	12.8	15.0	19.1	14.8	17.0
23	4.4	1.4	2.7	5.0	.6	2.8	16.3	12.0	13.7	16.7	13.7	15.1
24	3.1	1.1	2.1	6.9	2.4	4.7	15.6	11.2	13.1	15.6	14.0	15.0
25	4.1	1.0	2.4	6.8	4.8	5.9	13.8	10.6	12.3	14.4	13.6	14.0
26	4.2	1.0	2.4	10.1	6.0	7.9	12.1	10.4	11.1	13.6	12.9	13.1
27	4.3	.9	2.4	10.0	7.9	8.9	14.6	10.9	12.4	16.1	12.4	14.1
28	5.5	1.8	3.3	8.7	6.1	7.5	14.8	11.6	13.1	15.4	14.3	14.9
29	5.3	2.2	3.6	8.8	4.8	6.7	16.0	11.1	13.5	16.5	13.8	15.1
30	---	---	---	7.0	5.5	6.1	17.5	13.2	15.4	17.4	13.4	15.4
31	---	---	---	6.3	5.0	5.7	---	---	---	17.6	14.5	16.2
MONTH	5.5	0.0	1.8	10.1	0.4	4.2	17.6	3.3	9.8	22.4	12.0	16.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.3	14.3	15.2	21.4	18.7	20.1	23.3	22.4	22.8	22.4	20.1	21.4
2	17.1	13.8	15.2	22.0	19.1	20.7	24.5	21.5	22.8	22.0	20.1	21.2
3	18.7	15.2	16.8	22.2	19.3	20.7	24.8	21.5	23.2	22.2	19.6	21.0
4	19.4	15.0	17.2	22.7	19.0	20.8	24.8	22.7	23.6	23.1	20.8	21.9
5	18.9	16.0	17.3	21.2	19.7	20.1	23.3	21.0	22.0	21.9	20.5	21.1
6	17.1	14.9	16.0	21.7	19.3	20.5	21.6	19.9	20.7	21.4	18.9	20.3
7	18.1	14.4	15.9	22.8	19.7	21.2	20.8	18.6	20.0	21.8	19.2	20.6
8	20.9	16.0	18.4	21.7	20.3	20.8	21.5	18.6	20.1	21.6	20.3	21.1
9	23.7	18.9	21.1	21.7	19.8	20.7	22.8	19.5	21.1	20.9	19.0	20.1
10	22.0	18.9	20.6	22.0	19.2	20.6	23.4	20.4	21.9	21.2	19.0	20.4
11	20.2	16.4	18.3	22.2	19.8	20.9	23.3	22.0	22.5	19.0	17.0	18.0
12	19.8	15.4	17.6	21.1	19.5	20.4	23.9	21.9	22.9	20.1	16.7	18.4
13	20.1	15.8	17.9	20.4	19.3	19.8	23.6	22.0	22.5	21.2	18.9	19.9
14	18.3	16.6	17.5	19.6	18.9	19.2	23.4	21.8	22.7	20.4	18.5	19.5
15	22.5	17.3	19.6	21.0	19.1	19.9	22.8	20.3	21.2	19.9	17.9	19.1
16	23.6	18.8	21.2	21.6	19.7	20.7	20.3	19.1	19.6	20.1	19.2	19.6
17	22.9	19.8	21.4	23.3	20.2	21.7	20.4	18.6	19.4	21.4	19.7	20.5
18	21.9	19.5	20.8	23.1	21.0	22.1	20.9	18.6	19.8	21.2	16.8	18.7
19	21.8	18.9	20.2	22.2	21.0	21.5	21.7	19.8	20.7	16.8	14.9	15.7
20	20.8	17.6	19.2	23.3	20.7	21.8	23.3	20.4	21.7	15.6	13.4	14.6
21	20.7	16.6	18.6	24.0	20.9	22.4	22.4	20.9	21.8	16.2	14.3	15.2
22	19.0	17.6	18.4	24.1	21.4	22.7	20.9	19.0	20.0	17.9	15.0	16.4
23	21.9	17.8	19.6	23.9	22.1	23.0	20.6	18.1	19.4	19.1	17.2	18.1
24	21.6	17.7	19.7	23.0	21.0	21.7	20.6	18.9	19.7	19.0	17.1	18.0
25	19.8	18.5	19.1	21.9	20.3	21.0	20.1	17.3	18.7	19.3	17.2	18.3

Table 8. Discharge, water temperature, specific conductance, pH, and turbidity for U.S. Geological Survey station number 01104460, Stony Brook at Route 20 at Waltham, Massachusetts.—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
26	19.8	18.5	18.9	21.9	19.4	20.6	20.0	17.0	18.5	20.1	18.4	19.1
27	20.0	17.0	18.6	20.8	19.4	20.2	21.5	18.5	19.8	19.2	16.6	18.0
28	19.9	17.4	18.8	20.2	18.8	19.4	23.1	19.8	21.3	18.3	17.3	17.8
29	20.6	18.2	19.3	21.4	18.8	19.9	23.4	20.9	22.2	17.5	14.8	16.2
30	21.4	18.1	19.7	22.4	19.5	21.0	24.4	22.3	23.2	15.1	13.2	14.3
31	---	---	---	24.4	21.2	22.6	23.4	22.0	22.9	---	---	---
MONTH	23.7	13.8	18.6	24.4	18.7	20.9	24.8	17.0	21.2	23.1	13.2	18.8
YEAR	24.8	-0.1	11.1									

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	723	715	719	346	312	332	377	362	370	347	339	342
2	730	721	724	377	343	359	392	376	384	595	345	379
3	738	730	734	398	360	388	418	391	404	456	350	360
4	768	460	710	396	391	393	423	416	420	392	331	347
5	726	717	723	436	290	387	447	418	428	798	345	426
6	724	720	721	376	360	369	655	420	455	567	353	381
7	733	724	728	367	359	362	1,100	420	626	385	356	371
8	737	732	734	379	367	374	934	505	655	418	379	398
9	738	734	736	399	378	389	506	426	454	463	413	437
10	750	735	739	414	399	408	657	421	485	500	463	480
11	754	749	750	471	404	417	1,990	408	717	509	492	502
12	763	490	702	413	403	408	410	348	377	1,110	491	655
13	683	668	677	430	394	400	349	316	325	506	471	482
14	678	655	670	408	397	402	1,460	320	340	558	413	486
15	657	288	469	412	399	407	2,390	397	601	500	490	495
16	444	423	429	416	404	412	398	348	367	512	500	507
17	449	426	437	419	404	413	432	344	362	516	504	510
18	481	449	466	420	413	416	378	316	345	1,060	502	612
19	516	481	498	422	416	419	316	286	303	570	497	507
20	553	516	532	486	342	411	313	290	306	503	496	500
21	570	552	561	420	303	391	323	303	316	553	498	513
22	574	566	570	410	381	397	336	308	325	554	514	539
23	566	559	563	397	381	390	332	313	322	546	536	540
24	645	557	572	409	396	403	370	281	336	558	539	549
25	711	645	679	475	360	395	333	288	308	572	557	562
26	712	668	704	400	390	397	293	275	288	579	571	574
27	675	346	534	404	389	397	309	292	300	579	573	576
28	482	432	472	444	375	395	326	308	317	1,010	575	684
29	446	272	344	404	290	363	336	326	331	726	521	564
30	322	280	303	365	361	363	339	335	337	636	513	543
31	312	279	296	---	---	---	340	335	337	638	629	634
MONTH	768	272	597	486	290	392	2,390	275	395	1,110	331	499

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	639	630	635	686	650	677	366	245	309	485	477	481
2	645	637	640	650	578	632	246	219	229	490	483	486
3	3,420	639	768	578	486	553	313	219	266	539	452	483
4	1,030	685	782	586	455	482	378	313	342	487	407	448
5	722	659	673	466	451	458	403	364	388	459	443	450
6	2,210	659	928	634	421	450	424	402	413	476	459	471
7	1,450	810	1,040	426	413	420	438	423	433	487	474	482
8	810	663	714	525	426	458	449	437	445	508	474	481
9	705	685	695	472	461	466	461	447	455	487	430	474
10	687	659	672	480	470	475	465	460	463	487	478	483

Table 8. Discharge, water temperature, specific conductance, pH, and turbidity for U.S. Geological Survey station number 01104460, Stony Brook at Route 20 at Waltham, Massachusetts.—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
11	665	648	654	477	465	470	468	455	464	489	484	486
12	657	639	648	635	466	486	508	457	474	504	488	495
13	651	641	647	483	470	477	495	332	443	516	503	510
14	649	642	646	475	469	471	393	352	374	530	516	521
15	660	644	648	474	453	463	409	362	388	518	510	513
16	702	626	670	1,120	448	486	437	409	426	553	484	510
17	695	664	685	1,380	488	759	453	397	449	529	514	519
18	696	689	692	500	466	481	462	452	457	578	443	521
19	695	689	692	468	460	465	468	462	465	516	443	507
20	695	647	682	828	449	496	474	464	470	544	514	524
21	648	634	642	763	413	474	476	473	474	532	517	523
22	635	617	629	414	398	404	475	468	472	544	504	523
23	626	617	622	415	401	411	492	424	454	600	496	530
24	627	617	620	424	412	418	446	437	440	571	459	527
25	631	623	627	419	413	416	466	446	457	529	459	519
26	632	625	629	420	393	406	475	419	454	554	500	513
27	735	623	655	469	370	392	445	421	430	565	345	485
28	736	703	727	378	363	369	456	427	443	539	413	486
29	708	681	701	376	367	372	473	456	464	502	489	492
30	---	---	---	392	373	379	481	472	476	524	502	510
31	---	---	---	535	307	374	---	---	---	535	524	529
MONTH	3,420	617	692	1,380	307	469	508	219	424	600	345	499

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	572	522	534	743	732	739	605	580	593	664	577	613
2	550	487	531	732	633	718	621	605	611	671	661	665
3	543	507	531	731	727	729	666	621	631	675	662	669
4	576	540	557	731	725	728	704	666	695	679	670	674
5	576	570	572	743	615	717	736	525	672	688	677	681
6	624	508	568	728	719	724	698	692	695	689	681	687
7	572	559	567	731	726	728	705	695	700	686	675	681
8	568	561	564	745	717	729	719	703	709	712	423	621
9	674	360	560	731	677	692	726	719	722	584	212	473
10	570	523	544	708	666	701	733	724	727	453	408	422
11	564	551	556	719	707	712	735	618	724	418	402	406
12	566	558	562	727	719	722	751	496	725	604	418	518
13	567	555	561	741	674	718	496	221	414	642	604	625
14	578	558	567	705	683	696	367	331	347	661	640	649
15	574	562	568	697	693	695	375	246	320	668	660	663
16	574	555	564	710	696	702	367	340	344	684	659	665
17	622	558	583	724	708	716	374	325	350	663	658	661
18	654	491	616	760	722	729	360	353	356	683	315	444
19	685	610	630	765	760	762	375	355	363	339	271	293
20	698	685	692	768	763	765	378	188	356	314	271	285
21	704	693	697	781	767	771	369	240	315	311	292	302
22	706	701	703	785	779	782	301	258	274	404	306	327
23	711	700	705	785	777	783	285	260	271	520	404	477
24	739	708	714	808	370	553	323	285	304	560	519	540
25	794	719	743	481	414	455	354	323	336	582	560	572
26	748	646	739	469	414	437	397	346	370	589	566	582
27	746	740	742	512	469	497	423	379	393	578	563	571
28	745	740	743	638	399	518	409	399	404	619	358	497
29	755	733	739	563	466	546	468	385	405	439	330	372
30	742	737	740	563	544	550	574	468	543	330	297	305
31	---	---	---	581	556	566	583	552	569	---	---	---
MONTH	794	360	623	808	370	674	751	188	492	712	212	531
YEAR	3420	188	523									

Table 8. Discharge, water temperature, specific conductance, pH, and turbidity for U.S. Geological Survey station number 01104460, Stony Brook at Route 20 at Waltham, Massachusetts.—Continued

pH, UNFILTERED WATER, IN STANDARD UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	6.2	6.5	6.4	6.6	6.6	6.3	6.6	6.3	6.5	6.6	6.5
2	6.6	6.2	6.5	6.4	6.6	6.6	6.2	6.6	6.3	6.5	6.6	6.6
3	6.6	6.2	6.5	6.4	6.6	6.6	6.2	6.5	6.3	6.5	6.6	6.6
4	6.6	6.3	6.4	6.4	6.5	6.5	6.2	6.5	6.3	6.6	6.6	6.6
5	6.6	6.3	6.4	6.5	6.6	6.5	6.3	6.6	6.2	6.5	6.5	6.6
6	6.6	6.3	6.4	6.5	6.5	6.5	6.4	6.6	6.2	6.5	6.6	6.6
7	6.6	6.3	6.4	6.5	6.5	6.5	6.4	6.6	6.4	6.5	6.6	6.6
8	6.6	6.4	6.4	6.4	6.5	6.5	6.4	6.5	6.4	6.5	6.6	6.6
9	6.6	6.4	6.4	6.4	6.5	6.5	6.4	6.4	6.3	6.5	6.6	6.5
10	6.6	6.4	6.4	6.4	6.5	6.5	6.5	6.5	6.3	6.6	6.6	6.4
11	6.6	6.4	6.4	6.4	6.5	6.5	6.5	6.5	6.4	6.6	6.5	6.5
12	6.5	6.4	6.3	6.4	6.5	6.6	6.5	6.4	6.4	6.6	6.5	6.5
13	6.5	6.5	6.3	6.5	6.5	6.6	6.5	6.4	6.4	6.5	6.3	6.5
14	6.5	6.5	6.3	6.4	6.5	6.6	6.4	6.5	6.3	6.6	6.3	6.5
15	6.3	6.5	6.3	6.4	6.5	6.6	6.4	6.4	6.4	6.6	6.3	6.5
16	6.4	6.5	6.3	6.4	6.5	6.6	6.4	6.4	6.4	6.6	6.3	6.5
17	6.4	6.5	6.3	6.4	6.6	6.6	6.5	6.5	6.4	6.6	6.4	6.5
18	6.4	6.5	6.2	6.4	6.6	6.6	6.5	6.5	6.4	6.6	6.4	6.3
19	6.4	6.5	6.2	6.5	6.6	6.6	6.5	6.5	6.4	6.6	6.4	6.2
20	6.4	6.5	6.2	6.5	6.6	6.6	6.5	6.4	6.5	6.6	6.4	6.3
21	6.4	6.5	6.3	6.5	6.6	6.6	6.5	6.4	6.5	6.7	6.3	6.3
22	6.4	6.5	6.3	6.5	6.6	6.6	6.6	6.4	6.4	6.7	6.2	6.4
23	6.4	6.5	6.3	6.6	6.6	6.5	6.5	6.4	6.4	6.7	6.3	6.4
24	6.5	6.5	6.4	6.5	6.6	6.5	6.5	6.4	6.4	6.3	6.4	6.5
25	6.6	6.5	6.3	6.4	6.6	6.5	6.5	6.4	6.5	6.4	6.4	6.5
26	6.6	6.5	6.3	6.4	6.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5
27	6.4	6.5	6.4	6.4	6.6	6.5	6.5	6.5	6.5	6.6	6.5	6.5
28	6.4	6.5	6.4	6.4	6.6	6.5	6.5	6.4	6.5	6.7	6.4	6.4
29	6.3	6.5	6.4	6.4	6.6	6.5	6.6	6.5	6.5	6.6	6.4	6.3
30	6.3	6.5	6.4	6.4	---	6.5	6.6	6.4	6.5	6.7	6.5	6.4
31	6.2	---	6.4	6.5	---	6.4	---	6.3	---	6.6	6.4	---
MED	6.5	6.5	6.4	6.4	6.6	6.5	6.5	6.5	6.4	6.6	6.4	6.5

TURBIDITY, WATER, UNFILTERED, FORMAZIN NEPHELOMETRIC MULTIBEAM UNITS,
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	4.8	1.4	3.5	5.6	3.2	4.0	5.7	4.6	5.1	5.7	2.7	3.7
2	4.8	1.0	2.7	4.7	2.3	3.4	6.7	4.7	5.1	6.6	3.0	3.9
3	4.4	1.0	2.8	24	2.3	3.7	5.7	4.3	4.9	5.5	3.1	4.1
4	48	1.5	5.2	4.8	1.9	3.0	6.2	4.1	4.9	6.6	2.7	4.1
5	4.4	1.5	2.9	50	2.3	6.3	8.5	4.4	5.4	5.0	3.6	4.3
6	4.2	1.6	3.1	7.0	1.6	3.7	7.8	4.6	6.0	5.3	3.2	4.0
7	4.5	2.0	3.4	5.0	1.7	3.3	7.4	5.1	6.3	8.4	4.2	5.6
8	4.7	2.5	3.7	6.1	3.2	4.3	16	5.0	7.6	10	3.4	5.3
9	5.3	3.1	4.1	9.1	3.7	4.7	12	5.5	7.0	11	3.6	5.6
10	5.5	3.7	4.5	6.6	3.6	4.6	13	5.8	7.3	13	4.1	5.3
11	5.8	4.0	4.8	11	3.7	5.0	250	5.4	51	10	4.1	5.3
12	24	4.6	6.6	7.8	2.8	4.4	17	5.0	8.3	10	4.1	6.4
13	6.2	4.8	5.5	7.9	3.3	4.8	7.3	4.2	5.2	7.4	3.9	4.8
14	6.0	4.8	5.4	6.4	4.0	4.9	15	3.3	4.3	8.2	4.0	4.8
15	30	5.5	9.2	6.4	3.9	5.0	55	2.8	9.7	5.3	3.9	4.5
16	6.2	4.8	5.3	7.6	4.1	5.2	4.6	1.9	2.9	6.0	4.2	4.7
17	7.7	4.4	5.1	7.9	3.6	5.1	38	1.7	7.6	6.7	4.4	4.9
18	5.5	4.1	4.7	6.6	3.7	4.8	10	2.5	4.5	7.3	4.5	5.5
19	5.1	3.7	4.3	8.0	3.4	4.7	68	3.0	4.7	6.7	4.9	5.4
20	4.9	3.3	4.1	32	4.1	6.6	6.5	2.9	4.2	6.1	4.9	5.4

Table 8. Discharge, water temperature, specific conductance, pH, and turbidity for U.S. Geological Survey station number 01104460, Stony Brook at Route 20 at Waltham, Massachusetts.—Continued

TURBIDITY, WATER, UNFILTERED, FORMAZIN NEPHELOMETRIC MULTIBEAM UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
21	7.3	2.9	4.2	28	4.2	6.5	8.3	3.1	4.6	8.4	5.4	6.0
22	6.4	3.1	4.6	9.1	4.2	5.1	8.0	3.1	4.6	7.7	5.5	6.2
23	6.6	4.0	5.3	6.4	4.0	5.0	6.6	2.4	3.6	7.8	5.7	6.3
24	8.5	4.5	6.0	6.2	4.4	5.3	99	2.1	7.7	7.3	5.5	6.4
25	8.6	4.5	6.0	9.5	4.4	5.4	5.0	2.3	3.4	6.7	5.3	5.9
26	6.4	3.1	4.7	6.0	4.3	5.2	4.0	2.1	2.8	7.1	5.2	6.0
27	22	3.5	7.5	6.4	4.7	5.3	4.0	2.2	2.9	6.5	5.1	5.8
28	7.9	3.9	5.6	14	5.0	6.0	7.5	2.6	3.8	6.9	5.3	5.9
29	23	4.8	11	20	5.0	6.6	5.3	2.6	3.4	6.7	5.4	6.0
30	7.8	4.0	5.5	5.9	4.7	5.2	4.3	2.2	3.1	7.1	5.3	6.1
31	5.7	3.5	4.6	---	---	---	4.2	1.9	2.9	6.6	4.9	5.6
MONTH	48	1.0	5.0	50	1.6	4.9	250	1.7	6.6	13	2.7	5.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.0	4.6	5.2	3.6	1.8	2.7	140	11	39	---	---	---
2	5.6	4.3	4.9	4.1	2.3	3.0	110	4.5	11	---	---	---
3	270	4.1	18	4.4	3.0	3.5	3.8	2.3	2.8	---	---	---
4	37	4.3	7.0	6.1	3.0	3.6	4.3	2.2	2.8	---	---	---
5	5.4	3.6	4.5	3.6	2.7	3.1	7.7	2.2	2.7	---	---	---
6	84	3.3	14	66	2.7	5.6	9.7	2.1	2.5	---	---	---
7	38	3.4	9.2	3.4	2.2	2.6	2.7	2.0	2.3	---	---	---
8	31	2.2	4.1	3.4	2.0	2.4	2.9	1.6	2.2	---	---	---
9	10	1.6	2.8	5.9	1.4	2.2	2.6	1.8	2.1	---	---	---
10	3.4	.9	1.8	4.4	1.1	1.8	2.7	1.8	2.1	---	---	---
11	3.7	.8	1.5	6.0	1.0	2.7	2.4	1.7	2.1	---	---	---
12	6.7	1.2	2.3	13	2.5	4.7	3.3	1.9	2.2	---	---	---
13	5.1	1.1	2.0	9.7	2.3	4.0	---	---	---	---	---	---
14	3.9	.6	1.8	8.5	2.4	4.0	---	---	---	---	---	---
15	7.2	1.1	2.4	5.8	2.1	3.3	---	---	---	---	---	---
16	7.0	1.0	2.2	6.1	2.2	3.5	---	---	---	---	---	---
17	7.4	1.1	2.7	7.8	2.4	3.9	---	---	---	---	---	---
18	4.3	1.0	2.1	14	2.5	4.1	---	---	---	---	---	---
19	10	.9	2.5	22	2.2	4.6	4.9	.7	2.2	---	---	---
20	5.5	.9	2.4	35	2.8	10	10	1.7	2.7	---	---	---
21	5.4	1.2	2.4	93	4.1	14	32	2.0	3.8	---	---	---
22	3.6	1.2	2.1	5.8	2.8	3.8	5.1	1.8	2.7	---	---	---
23	5.0	1.7	2.7	21	2.8	4.6	200	2.4	10	---	---	---
24	11	1.9	3.6	14	2.3	3.7	110	3.1	22	---	---	---
25	6.8	1.4	3.0	5.7	2.3	3.0	---	---	---	---	---	---
26	5.6	1.5	3.0	4.2	2.3	3.0	---	---	---	---	---	---
27	8.9	1.9	3.5	69	2.9	6.2	---	---	---	---	---	---
28	4.2	1.8	2.7	4.7	3.0	3.6	---	---	---	---	---	---
29	4.4	2.0	2.8	7.3	2.9	3.6	---	---	---	---	---	---
30	---	---	---	4.5	3.0	3.7	---	---	---	---	---	---
31	---	---	---	190	3.5	30	---	---	---	---	---	---
MONTH	270	0.6	4.1	190	1.0	5.0	---	---	---	---	---	---

Table 8. Discharge, water temperature, specific conductance, pH, and turbidity for U.S. Geological Survey station number 01104460, Stony Brook at Route 20 at Waltham, Massachusetts.—Continued

TURBIDITY, WATER, UNFILTERED, FORMAZIN NEPHELOMETRIC MULTIBEAM UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	8.6	6.7	7.5	2.9	1.0	2.0	---	---	---
2	---	---	---	37	5.8	7.3	3.1	1.5	2.3	---	---	---
3	---	---	---	8.8	4.8	6.0	4.7	1.8	2.6	---	---	---
4	0.9	0.6	0.7	9.3	6.3	7.9	4.1	2.2	3.2	---	---	---
5	.9	.7	.8	21	7.5	9.5	14	3.0	4.6	---	---	---
6	23	.8	1.9	12	9.8	11	4.9	3.3	4.1	---	---	---
7	---	---	---	13	11	12	5.3	3.7	4.5	---	---	---
8	---	---	---	15	12	13	5.4	4.4	4.9	54	0.8	4.1
9	---	---	---	22	13	15	5.7	4.2	4.9	55	1.2	4.2
10	---	---	---	16	14	15	6.3	5.0	5.5	11	1.1	1.9
11	---	---	---	16	14	14	41	5.5	7.1	3.1	1.2	2.1
12	---	---	---	15	13	14	34	6.6	7.6	3.4	1.4	2.3
13	---	---	---	15	12	13	35	9.8	13	3.0	1.4	2.2
14	---	---	---	13	11	12	12	10	11	2.9	1.5	2.2
15	6.5	4.2	5.3	12	8.9	10	15	11	12	3.3	1.6	2.3
16	7.5	5.0	6.2	19	8.2	11	13	11	12	3.6	1.9	2.6
17	13	5.5	7.1	9.3	7.7	8.5	13	11	12	3.8	2.1	2.8
18	57	5.0	7.1	12	8.3	9.2	12	11	12	150	2.6	18
19	7.5	5.0	6.1	16	4.6	11	12	10	11	14	4.5	6.9
20	7.3	4.7	5.9	16	5.6	11	54	9.5	13	8.8	5.2	5.2
21	7.5	5.1	6.3	19	4.5	11	22	13	17	20	3.0	5.0
22	7.9	6.1	6.9	17	3.4	10	20	9.5	13	4.8	3.2	3.8
23	8.4	6.5	7.5	18	3.9	9.3	18	8.2	11	6.5	2.9	3.9
24	10	7.6	8.5	100	4.4	21	11	7.0	8.8	6.4	3.2	4.2
25	16	7.9	9.2	---	---	---	9.8	6.4	7.5	6.3	3.5	4.4
26	65	8.3	10	---	---	---	9.0	6.7	7.8	48	3.7	11
27	10	8.3	9.0	3.1	1.2	---	---	---	---	11	4.2	6.7
28	10	8.0	8.8	52	1.2	3.6	---	---	---	27	5.7	11
29	9.3	7.9	8.6	11	1.4	2.8	---	---	---	16	5.9	8.9
30	9.1	7.2	8.2	4.4	1.1	2.3	---	---	---	15	5.2	9.9
31	---	---	---	2.7	1.0	2.0	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

Table 9. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts.

PERIOD OF RECORD.--October 1997 to September 1998, June 2004 to current year.

PERIOD OF DAILY RECORD.--

DISCHARGE: December 24, 2003, to current year.

WATER TEMPERATURE: December 24, 2003, to current year.

SPECIFIC CONDUCTANCE: December 24, 2003, to current year.

WATER-QUALITY RECORDS: Water years 1998; March 2003 to current year.

REMARKS.--Records for discharge are good except for the days of Mar. 31 through Apr. 6 and Apr. 14 which are poor and are denoted by a greater than symbol. Records for water temperature are excellent and records for specific conductance are good. e, estimated; >, actual value is greater than value shown.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum recorded, 10.4 Mgal/d, Apr. 2, 2004; minimum, 0.07 Mgal/d, July 21–24, and Aug. 10–12, 2004.

WATER TEMPERATURE: Maximum recorded, 22.8°C, Aug. 13, 2004; minimum, -0.1°C, Jan. 24–25, and Feb. 16–17, 2004.

SPECIFIC CONDUCTANCE: Maximum recorded, 3,540 µS/cm, Feb. 3, 2004; minimum, 40 µS/cm, Aug.13, 2004.

DISCHARGE, IN MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY-TOTAL VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	0.31	0.37	0.43	>4.5	1.5	0.57	0.12	0.12	0.15
2	---	---	---	.30	.34	.54	>4.6	1.4	.54	.16	.12	.14
3	---	---	---	.30	.41	.58	>4.5	1.6	.41	.12	.10	.13
4	---	---	---	.32	.78	.60	>4.6	2.3	.36	.11	.10	.12
5	---	---	---	.32	.52	.58	>4.6	1.7	.29	.16	.16	.12
6	---	---	---	.31	.71	.71	>3.9	1.5	.27	.12	.10	.11
7	---	---	---	.25	1.5	.65	2.8	1.3	.27	.11	.10	.11
8	---	---	---	.25	.90	.59	2.5	1.1	.24	.11	.09	.43
9	---	---	---	.19	.61	.52	2.3	1.2	.21	.11	.08	.71
10	---	---	---	.21	.63	.50	2.0	1.2	.25	.10	.08	.43
11	---	---	---	.26	.59	.58	1.8	1.0	.19	.09	.08	.31
12	---	---	---	.34	.52	.57	1.7	.97	.15	.09	.12	.26
13	---	---	---	.36	.48	.53	3.0	.84	.14	.11	2.3	.23
14	---	---	---	.22	.47	.48	>4.8	.78	.14	.12	.61	.20
15	---	---	---	.25	.43	.51	5.0	.56	.17	.10	1.2	.16
16	---	---	---	.24	.65	.48	3.9	.71	.20	.10	.78	.16
17	---	---	---	.36	.36	.58	3.2	.78	.17	.10	.59	.16
18	---	---	---	.40	.34	.50	2.7	.71	.23	.09	.45	3.0
19	---	---	---	.41	.32	.47	2.3	.78	.21	.09	.37	1.7
20	---	---	---	.37	.31	.51	1.9	.61	.18	.08	.37	.90
21	---	---	---	.39	.35	1.2	1.7	.59	.17	.08	1.0	.65
22	---	---	---	.40	.38	1.0	1.6	.59	.16	.08	1.1	.54
23	---	---	---	.40	.39	.78	2.3	.62	.15	.08	.59	.45
24	---	---	0.26	.35	.36	.71	1.9	1.0	.14	.97	.43	.40
25	---	---	.28	.32	.33	.65	1.6	1.2	.15	.39	.35	.39
26	---	---	.26	.36	.32	.71	2.1	.97	.17	.21	.29	.37
27	---	---	.26	.40	.31	.90	2.6	1.2	.15	.15	.25	.33
28	---	---	.26	.43	.32	.84	2.3	1.2	.14	.25	.22	1.7
29	---	---	.28	.42	.37	.78	1.9	1.0	.14	.23	.17	2.5
30	---	---	.32	.41	---	.71	1.6	.78	.14	.17	.14	1.5
31	---	---	.32	.39	---	1.8	---	.60	---	.14	.19	---
TOTAL	---	---	---	10.24	14.37	20.99	86.2	32.29	6.70	4.94	12.65	18.36
MEAN	---	---	---	0.33	0.50	0.68	2.87	1.04	0.22	0.16	0.41	0.61
MAX	---	---	---	0.43	1.5	1.8	5.0	2.3	0.57	0.97	2.3	3.0
MIN	---	---	---	0.19	0.31	0.43	1.6	0.56	0.14	0.08	0.08	0.11
MED	---	---	---	0.34	0.39	0.58	2.4	1.0	0.17	0.11	0.22	0.35
MGDSM	---	---	---	0.39	0.58	0.80	3.38	1.23	0.26	0.19	0.48	0.72
IN.	---	---	---	0.69	0.97	1.42	5.84	2.19	0.45	0.33	0.86	1.24

Table 9. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts.—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	5.6	4.3	4.8
2	---	---	---	---	---	---	---	---	---	4.7	4.0	4.4
3	---	---	---	---	---	---	---	---	---	5.5	4.7	5.0
4	---	---	---	---	---	---	---	---	---	6.3	5.2	5.8
5	---	---	---	---	---	---	---	---	---	5.2	4.1	4.4
6	---	---	---	---	---	---	---	---	---	5.0	2.7	4.1
7	---	---	---	---	---	---	---	---	---	3.3	2.1	2.7
8	---	---	---	---	---	---	---	---	---	2.8	1.8	2.2
9	---	---	---	---	---	---	---	---	---	1.8	.8	1.4
10	---	---	---	---	---	---	---	---	---	1.9	.6	1.2
11	---	---	---	---	---	---	---	---	---	2.8	.8	1.8
12	---	---	---	---	---	---	---	---	---	3.4	2.2	2.8
13	---	---	---	---	---	---	---	---	---	3.8	1.0	2.7
14	---	---	---	---	---	---	---	---	---	1.0	.2	.6
15	---	---	---	---	---	---	---	---	---	.8	.0	.4
16	---	---	---	---	---	---	---	---	---	.5	.0	.2
17	---	---	---	---	---	---	---	---	---	2.0	.5	1.3
18	---	---	---	---	---	---	---	---	---	2.5	2.0	2.3
19	---	---	---	---	---	---	---	---	---	2.1	.9	1.5
20	---	---	---	---	---	---	---	---	---	1.6	.7	1.0
21	---	---	---	---	---	---	---	---	---	1.9	.5	1.1
22	---	---	---	---	---	---	---	---	---	2.5	.7	1.6
23	---	---	---	---	---	---	---	---	---	1.1	.1	.6
24	---	---	---	---	---	---	e6.5	e5.5	e6.2	.8	-.1	.2
25	---	---	---	---	---	---	6.5	4.8	5.9	.1	-.1	.0
26	---	---	---	---	---	---	5.0	4.4	4.7	.6	.0	.2
27	---	---	---	---	---	---	5.8	4.1	4.7	1.3	.3	.8
28	---	---	---	---	---	---	5.7	3.8	4.6	1.7	.9	1.2
29	---	---	---	---	---	---	6.0	4.2	5.0	1.6	.5	1.0
30	---	---	---	---	---	---	6.8	4.9	5.6	1.3	.3	.7
31	---	---	---	---	---	---	5.8	4.5	5.0	1.4	.3	.8
MONTH	---	---	---	---	---	---	---	---	---	6.3	-0.1	1.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.6	0.1	0.8	6.9	2.8	4.6	5.7	5.2	5.5	17.4	12.9	15.2
2	2.3	.5	1.3	7.3	3.8	5.1	5.6	5.0	5.3	16.9	14.2	15.5
3	2.3	.5	1.5	7.0	3.5	5.0	5.9	5.2	5.6	15.4	14.4	14.9
4	2.3	.9	1.4	5.9	3.8	4.6	6.8	5.5	6.1	14.9	12.1	13.4
5	2.7	.8	1.6	5.0	3.6	4.3	7.3	4.9	5.9	13.8	10.5	12.3
6	1.9	.0	1.3	6.6	4.3	5.2	8.7	3.9	6.1	15.8	11.1	13.4
7	2.4	.9	1.5	7.1	3.0	5.1	9.6	5.3	7.3	18.0	13.2	15.3
8	1.5	.0	.8	5.6	2.9	4.1	10.7	5.9	8.3	15.1	12.0	13.6
9	2.8	.4	1.6	3.9	2.5	3.2	11.5	7.2	9.2	13.5	11.7	12.3
10	4.0	1.6	2.5	5.8	2.5	4.0	11.4	7.0	9.2	15.5	11.0	13.1
11	3.3	1.3	2.1	6.0	3.2	4.5	9.9	7.7	8.7	17.7	13.3	15.4
12	2.9	.5	1.8	5.2	2.7	3.9	11.1	7.5	9.1	18.4	15.0	16.5
13	3.5	1.4	2.4	6.2	1.7	3.7	9.1	6.8	8.0	17.2	14.6	16.0
14	4.0	1.6	2.6	5.6	1.6	3.7	9.7	7.2	8.9	17.1	13.4	15.0
15	2.1	.0	1.1	7.9	4.0	5.6	10.3	8.1	8.9	17.4	14.3	15.6
16	1.9	-.1	.7	5.2	1.0	3.7	11.1	6.6	8.7	16.5	14.2	15.9
17	2.5	-.1	1.2	2.9	2.1	2.4	12.6	7.1	9.9	17.1	14.6	15.6
18	2.5	1.4	1.9	4.4	2.0	2.8	14.0	10.3	12.0	16.7	14.9	15.7
19	3.6	.7	2.0	4.3	2.0	3.0	15.3	10.4	12.9	17.2	15.4	16.5
20	4.3	1.1	2.6	6.8	1.4	3.8	16.1	12.3	14.0	17.0	14.2	15.6
21	3.7	2.7	3.1	6.3	3.6	4.8	14.3	10.7	12.3	17.5	14.8	16.1
22	4.0	2.3	3.1	5.5	1.6	3.5	16.6	11.5	13.8	16.8	13.4	14.9
23	4.6	1.5	2.8	6.4	1.8	4.0	14.9	10.6	12.4	14.8	13.0	13.7
24	3.8	1.4	2.6	8.5	3.0	5.8	14.8	10.0	12.2	14.1	12.7	13.7
25	4.5	1.0	2.5	8.5	5.9	7.1	13.2	9.0	11.1	13.4	12.7	13.2

Table 9. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts.—Continued

WATER TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
26	4.7	1.2	2.6	11.7	7.1	9.2	10.8	9.3	10.1	12.7	12.0	12.3
27	4.9	1.0	2.7	12.2	9.0	10.1	13.9	10.1	11.8	15.4	11.8	13.4
28	6.0	1.5	3.5	9.6	6.1	8.1	14.2	10.3	12.0	14.4	13.5	13.9
29	5.8	2.2	3.9	10.1	5.5	7.3	15.6	9.9	12.6	15.2	12.8	13.9
30	---	---	---	7.8	5.9	6.6	16.7	11.9	14.3	15.8	12.8	14.2
31	---	---	---	6.6	5.4	6.2	---	---	---	15.8	13.2	14.6
MONTH	6.0	-0.1	2.1	12.2	1.0	5.0	16.7	3.9	9.7	18.4	10.5	14.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.7	13.2	13.8	16.7	14.5	15.6	19.3	18.4	18.8	18.6	17.1	17.8
2	15.8	12.9	14.2	17.4	15.6	16.4	19.2	17.8	18.4	17.3	15.8	16.6
3	16.7	14.4	15.6	16.8	14.9	15.8	19.4	17.5	18.4	17.6	15.1	16.4
4	17.3	14.2	15.7	17.0	14.6	15.8	18.9	17.2	18.1	18.1	16.3	17.1
5	16.8	14.8	15.7	17.8	15.2	16.0	17.7	16.3	17.0	16.3	14.4	15.7
6	15.6	13.9	14.6	17.0	15.6	16.3	16.4	15.2	15.8	15.7	13.1	14.6
7	16.2	13.4	14.7	17.3	15.4	16.3	15.9	13.8	15.0	16.7	14.1	15.4
8	18.3	14.9	16.6	16.4	15.5	15.9	16.2	14.0	15.1	19.7	16.0	18.2
9	19.9	16.8	18.4	16.9	15.5	16.0	16.8	14.3	15.6	21.0	18.9	19.9
10	19.3	16.7	18.3	16.6	14.8	15.7	17.6	15.0	16.2	20.6	18.1	19.4
11	16.9	14.8	15.9	16.5	14.8	15.6	17.7	16.1	16.8	18.2	16.6	17.5
12	16.2	13.8	15.1	16.0	14.4	15.1	21.5	16.2	17.3	17.8	15.2	16.7
13	16.5	13.9	15.3	15.3	14.6	14.9	22.8	20.7	22.2	18.2	16.4	17.3
14	16.1	14.7	15.5	15.3	14.6	15.0	22.6	20.8	21.7	16.8	14.9	15.9
15	18.0	15.6	16.7	16.2	14.5	15.2	21.6	19.5	20.5	15.8	13.9	15.0
16	17.8	16.0	16.9	16.6	14.9	15.8	19.5	18.5	19.0	16.4	15.4	15.8
17	17.2	15.9	16.5	17.4	15.3	16.3	20.0	17.9	18.8	17.5	16.2	16.8
18	16.6	16.0	16.4	17.5	15.7	16.5	20.4	17.9	19.2	18.4	16.4	17.3
19	17.6	15.8	16.5	16.3	15.6	15.9	20.8	19.2	20.0	17.2	14.8	15.9
20	15.9	13.8	14.9	17.7	15.5	16.4	21.8	19.8	20.7	17.1	13.7	15.2
21	15.9	13.7	14.9	17.7	15.4	16.5	22.0	20.6	21.3	17.1	14.9	15.9
22	15.5	14.2	15.0	18.2	15.6	16.8	21.4	18.5	19.9	18.4	15.6	16.9
23	16.7	15.0	15.7	18.4	16.2	17.1	21.0	17.7	19.3	18.2	16.8	17.5
24	16.3	13.9	15.2	21.0	16.6	19.4	20.1	18.4	19.2	17.7	15.8	16.8
25	15.8	14.6	15.2	19.5	17.7	18.8	19.6	17.1	18.4	18.0	15.8	17.0
26	16.8	14.7	15.4	18.2	16.7	17.4	18.9	16.3	17.8	18.2	16.9	17.6
27	15.6	13.6	14.7	17.1	15.8	16.5	19.6	17.7	18.6	17.5	15.3	16.6
28	15.4	13.6	14.6	17.5	16.4	16.9	20.6	18.8	19.7	17.9	16.3	17.1
29	15.6	14.1	14.8	18.7	17.1	17.8	20.7	19.2	19.9	17.0	14.6	15.9
30	16.4	14.2	15.3	19.1	17.4	18.3	20.0	18.7	19.3	16.6	13.5	15.0
31	---	---	---	20.0	17.9	18.9	20.0	18.3	19.3	---	---	---
MONTH	19.9	12.9	15.6	21.0	14.4	16.5	22.8	13.8	18.6	21.0	13.1	16.7

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	256	251	254
2	---	---	---	---	---	---	---	---	---	313	254	259
3	---	---	---	---	---	---	---	---	---	263	253	255
4	---	---	---	---	---	---	---	---	---	254	245	250
5	---	---	---	---	---	---	---	---	---	654	239	273
6	---	---	---	---	---	---	---	---	---	357	246	260
7	---	---	---	---	---	---	---	---	---	337	252	266
8	---	---	---	---	---	---	---	---	---	270	263	266
9	---	---	---	---	---	---	---	---	---	280	270	275
10	---	---	---	---	---	---	---	---	---	287	280	285

Table 9. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts.—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
11	---	---	---	---	---	---	---	---	---	291	287	290
12	---	---	---	---	---	---	---	---	---	348	284	299
13	---	---	---	---	---	---	---	---	---	298	280	286
14	---	---	---	---	---	---	---	---	---	284	280	282
15	---	---	---	---	---	---	---	---	---	290	283	286
16	---	---	---	---	---	---	---	---	---	294	289	292
17	---	---	---	---	---	---	---	---	---	294	290	292
18	---	---	---	---	---	---	---	---	---	354	287	299
19	---	---	---	---	---	---	---	---	---	293	284	287
20	---	---	---	---	---	---	---	---	---	289	284	285
21	---	---	---	---	---	---	---	---	---	298	284	287
22	---	---	---	---	---	---	---	---	---	289	282	285
23	---	---	---	---	---	---	---	---	---	283	281	282
24	---	---	---	---	---	---	e270	e196	e242	291	282	285
25	---	---	---	---	---	---	231	222	227	297	291	294
26	---	---	---	---	---	---	240	231	236	298	293	295
27	---	---	---	---	---	---	245	239	242	311	292	301
28	---	---	---	---	---	---	245	243	244	309	300	304
29	---	---	---	---	---	---	248	244	246	367	299	314
30	---	---	---	---	---	---	249	245	247	318	300	306
31	---	---	---	---	---	---	252	248	250	313	299	302
MONTH	---	---	---	---	---	---	---	---	---	654	239	284

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	344	301	307	299	287	297	222	173	198	340	324	332
2	325	301	306	289	278	286	234	166	214	349	339	345
3	3540	293	459	279	269	274	245	234	241	353	346	350
4	1340	347	586	282	269	276	251	241	247	346	332	337
5	355	306	318	274	269	272	264	241	255	332	328	329
6	1410	285	527	278	259	266	260	247	253	330	326	328
7	1270	371	702	274	260	266	256	252	254	338	327	332
8	371	319	334	277	273	275	264	256	260	327	307	315
9	338	302	315	287	276	282	278	264	269	307	293	300
10	334	292	304	289	284	286	280	271	277	308	298	303
11	292	280	286	300	284	290	286	280	283	322	308	314
12	289	283	286	353	293	299	288	286	287	334	320	326
13	288	284	286	295	293	294	287	156	254	340	330	335
14	290	284	287	297	293	295	230	206	222	354	340	346
15	292	286	290	294	291	293	232	216	228	365	354	359
16	298	283	292	294	277	291	234	223	228	383	365	377
17	310	298	307	296	282	290	249	234	241	391	314	371
18	312	307	310	302	295	297	260	249	254	314	292	297
19	312	303	309	300	297	298	276	228	268	300	292	295
20	309	303	307	331	300	305	279	274	276	385	297	335
21	313	303	307	320	283	295	282	277	280	450	385	416
22	307	294	301	288	282	285	288	281	285	577	449	506
23	297	287	294	296	288	293	288	284	287	713	577	650
24	294	287	292	300	294	297	284	283	284	801	713	755
25	295	290	293	301	299	300	286	283	284	807	276	500
26	298	290	296	301	299	300	292	284	288	283	262	278
27	305	296	303	300	284	294	294	289	291	329	171	266
28	309	301	307	295	292	294	301	294	297	292	220	261
29	306	299	304	299	295	297	312	301	306	268	261	264
30	---	---	---	301	299	300	325	312	319	278	268	273
31	---	---	---	302	206	275	---	---	---	284	277	280
MONTH	3540	280	338	353	206	289	325	156	264	807	171	357

Table 9. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts.—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	285	263	280	335	332	333	299	296	298	284	274	280
2	296	173	272	343	203	317	306	298	301	285	282	283
3	288	276	282	330	328	329	309	301	305	285	280	283
4	325	287	292	333	328	330	314	306	309	290	284	286
5	301	293	297	331	192	306	308	171	275	291	285	287
6	302	278	297	330	322	326	371	298	309	291	286	289
7	300	295	298	340	324	328	304	299	301	294	288	292
8	315	299	304	354	326	331	304	300	302	295	88	221
9	318	248	308	327	315	324	307	300	303	239	105	219
10	304	286	301	328	324	326	327	302	309	250	239	244
11	312	302	306	329	325	326	336	306	313	256	250	253
12	316	310	312	333	325	328	313	66	305	261	254	258
13	316	312	314	336	283	318	200	40	177	265	261	262
14	332	314	317	352	287	315	227	195	209	321	263	271
15	326	317	320	335	323	326	230	136	188	282	269	275
16	333	326	329	333	322	326	403	188	221	283	270	280
17	334	332	333	326	322	324	230	203	220	285	279	282
18	334	287	320	326	322	324	243	230	235	284	103	187
19	325	320	322	327	322	324	272	243	249	206	189	200
20	327	322	324	330	324	327	267	173	249	210	201	205
21	349	326	331	337	324	329	243	132	211	226	191	209
22	335	333	334	331	325	327	217	193	206	206	189	195
23	348	333	337	381	325	342	232	215	224	228	206	218
24	343	332	336	334	75	227	241	231	236	248	228	239
25	358	319	339	274	245	256	248	240	244	260	248	253
26	335	293	323	289	272	279	256	246	251	268	260	263
27	328	316	325	348	289	297	304	256	264	278	268	273
28	331	327	329	295	166	261	275	263	268	280	111	222
29	330	323	328	281	238	272	284	274	279	214	176	195
30	336	326	330	292	281	285	290	283	287	223	209	217
31	---	---	---	296	292	294	292	174	272	---	---	---
MONTH	358	173	315	381	75	312	403	40	262	321	88	248

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS, AND PESTICIDES

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Date	Time	Turbidity, water, unfiltered, broad band light source (400–680 nm), detectors at multiple angles including 90 ± 30 degrees, NTRU (P63676)	Dissolved oxygen, water, unfiltered (mg/L) (P00300)	pH, water, unfiltered, field, standard units (P00400)	Specific conductance, water, unfiltered (µS/cm at 25°C) (P00095)	Calcium, water, filtered (mg/L) (P00915)	Magnesium, water, filtered (mg/L) (P00925)	Potassium, water, filtered (mg/L) (P00935)	Sodium, water, filtered (mg/L) (P00930)
8-26-2004	1330	1.2	8.8	7	245	17.7	2.99	2.53	25.2

Table 9. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts.—Continued

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS, AND PESTICIDES—Continued

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, (mg/L as $CaCO_3$) (P29801)	Chloride, water, filtered, (mg/L) (P00940)	Sulfate, water, filtered (mg/L) (P00945)	Phosphorus, water, unfiltered (mg/L) (P00665)	Total nitrogen (nitrate + nitrite + ammonia + organic-N), water, unfiltered, analytically determined (mg/L as N) (P62855)	*Escherichia coli*, m-TEC MF method, water (colonies per 100 mL) (P31633)	Cadmium, water, unfiltered (µg/L) (P01027)	Chromium, water, unfiltered, recoverable, micrograms per liter (µg/L) (P01034)	Copper, water, unfiltered, recoverable (µg/L) (P01042)	Iron, water, unfiltered, recoverable (µg/L) (P01045)
35	42.8	16.5	0.01	1.7	18	<0.04	<0.8	1.2	120

Lead, water, unfiltered, recoverable (µg/L) (P01051)	Manganese, water, unfiltered, recoverable (µg/L) (P01055)	Nickel, water, unfiltered, recoverable (µg/L) (P01067)	Zinc, water, unfiltered, recoverable (µg/L) (P01092)	2,4,5-T, surrogate, Schedule 9060/2060, water, filtered, percent recovery (P99958)	2,4-D methyl ester, water, filtered, recoverable (µg/L) (P50470)	2,4-D, water, filtered, recoverable (µg/L) (P39732)	2,4-DB, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38746)	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable (µg/L) (P04040)	2-Chloro-6-ethylamino-4-amino-s-triazine, water, filtered, recoverable (µg/L) (P04038)
0.32	14	1.26	E2	94.4	<0.009	<0.02	<0.02	<0.03	<0.01

2-Hydroxy-4-isopropylamino-6-ethylamino-s-triazine, water, filtered, recoverable (µg/L) (P50355)	3-Hydroxy carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49308)	3-Keto-carbofuran, water, filtered, recoverable (µg/L) (P50295)	9*H*-Fluorene, water, unfiltered, recoverable (µg/L) (P34381)	Acenaphthene, water, unfiltered, recoverable (µg/L) (P34205)	Acenaphthylene, water, unfiltered, recoverable (µg/L) (P34200)	Acifluorfen, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49315)	Aldicarb sulfone, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49313)	Aldicarb sulfoxide, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49314)
<0.008	<0.006	<0.014	<2	<2	<2	<0.007	<0.02	<0.008

Aldicarb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49312)	Anthracene, water, unfiltered, recoverable (µg/L) (P34220)	Atrazine, water, filtered, recoverable (µg/L) (P39632)	Barban, surrogate, Schedules 2060/9060, water, filtered, percent recovery (P90640)	Bendiocarb, water, filtered, recoverable (µg/L) (P50299)	Benomyl, water, filtered, recoverable (µg/L) (P50300)	Bensulfuron, water, filtered, recoverable (µg/L) (P61693)	Bentazon, water, filtered (0.7 micron glass fiber filter), ecoverable (µg/L) (P38711)	Benzo[*a*]anthracene, water, unfiltered, recoverable (µg/L) (P34526)	Benzo[*a*]pyrene, water, unfiltered, recoverable (µg/L) (P34247)
<0.04	<2	<0.009	79.1	<0.03	0.432	<0.02	<0.01	<2	<1

Table 9. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts.—Continued

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS, AND PESTICIDES—Continued

REMARKS.--(PXXXXX) National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Benzo[*b*] fluoranthene, water, unfiltered, recoverable (µg/L) (P34230)	Benzo [*g,h,i*] perylene, water, unfiltered, recoverable (µg/L) (P34521)	Benzo[*k*] fluoranthene, water, unfiltered, recoverable (µg/L) (P34242)	Bromacil, water, filtered, recoverable (µg/L) (P04029)	Bromoxynil, water, (0.7 micron glass fiber filter), recoverable (µg/L) (P49311)	Caffeine, water, filtered, recoverable (µg/L) (P50305)	Caffeine-13C, surrogate, Schedule 9060/2060, water, filtered, percent recovery (P99959)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49310)	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49309)	Chloramben methyl ester, water, filtered, recoverable (µg/L) (P61188)
<2	<3	<2	<0.03	<0.02	0.0149	107	<0.03	<0.006	<0.02

Chlorimuron, water, filtered, recoverable (µg/L) (P50306)	Chloro-diamino-s-triazine, water, filtered, recoverable (µg/L) (P04039)	Chloro-thalonil, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49306)	Chrysene, water, unfiltered, recoverable (µg/L) (P34320)	Clopyralid, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49305)	Cycloate, water, filtered, recoverable (µg/L) (P04031)	Dacthal monoacid, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49304)	Dibenzo[*a,h*] anthracene, water, unfiltered, recoverable (µg/L) (P34556)	Dicamba, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38442)	Dichlorprop, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49302)
<0.010	<0.04	<0.04	<3	<0.01	<0.01	<0.01	<3	<0.01	<0.01

Dinoseb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49301)	Diphenamid, water, filtered, recoverable (µg/L) (P04033)	Diuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49300)	Fenuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49297)	Flumetsulam, water, filtered, recoverable (µg/L) (P61694)	Fluometuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38811)	Fluoranthene, water, unfiltered, recoverable (µg/L) (P34376)	Imazaquin, water, filtered, recoverable (µg/L) (P50356)	Imaze-thapyr, water, filtered, recoverable (µg/L) (P50407)	Imida-cloprid, water, filtered, recoverable (µg/L) (P61695)
<0.01	<0.03	<0.01	<0.03	<0.01	<0.03	M	<0.02	<0.02	0.528

Indeno [1,2,3-*cd*] pyrene, water, unfiltered, recoverable (µg/L) (P34403)	Linuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38478)	MCPA, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38482)	MCPB, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38487)	Metalaxyl, water, filtered, recoverable (µg/L) (P50359)	Methiocarb, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38501)	Methomyl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49296)	Metsulfuron, water, filtered, recoverable (µg/L) (P61697)	N-(4-Chlorophenyl)-N'-methylurea, water, filtered, recoverable (µg/L) (P61692)
<3	<0.01	<0.02	<0.01	0.07	<0.008	<0.004	<0.03	<0.02

Table 9. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts.—Continued

PHYSICAL PROPERTIES AND CONCENTRATIONS OF SELECTED MAJOR INORGANIC CONSTITUENTS, TOTAL NUTRIENTS, TRACE METALS, SUSPENDED SEDIMENT, BACTERIA, SEMIVOLATILE ORGANIC COMPOUNDS, AND PESTICIDES—Continued

REMARKS.--PXXXXX, National Water Quality Laboratory parameter code; A, value is averaged; E, estimated; M, presence verified, but not quantified; NTRU, nephelometric turbidity ratio units; <, concentration is less than value shown; >, concentration is greater than value shown.

Neburon, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49294)	Nicosulfuron, water, filtered, recoverable (µg/L) (P50364)	Nitrobenzene, water, unfiltered, recoverable (µg/L) (P34447)	Norflurazon, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49293)	Oryzalin, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49292)	Oxamyl, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38866)	Phenanthrene, water, unfiltered, recoverable (P34461/L) (P01027)	Picloram, water, filtered (0.7 micron glass fiber filter), recoverable, (µg/L) (P49291)	Propham, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49236)
<0.01	<0.01	<2	<0.02	<0.02	<0.01	<2	<0.02	<0.010

Propiconazole, water, filtered, recoverable (µg/L) (P50471)	Propoxur, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P38538)	Pyrene, water, unfiltered, recoverable (µg/L) (P34469)	Siduron, water, filtered, recoverable (µg/L) (P38548)	Sulfometuron, water, filtered, recoverable (µg/L) (P50337)	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P82670)	Terbacil, water, filtered, recoverable (µg/L) (P04032)	Triclopyr, water, filtered (0.7 micron glass fiber filter), recoverable (µg/L) (P49235)	Naphthalene, water, unfiltered, recoverable (P34696/L) (P01027)
0.15	E0.004	M	<0.02	<0.009	<0.006	<0.010	<0.02	<2

CONCENTRATIONS OF INORGANIC AND ORGANIC CONSTITUENTS IN BED-SEDIMENT SAMPLES

REMARKS.--E, estimated; -LR, laboratory replicate sample; -R, replicate sample; %, parts per hundred; <, value is less than value shown; >, value is greater than value shown; --, no data.

Particle-size composition (mm)	Date	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorus, total, as P (%)	Carbon, organic, total (%)	Aluminum (%)	Antimony (ppm)	Arsenic (ppm)	Barium (ppm)
< 0.062	4-01-2003	0.62	0.5	0.07	0.24	0.12	6.25	2.13	<5	15	206
< 0.062 -LR	4-01-2003	.65	.52	.07	.24	.13	6.22	2.22	<5	14	215
0.062 < 0.250	4-01-2003	.31	.26	.06	.14	.04	2.51	.81	<5	4	72
0.062 < 0.250	4-01-2003	.28	.21	.06	.14	.03	.45	.67	<5	<3	39
0.250 < 2.00	4-01-2003	.14	.16	.02	.09	.02	.49	.42	<5	<3	29
0.250 < 2.00 -R	4-01-2003	.1	.12	.02	.09	.02	.17	.33	<5	<3	22
< 2.00	4-01-2003	.15	.15	.02	.1	.02	--	.45	<5	5	29
< 2.00 -R	4-01-2003	.14	.15	.02	.1	.02	--	.46	<5	6	29

Table 9. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts.—Continued

CONCENTRATIONS OF INORGANIC AND ORGANIC CONSTITUENTS IN BED-SEDIMENT SAMPLES—Continued

REMARKS.--E, estimated; -LR, laboratory replicate sample; -R, replicate sample; %, parts per hundred; <, value is less than value shown; >, value is greater than value shown; --, no data.

Beryllium (ppm)	Bismuth (ppm)	Cadmium (ppm)	Chromium (ppm)	Cobalt (ppm)	Copper (ppm)	Iron (%)	Lanthanum (ppm)	Lead (ppm)	Lithium (ppm)	Manganese (ppm)	Molybdenum (ppm)
1.1	<5	<1	693	16	46.2	2.9	37.8	91	22	1,910	5
1.1	<5	<1	735	16	48.1	3.05	40.2	97	22	2,010	5
<.5	<5	<1	753	6	22.8	1.74	14.1	29	8	613	5
<.5	<5	<1	689	5	16.9	1.7	15.1	13	5	321	4
<.5	<5	<1	263	3	10.9	.92	7.2	9	4	248	2
<.5	<5	<1	338	3	8	.89	6.4	6	3	166	2
<.5	<5	<1	335	3	9.8	1.22	8.7	12	5	254	3
<.5	<5	<1	363	3	10	1.24	9.3	11	5	238	3

Nickel (ppm)	Scandium (ppm)	Silver (ppm)	Strontium (ppm)	Tin (ppm)	Titanium (%)	Tungsten (ppm)	Vanadium (ppm)	Yttrium (ppm)	Zinc (ppm)	Zirconium (ppm)
42	4.3	0.3	40.4	<10	0.1	<10	56	19.6	169	4.9
44	4.4	<.2	42	<10	.11	<10	59	21	178	5.8
29	2.1	<.2	22	<10	.06	<10	29	8.1	60.4	3.2
23	2.1	<.2	21.9	<10	.07	<10	28	7.8	35	5.1
12	1	<.2	11.1	<10	.03	<10	15	3.6	26	3.1
12	.8	<.2	9.1	<10	.02	<10	13	2.9	19	3.1
14	1	<.2	12.4	<10	.04	<10	20	4.1	32.3	3.3
14	1.1	<.2	12.4	<10	.03	<10	20	4.1	27.9	3.5

CONCENTRATIONS OF SEMIVOLATILE COMPOUNDS IN BED-SEDIMENT SAMPLES

REMARKS.--E, estimated; %-rec, percent of surrogate recovery; <, value is less than value shown; --, no data.

Particle-size composition (mm)	Date	Phenol (ppb)	p-cresol (ppb)	Naphthalene (ppb)	C1-128 isomers, methylated naphthalenes (ppb)	2-ethylnaphthalene (ppb)	2,6-dimethylnaphthalene (ppb)	1,6-dimethylnaphthalene (ppb)	C2-128 isomers, C2-alkyated naphthalenes (ppb)
0.250 < 2.00	4-01-2003	E1.2	E1.7	E11.8	E53	E6.6	E14.2	E21.4	E88.7
< 0.250	4-01-2003	E19.9	E16.6	E30.8	E39.1	E11.2	112	E23.4	E234

Particle-size composition (mm)	Acenaphthylene (ppb)	1,2-dimethylnaphthalene (ppb)	Acenaphthene (ppb)	C3-128, C3-alkylated naphthalenes (ppb)	2,3,6-trimethylnaphthalene (ppb)	9*H*-Fluorene (ppb)	C4-128, C4-alkylated naphthalenes (ppb)	1-methyl-9*H*-Fluorene (ppb)	Phenanthrene (ppb)
0.250 < 2.00	59.7	E7.2	146	E188	E11.3	206	E72.6	E23.2	2,320
< 0.250	244	E16.5	E91.0	E351	E17.4	146	E75.4	E38.6	2,500

Table 9. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts.—Continued

CONCENTRATIONS OF SEMIVOLATILE COMPOUNDS IN BED-SEDIMENT SAMPLES—Continued

REMARKS.--E, estimated; %-rec, percent of surrogate recovery; <, value is less than value shown; --, no data.

Particle-size composition (mm)	Anthracene (ppb)	C5-128, C5-alkylated naphthalenes (ppb)	2-methyl-anthracene (ppb)	4,5-methyl-enephenan-threne (ppb)	C1-178 isomers, methylated phenanthrene/ anthracenes (ppb)	1-methyl-phenanthrene (ppb)	C2-178 isomers, C2-alkylated phenanthrene/ anthracenes (ppb)	Fluoranthene (ppb)	Pyrene (ppb)
0.250 < 2.00	530	<50	65.4	250	E693	109	E321	E3,310	2,360
< 0.250	438	<100	E93.8	386	E1,190	190	E629	E6,350	4,350

Particle-size composition (mm)	C3-178 isomers, C3-alkylated phenanthrene/ anthracenes (ppb)	C4-178 isomers, C4-alkylated phenanthrene/ anthracenes (ppb)	1-methyl-pyrene (ppb)	C1-202 isomers, methylated fluoranthene/ pyrenes (ppb)	C2-202 isomers, C2-alkylated fluoranthene/ pyrenes (ppb)	C5-178 isomers, C5-alkylated phenanthrene/ anthracenes (ppb)	Benzo[*a*] anthracene (ppb)	Chrysene (ppb)
0.250 < 2.00	E29.1	<50	81.3	E1,220	<340	<50	1,180	1,260
< 0.250	E132	<100	184	E2,880	<2,280	<100	1,940	3,290

Particle-size composition (mm)	C3-202 isomers, C3-alkylated fluoranthene/ pyrenes (ppb)	C1-228 isomers, methylated benzo[*a*] anthracene/ chrysenes (ppb)	C4-202 isomers, C4-alkylated fluoranthene/ pyrenes (ppb)	C5-202 isomers, C5-alkylated fluoranthene/ pyrenes (ppb)	C2-228 isomers, C2-alkylated benzo[*a*] anthracene/ chrysenes (ppb)	Benzo[*b*] fluoranthene (ppb)	Benzo[*k*] fluoranthene (ppb)	Benzo[*e*] pyrene (ppb)	Benzo[*a*] pyrene (ppb)
0.250 < 2.00	<210	<410	<50	<50	<100	E7.8	E9.7	724	1,080
< 0.250	<550	<1,090	<430	<175	<495	3,500	2,710	2,270	2,450

Particle-size composition (mm)	Perylene (ppb)	C1-252 isomers, C1-methylated benzopyrene/ perylenes (ppb)	C3-228 isomers, C3-benzo[*a*] anthracene/ chrysenes (ppb)	C2-252 isomers, C2-alkylated benzopyrene/ perylenes (ppb)	C4-228 isomers, C4-benzo[*a*] anthracene/ chrysenes (ppb)	Benzo [*g,h,i*] perylene (ppb)	Indeno [1,2,3-*cd*] pyrene (ppb)	Dibenzo[*a,h*] anthracene (ppb)
0.250 < 2.00	258	E562	<75	<285	<120	609	814	112
< 0.250	662	E1,820	<200	<780	<430	2,050	2,460	436

Particle-size composition (mm)	C3-252 isomers, C3-alkylated benzopyrene/ perylenes (ppb)	C4-252 isomers, C4-alkylated benzopyrene/ perylenes (ppb)	C5-228 isomers, C5-benzo[*a*] anthracene/ chrysenes	C5-252 isomers, C5-alkylated benzopyrene/ perylenes	Coronene	Nitro-benzene-d5 (%-rec)	2-fluoro-biphenyl (%-rec)	Terphenyl-d14 (%-rec)
0.250 < 2.00	<140	<70	<65	<210	E114	74.25	71.75	103.71
< 0.250	<260	<200	<220	<700	E439	66.43	76.22	114.84

Table 9. Discharge, water temperature, specific conductance, and physical properties and concentrations of selected analytes in samples of base-flow water, bed sediment, and soil for U.S. Geological Survey station number 01104475, Stony Brook Reservoir, unnamed tributary 1, near Weston, Massachusetts.—Continued

CONCENTRATIONS OF ELEMENTS IN SAMPLES OF SOIL

REMARKS.--Latitude and Longitude: In degrees, minutes, and seconds; -LR, laboratory replicate sample; %, parts per hundred;
<, concentration is less than value shown.

Sample identifier	Latitude ° ′ ″	Longitude ° ′ ″	Date	Calcium (%)	Magnesium (%)	Sodium (%)	Potassium (%)	Phosphorus, total, as P (%)	Aluminum (%)	Antimony (ppm)	Arsenic (ppm)
01104475A	42 21 16.6	71 16 05.2	6-25-2003	0.36	0.5	0.03	0.09	0.08	2.57	<5	4
01104475B	42 22 11.6	71 16 04.3	6-25-2003	.28	.35	.03	.12	.07	2.21	<5	8
01104475C	42 21 16	71 16 15.6	6-25-2003	.68	.8	.05	.2	.09	2.18	<5	4
01104475D	42 21 16.3	71 16 09.9	6-25-2003	.53	.64	.05	.15	.1	2.23	<5	9
01104475D-LR	42 21 16.3	71 16 09.9	6-25-2003	.44	.59	.04	.14	.1	1.99	<5	7
01104475E	42 21 17.1	71 16 15.1	6-25-2003	.51	.89	.06	.19	.06	2.82	<5	5

Sample identifier	Barium (ppm)	Beryllium (ppm)	Bismuth (ppm)	Cadmium (ppm)	Chromium (ppm)	Cobalt (ppm)	Copper (ppm)	Iron (%)	Lanthanum (ppm)	Lead (ppm)	Lithium (ppm)	Manganese (ppm)
01104475A	84	1.3	<5	<1	262	10	18.6	2.27	39.6	23	23	343
01104475B	68	.7	<5	<1	477	5	15.5	2.06	28.3	25	16	375
01104475C	50	.6	<5	<1	400	13	24.9	2.85	22.5	31	17	538
01104475D	46	.7	<5	<1	360	9	19.7	2.81	24.8	34	19	400
01104475D-LR	41	.6	<5	<1	345	9	18.7	2.64	22.1	33	17	368
01104475E	51	.9	<5	<1	332	13	35	3.32	27.5	20	19	357

Sample identifier	Molyb-denum (ppm)	Nickel (ppm)	Scandium (ppm)	Silver (ppm)	Strontium (ppm)	Tin (ppm)	Titanium (%)	Tungsten (ppm)	Vanadium (ppm)	Yttrium (ppm)	Zinc (ppm)	Zirconium (ppm)
01104475A	3	24	4.5	<0.2	24	<10	0.14	<10	51	20.9	58	3.8
01104475B	3	24	3.1	<.2	16.5	<10	.11	<10	35	11.2	50	3.7
01104475C	3	33	5.4	<.2	54.5	<10	.16	<10	62	11.5	62.1	5.2
01104475D	3	26	4.8	<.2	35.4	<10	.19	<10	64	12.7	57.8	4.9
01104475D-LR	3	25	4	<.2	31.3	<10	.18	<10	59	11.4	53.6	4.2
01104475E	2	35	6.3	<.2	32.3	<10	.2	<10	69	20.6	67.2	7.4

PARTICLE-SIZE DISTRIBUTION OF COMPOSITED SAMPLES OF SOIL BY PERCENT

REMARKS.--<, Actual value is less than value shown; >, actual value is greater than value shown

Size range in millimeters			
<0.063	0.250 > 0.063	2.00 > 0.250	>2.00
24.6	23.3	35.5	16.6

Table 10. Discharge, reservoir altitude and capacity, precipitation, air temperature, reservoir pH, dissolved oxygen, turbidity, and specific conductance for U.S. Geological Survey station number 01104480, Stony Brook Reservoir at dam near Waltham, Massachusetts.

PERIOD OF RECORD.--March 1997 to current year.

PERIOD OF DAILY RECORD.--

DISCHARGE: October 1999 to current year.
RESERVOIR ALTITUDE AND CAPACITY: October 1999 to current year.
PRECIPITATION: November 2001 to current year.
AIR TEMPERATURE: November 2001 to current year.
WATER TEMPERATURE: October 2001 to April 2002.
SPECIFIC CONDUCTANCE: October 2001 to November 2003.
DISSOLVED OXYGEN: November 2001 to November 2003.
pH: November 2001 to November 2003.
TURBIDITY: November 2001 to November 2003.

GAGE.--Spillway altitude is 80.30 ft (city of Cambridge datum). Add 10.34 ft to altitudes to adjust to National Geodetic Vertical Datum of 1929. Reservoir capacity at spillway elevation is 258.2 Mgal.

REMARKS.— Records for discharge and reservoir elevation are good. Flow is affected by regulation of dam, 300 ft upstream at outflow of Stony Brook Reservoir. Air temperature records are good; precipitation records are excellent except for measurements made during high wind which are poor; specific conductance records are excellent; pH records are excellent; dissolved oxygen records are poor; turbidity records are excellent. e, estimated.

EXTREMES FOR PERIOD OF RECORD.—

DISCHARGE: Maximum discharge, 310 Mgal/d, Mar. 23, 2001; minimum, no flow, many days throughout the period of record (controlled shutdown).
RESERVOIR ALTITUDE AND CAPACITY: Maximum recorded elevation, 81.73 ft, 271 Mgal, Apr. 2, 2004; minimum, 62.60 ft (manual measurement when reservoir elevation was below sensor), 29.5 Mgal, Sept. 16, 2002.
PRECIPITATION: Maximum recorded, 0.57 in. per 15 minute interval, Sept. 23, 2003.
AIR TEMPERATURE: Maximum recorded, 36.5°C, Aug. 14, 2002; minimum, -22.2°C, Jan. 16, 2004.
WATER TEMPERATURE: Maximum recorded, 19.2°C, Oct. 2, 2001; minimum, 2.5°C, Jan. 2, Feb. 2, 2002.
SPECIFIC CONDUCTANCE: Maximum recorded, 865 µS/cm, Aug. 26, 27, 2002; minimum, 308 µS/cm, Dec. 25, 2002.
DISSOLVED OXYGEN: Maximum recorded, 13.7 mg/L, Jan. 30, 2003; minimum, 2.8 mg/L, Oct. 7 2003.
pH: Maximum recorded, 7.5 units, Sept. 23, 2002; minimum, 6.5 units Oct. 22, 2002, Jan. 1–13, 15–19, Feb. 4, Mar. 29, and Sept. 17 and 26, 2003.
TURBIDITY: Maximum recorded, 97 FNUs, Apr. 30, 2002, and Jan. 22, 2003; minimum, 0.3 FNUs, June 22, 23, 25, 2003 and Aug. 28, 2003.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum discharge, 196 Mgal/d, Apr. 2; minimum, 0.05 Mgal/d, Jan. 31, Feb. 1, 5 and 19.
RESERVOIR ALTITUDE AND CAPACITY: Maximum recorded elevation, 81.73 ft, 271 Mgal, Apr. 2; minimum, 70.95 ft, 165 Mgal, Oct. 11 and 12.
PRECIPITATION: Maximum recorded, 0.41 in. per 15 minute interval, Aug. 13.
AIR TEMPERATURE: Maximum recorded, 32.6°C, June 9; minimum, -22.2°C, Jan. 16.
SPECIFIC CONDUCTANCE: Maximum recorded, 701 µS/cm, Oct. 14; minimum, 506 µS/cm, Nov. 5.
pH: Maximum recorded, 7.3, Oct.1; minimum, 7.0 units, Oct.1–2, 7, 9–11, 14–15, 21, 27–29, 31, and Nov. 1–5.
DISSOLVED OXYGEN: Maximum recorded, 9.1 mg/L, Nov. 4; minimum, 2.8 mg/L, Oct. 7.
TURBIDITY: Maximum recorded, 13 FNUs, Oct. 30; minimum, 0.9 FNUs, Oct. 29.

DISCHARGE, IN MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY TOTAL VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.25	0.71	0.16	19	0.06	0.1	61	9.7	e1.8	e0.34	e0.43	e0.1
2	.26	.78	.16	19	.07	.12	188	26	e1	e.38	e.38	e.13
3	.32	.97	.24	19	.07	.35	171	e0.71	e2.8	e.38	e.43	e.26
4	.41	1.2	.19	25	.08	.45	138	e14	e2.5	e.38	e.84	e.26
5	.4	1.6	.19	29	.06	.43	118	26	e.55	e.38	e.84	e.26
6	.38	10	.23	25	.09	.47	92	36	e.16	e.38	e.84	e.26
7	.39	12	.19	16	.11	.34	79	36	e.16	e.34	e1	e.26
8	.43	2.5	.16	12	.08	.35	67	21	e.16	e.38	e.84	e.34
9	.48	.31	.17	11	.08	.34	58	16	e.13	e.38	e1.2	e.34
10	.5	2.9	.17	11	.08	.39	48	13	e.13	e.38	e.84	e.3

Table 10. Discharge, reservoir altitude and capacity, precipitation, air temperature, reservoir pH, dissolved oxygen, turbidity, and specific conductance for U.S. Geological Survey station number 01104480, Stony Brook Reservoir at dam near Waltham, Massachusetts.—Continued

DISCHARGE, IN MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY-TOTAL VALUES—Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
11	0.51	6.3	0.34	11	0.08	0.48	40	9.7	e0.16	e0.38	e1.2	e0.34
12	.59	6.5	.25	11	.08	.45	69	9.7	e.16	e.37	e1.2	e.16
13	.34	6.1	.22	4.4	.09	e.34	83	5.2	e.16	e.38	e1.2	e.19
14	.35	2.5	20	.26	.09	e.34	86	.22	e.16	e.38	e1.8	e.16
15	.56	.17	47	.22	.08	e.35	104	.19	e.16	e.38	e1.8	e.1
16	.71	.16	57	.22	.08	.36	105	.17	e.13	e.38	e3.3	e.22
17	.9	.18	69	.23	.08	.36	89	.36	e.16	e.38	e4.8	e.26
18	1	.19	69	.25	.08	.34	87	.97	e.26	e.38	e5	e.34
19	1.1	.19	67	.22	.07	.36	85	3	e.22	e.38	e.34	e19
20	1.2	.2	56	.21	.09	.36	68	8.4	e.22	e.38	e.34	e3
21	1.4	.22	54	.22	.1	.36	26	.5	e.22	e.3	e.34	e30
22	1.5	.19	42	.22	.1	.37	12	1.2	e.3	e.3	e35	e13
23	.71	.19	25	.24	.08	.39	23	e1.2	e.3	e.3	e35	e4.3
24	.16	.19	33	e.24	.08	.38	25	e.65	e.3	e.3	e19	e.84
25	.24	.18	43	e.23	.08	.41	61	e.84	e.3	e.33	e.34	e.5
26	.28	.17	32	e.19	.08	.38	83	e.65	e.3	e.33	e.34	e.16
27	.43	.19	22	e.18	.08	.39	e16	e.84	e.3	e.37	e.34	e.16
28	.46	.24	22	e.14	.08	.37	e4.8	e.84	e.3	e.25	e.26	e.22
29	.97	.24	22	e.12	.08	.41	e.61	e1.2	e.3	e.38	e.1	e19
30	.63	.16	21	.07		.43	e.55	e1.2	e.97	e.38	e.1	e3.7
31	.65		19	.06		.58		e2.5		e.38	e.13	
TOTAL	18.5	57.4	723	216	2.36	11.6	2088	248	14.8	11.1	120	130
MEAN	0.6	1.91	23.31	6.97	0.08	0.37	69.6	8	0.49	0.36	3.87	4.34
MAX	1.5	12	69	29	0.11	0.58	188	36	2.8	0.38	35	35
MIN	0.16	0.16	0.16	0.06	0.06	0.1	0.55	0.17	0.13	0.25	0.1	0.1
MED	0.48	0.24	21	0.24	0.08	0.37	68.5	1.2	0.24	0.38	0.84	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, WATER YEAR (WY)

MEAN	8.73	8.08	20.1	9.57	8.08	28.6	46.0	13.6	11.0	1.62	3.85	5.33
MAX	29.1	20.9	29.8	20.5	30.6	65.9	69.6	36.6	26.0	6.45	9.24	14.7
(WY)	2001	2001	2001	2000	2000	2001	2004	2000	2003	2000	2000	2000
MIN	0.39	1.91	2.97	4.75	0.08	0.14	6.04	0.17	0.49	0.04	0.08	0.47
(WY)	2003	2004	2002	2001	2004	2002	2002	2001	2004	2002	2002	2001

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	4771		3637			
ANNUAL MEAN	13.1		9.95		13.7	
HIGHEST ANNUAL MEAN					23.2	2000
LOWEST ANNUAL MEAN					4.36	2002
HIGHEST DAILY MEAN	89.8	Mar 31	188	Apr 2	207	Mar 23 2001
LOWEST DAILY MEAN	0.10	Aug 19	0.06	Jan 31	0.00	Jan 22 2001
10 PERCENT EXCEEDS	44.6		33.6		41.4	
50 PERCENT EXCEEDS	0.51		0.38		2.91	
90 PERCENT EXCEEDS	0.14		0.12		0.07	

e Estimated

RESERVOIR ALTITUDE SURFACE WATER, FEET WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73.67	79.66	77.79	76.42	75.55	75.67	80.75	79.05	80.38	77.01	78.98	75.64
2	73.55	80.01	77.52	76.37	75.52	75.78	81.67	79.33	80.35	77.07	78.58	75.76
3	73.40	80.22	77.16	76.47	75.48	76.09	81.55	78.78	80.41	77.07	78.17	75.92
4	73.29	80.33	76.78	76.61	75.69	76.50	81.35	78.97	80.37	77.05	77.90	76.08
5	73.29	80.35	76.42	76.50	75.79	76.81	81.21	79.74	80.29	77.03	77.83	76.21
6	73.32	80.58	76.25	76.54	75.88	76.95	81.14	79.55	80.17	77.06	77.74	76.30
7	73.33	80.58	76.19	76.47	76.28	77.12	80.96	79.21	80.04	77.03	77.59	76.27
8	73.30	80.37	76.04	76.58	76.61	77.25	80.79	78.94	79.88	76.99	77.43	76.32
9	73.20	80.27	75.86	76.52	76.72	77.48	80.68	79.18	79.70	77.03	77.35	76.42
10	73.07	80.39	75.69	76.29	76.78	77.61	80.52	79.33	79.61	77.05	77.29	76.41

Table 10. Discharge, reservoir altitude and capacity, precipitation, air temperature, reservoir pH, dissolved oxygen, turbidity, and specific conductance for U.S. Geological Survey station number 01104480, Stony Brook Reservoir at dam near Waltham, Massachusetts.—Continued

RESERVOIR ALTITUDE SURFACE WATER, FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES—Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
11	72.95	80.39	75.82	75.97	76.84	77.64	80.30	79.48	79.47	77.04	77.32	76.10
12	72.94	80.23	77.52	75.68	76.84	77.69	79.68	79.55	79.25	77.00	77.41	75.83
13	73.18	79.81	79.33	75.52	76.83	77.74	78.18	79.57	78.97	76.97	78.94	75.83
14	73.22	79.38	80.15	75.72	76.79	77.72	78.95	79.77	78.68	77.05	80.04	75.87
15	73.68	79.06	80.23	75.88	76.75	77.68	80.56	80.01	78.42	77.10	79.64	75.88
16	74.45	78.73	80.04	75.84	76.65	77.62	80.65	80.17	78.10	77.10	79.21	75.89
17	74.73	78.41	79.16	75.75	76.53	77.63	80.25	80.31	77.67	77.07	78.37	75.93
18	74.85	78.08	78.79	75.68	76.46	77.58	79.53	80.35	77.37	77.01	77.93	76.75
19	74.94	77.78	78.59	75.66	76.56	77.51	78.40	80.43	77.09	76.95	77.85	78.43
20	75.12	77.73	77.94	75.61	76.64	e77.54	77.14	80.34	76.87	76.89	77.70	78.25
21	75.22	77.87	76.89	75.54	76.64	77.57	76.82	80.32	76.65	76.82	78.10	77.28
22	74.99	77.97	75.79	75.54	76.46	77.92	77.63	80.36	76.41	76.91	79.02	77.04
23	74.68	77.98	75.47	75.58	76.28	78.12	78.52	80.36	76.19	76.96	78.60	77.14
24	74.39	77.92	75.66	75.58	76.11	78.24	79.43	80.38	75.94	77.72	77.71	77.24
25	74.22	77.88	75.85	75.55	75.95	78.31	79.81	80.43	75.87	79.20	77.14	77.29
26	74.22	77.82	76.16	75.47	75.78	78.39	78.36	80.44	76.09	79.74	76.99	77.31
27	74.32	77.73	76.57	75.40	75.62	78.60	77.71	80.53	76.35	79.76	76.75	77.17
28	74.73	77.64	76.70	75.41	75.59	78.90	78.00	80.57	76.54	79.70	76.44	77.22
29	75.73	77.74	76.62	75.63	75.60	79.06	78.21	80.60	76.73	79.68	76.08	78.27
30	77.74	77.83	76.47	75.58	---	79.13	78.40	80.50	76.89	79.58	75.85	78.67
31	78.99	---	76.45	75.56	---	79.29	---	80.42	---	79.36	75.75	---
MEAN	74.28	79.02	77.16	75.90	76.25	77.65	79.57	79.90	78.22	77.61	77.80	76.69
MAX	78.99	80.58	80.23	76.61	76.84	79.29	81.67	80.60	80.41	79.76	80.04	78.67
MIN	72.94	77.64	75.47	75.40	75.48	75.67	76.82	78.78	75.87	76.82	75.75	75.64

RESERVOIR CAPACITY, MILLIONS OF GALLONS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	252	234	222	214	215	262	246	259	227	246	215
2	178	256	232	221	213	216	270	249	259	227	242	216
3	175	257	228	222	213	219	269	244	259	228	238	217
4	173	258	225	223	215	222	267	245	259	227	235	218
5	173	259	222	222	216	225	266	253	258	227	235	220
6	173	261	220	223	217	226	266	251	257	227	234	220
7	174	261	219	222	220	228	264	248	256	227	232	220
8	173	259	218	223	223	229	263	245	254	227	231	221
9	171	258	216	222	224	231	261	247	253	227	230	222
10	169	259	215	220	225	232	260	249	252	227	229	221
11	166	259	216	218	225	233	258	250	250	227	230	219
12	166	258	232	215	225	233	252	251	248	227	231	216
13	171	254	249	214	225	234	238	251	245	227	245	216
14	171	249	257	215	225	234	245	253	243	227	256	217
15	181	246	258	217	225	233	260	256	240	228	252	217
16	197	243	256	216	224	233	261	257	237	228	248	217
17	203	240	247	216	223	233	258	258	233	227	240	217
18	206	237	244	215	222	232	251	259	230	227	235	225
19	207	234	242	215	223	231	240	259	228	226	235	240
20	210	234	236	214	224	e232	228	259	226	226	233	239
21	211	235	226	214	223	232	225	258	224	225	237	229
22	208	236	216	214	222	235	233	259	221	226	246	227
23	202	236	213	214	220	237	241	259	219	226	242	228
24	195	235	215	214	219	238	250	259	217	234	233	229
25	192	235	216	214	217	239	254	259	217	248	228	230
26	192	234	219	213	216	240	240	259	219	253	227	230
27	194	234	223	212	214	242	233	260	221	253	225	228
28	203	233	224	213	214	245	236	261	223	253	222	229
29	215	234	223	214	214	246	238	261	224	252	219	239
30	234	234	222	214	---	247	240	260	226	251	216	243
31	246	---	222	214	---	249	---	259	---	249	216	---

Table 10. Discharge, reservoir altitude and capacity, precipitation, air temperature, reservoir pH, dissolved oxygen, turbidity, and specific conductance for U.S. Geological Survey station number 01104480, Stony Brook Reservoir at dam near Waltham, Massachusetts.—Continued

PRECIPITATION TOTAL, INCHES,WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY TOTAL VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.16	0.00	0.00	0.00
2	.00	.03	.00	.05	.00	.04	.18	.03	.44	.15	.00	.00
3	.00	.26	.00	.11	.50	.00	.00	.58	.09	.00	.00	.00
4	.38	.01	.00	.17	.00	.09	.06	.35	.00	.00	.00	.00
5	.00	.55	.02	.27	.00	.02	.05	.00	.00	.36	.44	.00
6	.00	.00	.51	.00	.67	.16	.00	.00	.15	.00	.00	.00
7	.00	.00	.02	.00	.06	.01	.00	.02	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.06	.00	.00	.00	.02	.00	1.36
9	.00	.00	.00	.00	.00	.00	.00	.30	.21	.03	.00	.75
10	.00	.00	.00	.00	.00	.01	.00	.00	.03	.00	.00	.02
11	.00	.13	1.36	.00	.00	.00	.00	.00	.00	.00	.01	.00
12	.83	.01	.00	.10	.00	.07	.03	.00	.00	.00	.77	.00
13	.00	.14	.00	.00	.00	.00	1.83	.00	.00	.32	1.34	.00
14	.00	.00	1.01	.00	.00	.00	.33	.00	.00	.13	.01	.00
15	1.55	.00	.77	.00	.00	.00	.18	.00	.00	.00	1.09	.01
16	.01	.00	.00	.00	.00	.17	.00	.34	.00	.00	.16	.09
17	.00	.02	.74	.00	.00	.05	.00	.00	.00	.00	.11	.00
18	.02	.00	.00	.06	.00	.01	.00	.21	.18	.01	.00	2.88
19	.00	.00	.00	.00	.00	e.09	.00	.02	.00	.03	.00	.00
20	.00	.39	.00	.00	.00	e.47	.00	.00	.00	.00	.25	.00
21	.02	.15	.00	.00	.00	.09	.00	.00	.00	.00	1.22	.00
22	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00
23	.07	.00	.00	.00	.00	.00	.78	.10	.00	.00	.00	.00
24	.00	.00	.58	.00	.00	.00	.01	.71	.00	1.93	.00	.00
25	.00	.12	.09	.00	.00	.01	.06	.04	.13	.00	.00	.00
26	.02	.00	.00	.00	.00	.02	.83	.13	.12	.00	.00	.01
27	1.16	.00	.00	.00	.00	.24	.43	.36	.00	.01	.00	.00
28	.02	.30	.00	.03	.00	.00	.00	.41	.00	.44	.00	2.00
29	2.12	.15	.00	.00	.00	.00	.00	.00	.06	.00	.00	.92
30	.00	.00	.01	.00	---	.00	.00	.00	.00	.00	.02	.13
31	.00	---	.00	.00	---	1.11	---	.00	---	.00	.23	---
TOTAL	6.20	2.26	5.11	0.79	1.23	2.72	7.02	3.63	1.57	3.43	5.65	8.17
MAX	2.12	0.55	1.36	0.27	0.67	1.11	2.25	0.71	0.44	1.93	1.34	2.88

AIR TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.6	5.9	11.1	25.0	10.4	17.7	9.2	0.4	5.4	5.5	-0.1	3.3
2	16.4	6.0	11.4	15.2	11.2	13.0	.4	-8.8	-3.2	1.1	-3.2	-.4
3	14.8	3.2	8.2	20.5	11.8	13.8	-1.9	-9.3	-5.9	5.6	.5	2.4
4	14.7	3.4	9.7	12.2	5.6	8.3	2.6	-7.8	-3.3	9.8	1.2	5.8
5	14.0	5.6	9.7	9.9	3.8	6.3	-.1	-9.0	-4.4	1.2	-.8	.2
6	14.1	3.2	8.4	12.4	9.3	11.1	-2.1	-6.7	-4.8	.5	-6.7	-1.7
7	15.9	2.1	9.0	13.1	7.2	9.5	-1.8	-3.3	-2.5	-6.3	-9.4	-7.6
8	22.3	6.4	14.4	8.8	-2.4	3.3	2.1	-6.0	-1.9	-7.2	-13.4	-9.5
9	24.0	10.8	16.2	3.6	-5.0	-1.0	2.8	-8.8	-2.7	-13.2	-18.0	-15.6
10	19.5	11.1	14.4	9.0	-5.2	1.2	4.6	-1.5	1.9	-11.0	-19.3	-15.6
11	19.2	9.1	12.9	8.4	-3.2	3.2	11.4	4.2	7.8	-4.8	-17.6	-10.8
12	14.9	9.7	12.7	12.6	6.6	9.3	4.7	-2.1	2.5	-.2	-5.7	-3.1
13	20.2	9.7	14.9	14.4	4.1	9.9	-1.3	-7.3	-3.1	4.6	-13.6	-3.2
14	17.4	6.2	12.2	4.1	.7	2.1	2.9	-9.1	-4.7	-13.6	-20.4	-16.9
15	17.2	11.5	15.0	5.8	-.5	2.0	4.5	-1.8	.5	-14.4	-21.4	-17.4
16	15.8	5.4	10.7	8.7	-3.0	2.9	5.2	-3.8	-.6	-10.6	-22.2	-16.1
17	13.2	5.5	9.5	5.2	1.2	3.4	12.9	-2.7	7.1	1.9	-11.4	-4.5
18	12.1	5.0	8.3	11.5	.5	5.3	4.8	-.5	2.2	1.2	-3.0	-.8
19	6.3	1.4	4.4	15.7	4.1	11.5	3.9	-2.2	-.2	-2.8	-9.0	-5.8
20	11.6	-1.2	5.5	17.1	5.9	10.7	1.9	-3.7	-.8	-4.3	-10.0	-7.7

Table 10. Discharge, reservoir altitude and capacity, precipitation, air temperature, reservoir pH, dissolved oxygen, turbidity, and specific conductance for U.S. Geological Survey station number 01104480, Stony Brook Reservoir at dam near Waltham, Massachusetts.—Continued

AIR TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
21	19.6	4.9	14.9	10.6	4.0	7.1	1.3	-7.0	-1.9	-2.1	-11.0	-7.5
22	13.3	3.3	6.2	12.7	2.1	6.1	9.3	.3	4.2	1.9	-12.1	-4.5
23	4.6	1.3	2.7	10.8	.3	4.3	12.4	1.0	6.4	-6.3	-13.0	-9.5
24	7.3	-1.0	3.4	10.4	-.6	5.1	14.8	5.5	11.2	-8.6	-15.2	-12.0
25	13.4	-2.6	5.5	8.4	-1.4	4.8	12.6	1.9	7.2	-9.2	-18.1	-14.4
26	17.6	7.6	14.1	7.4	-2.8	2.9	3.7	.2	2.1	-7.8	-17.6	-11.8
27	19.1	13.6	16.6	10.4	2.0	5.6	8.7	-1.8	3.0	-5.0	-12.2	-8.2
28	16.6	8.5	11.6	17.7	5.0	9.7	11.6	-4.8	1.6	-2.8	-7.2	-4.5
29	21.0	9.9	13.8	17.7	3.4	8.2	13.8	-2.5	5.2	-3.3	-8.2	-5.4
30	14.8	4.9	9.6	7.7	2.7	5.0	12.2	2.3	6.8	-4.2	-10.0	-7.1
31	19.6	3.2	11.6	---	---	---	7.4	2.6	4.6	-3.0	-10.6	-7.1
MONTH	24.0	-2.6	10.6	25.0	-5.2	6.7	14.8	-9.3	1.3	9.8	-22.2	-7.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.6	-13.2	-5.2	12.6	-0.4	6.7	7.0	3.9	5.2	26.3	12.5	19.6
2	4.2	-9.8	-3.5	18.6	3.4	9.9	4.8	3.4	3.8	23.9	16.3	18.7
3	2.9	-8.5	-2.0	11.6	1.7	7.9	5.5	3.4	4.3	19.4	11.7	16.2
4	5.8	-2.4	2.4	9.9	1.0	5.0	8.2	3.9	5.7	13.7	5.8	9.7
5	2.0	-4.2	-1.0	7.9	-.2	4.6	4.7	-.4	1.8	18.4	3.0	11.5
6	.6	-3.2	-1.0	15.2	4.5	9.9	10.2	-1.0	4.0	21.4	7.0	14.7
7	4.8	-3.2	.9	8.6	1.7	4.4	12.6	2.3	7.3	27.4	12.1	19.9
8	-3.2	-9.9	-5.8	3.2	-1.5	.2	14.2	.2	7.9	16.3	7.0	11.3
9	6.3	-7.2	.5	.9	-3.2	-.9	14.7	2.4	9.0	15.1	8.7	10.4
10	7.2	-1.8	2.6	5.2	-3.1	.9	13.6	1.9	8.0	20.6	7.2	13.8
11	2.5	-4.0	-.5	8.5	-1.2	2.4	11.5	4.0	6.9	28.9	13.3	21.4
12	2.3	-8.1	-2.5	8.6	-1.6	1.1	10.3	3.4	6.5	30.3	14.5	20.9
13	4.6	-2.8	1.0	5.0	-1.5	1.2	6.7	4.8	5.2	20.2	8.6	14.0
14	5.1	-1.2	1.7	5.9	-6.0	.8	15.9	6.7	13.9	26.4	8.5	15.7
15	-.1	-11.7	-7.3	9.7	2.5	6.3	13.0	5.8	8.2	31.1	16.2	23.7
16	-2.1	-14.4	-8.1	2.9	-3.3	-.6	12.4	2.2	6.8	22.0	11.0	16.1
17	-1.3	-11.4	-5.4	-1.8	-5.0	-3.1	24.7	.0	13.1	21.5	11.2	15.2
18	.2	-3.4	-1.7	-.4	-5.2	-2.9	17.5	10.7	14.5	24.3	12.1	18.5
19	4.5	-6.2	-.3	1.4	-5.2	-1.0	30.5	8.5	19.3	20.2	11.5	17.5
20	6.0	-4.4	.8	e7.2	e-9.6	e.3	22.3	8.8	16.3	23.4	9.1	16.6
21	3.6	.6	2.4	9.1	-1.2	4.4	17.1	5.2	10.9	27.1	12.4	19.0
22	5.0	.4	2.9	-1.2	-5.8	-3.5	26.1	10.3	18.6	18.2	8.5	11.8
23	6.4	-2.1	1.3	5.5	-7.6	-.8	19.7	5.9	8.7	19.8	9.4	12.4
24	3.1	-5.2	-.4	11.7	-2.9	4.3	17.4	5.6	11.3	13.5	9.7	11.4
25	4.7	-5.3	-.6	13.4	4.6	8.5	12.3	3.5	6.8	12.7	9.3	10.4
26	4.9	-3.7	.1	20.3	7.4	12.3	12.0	4.2	8.2	12.4	8.2	10.1
27	7.3	-5.5	.7	17.6	9.2	11.4	19.1	9.1	12.4	21.0	10.0	13.7
28	11.1	-4.8	3.6	9.2	1.2	5.3	12.7	6.4	9.8	17.8	11.8	14.2
29	11.8	-3.7	5.1	5.9	-.1	2.6	24.6	4.5	15.3	15.9	9.7	12.9
30	---	---	---	5.5	.2	2.3	27.0	14.0	19.8	20.8	8.7	14.9
31	---	---	---	5.0	3.2	4.1	---	---	---	19.7	7.5	15.1
MONTH	11.8	-14.4	-0.7	20.3	-9.6	3.4	30.5	-1.0	9.7	31.1	3.0	15.

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13.8	9.2	10.8	28.7	15.5	22.2	27.7	22.3	25.3	25.6	16.5	20.9
2	22.2	9.4	15.1	28.8	16.7	22.5	30.2	20.7	24.7	22.9	14.1	18.7
3	21.7	12.2	15.6	26.9	15.9	21.6	30.4	20.1	25.4	26.3	13.0	19.9
4	22.8	9.7	16.0	26.8	15.0	22.0	27.2	20.9	23.6	27.1	16.7	20.9
5	19.8	10.9	15.3	22.0	18.2	20.3	23.9	16.0	19.2	19.3	12.3	16.7
6	14.6	10.3	12.2	25.8	19.1	22.2	22.2	15.2	18.2	21.9	9.8	16.0
7	24.2	10.4	15.4	26.7	17.8	22.1	21.4	12.2	17.3	27.4	12.8	20.4
8	30.9	13.1	22.9	25.0	18.2	21.4	23.3	13.8	18.7	23.6	19.4	21.3
9	32.6	19.7	26.2	23.6	18.7	21.1	26.8	15.1	21.0	27.4	18.2	22.3
10	21.6	13.4	18.5	26.7	16.6	21.7	28.6	16.0	22.9	24.1	15.3	20.2

Table 10. Discharge, reservoir altitude and capacity, precipitation, air temperature, reservoir pH, dissolved oxygen, turbidity, and specific conductance for U.S. Geological Survey station number 01104480, Stony Brook Reservoir at dam near Waltham, Massachusetts.—Continued

AIR TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
11	21.2	9.8	15.9	25.3	16.6	20.8	27.4	20.4	23.2	21.9	12.9	16.8
12	22.1	9.4	15.9	25.1	15.2	20.0	28.7	20.4	24.2	25.6	10.0	17.5
13	23.9	10.2	17.7	19.4	16.8	17.9	26.3	21.6	23.6	24.1	14.2	18.7
14	22.0	13.8	18.6	19.0	16.7	17.5	27.5	20.4	23.6	19.5	11.9	15.5
15	30.2	18.4	24.1	25.9	16.6	20.7	22.4	17.6	18.8	20.8	10.3	16.0
16	30.0	18.6	24.1	25.7	17.0	21.8	18.6	16.7	17.6	21.3	15.9	18.4
17	28.4	19.8	23.6	29.2	19.0	24.1	23.7	15.6	18.9	26.0	18.8	22.1
18	20.4	17.4	18.9	28.7	18.9	23.7	26.3	15.2	20.8	21.6	12.5	15.3
19	26.0	16.6	21.0	23.7	18.9	20.4	27.3	19.6	23.6	15.7	8.1	12.0
20	21.6	10.9	17.2	29.5	19.7	24.1	30.6	21.2	24.6	21.0	7.9	13.6
21	24.8	14.3	19.5	29.9	18.0	24.0	25.4	16.9	21.6	21.0	12.7	16.7
22	23.9	14.6	20.2	30.6	18.8	24.7	22.1	12.7	17.5	25.7	13.5	19.9
23	27.0	17.9	22.3	29.5	20.4	24.6	27.4	12.4	20.0	23.2	13.4	19.1
24	26.8	12.9	20.7	22.9	17.1	20.0	23.8	14.8	19.3	23.6	12.4	16.9
25	23.8	16.3	20.2	23.4	15.8	18.8	25.5	12.4	18.7	24.7	12.7	18.8
26	23.8	15.7	19.5	24.2	14.2	19.4	25.6	10.8	18.5	23.5	13.4	19.2
27	23.8	13.1	18.7	23.2	15.1	19.4	27.4	17.6	22.5	24.0	10.7	17.5
28	23.1	14.3	19.2	19.1	14.8	17.3	31.5	20.6	25.9	17.5	15.2	16.5
29	23.3	15.0	18.3	28.9	18.1	22.2	30.6	20.9	25.6	16.7	10.0	12.8
30	26.6	15.7	21.1	29.3	17.7	24.1	30.0	21.5	25.1	19.6	7.5	13.6
31	---	---	---	30.1	21.3	25.9	25.6	18.0	23.1	---	---	---
MONTH	32.6	9.2	18.8	30.6	14.2	21.6	31.5	10.8	21.7	27.4	7.5	17.8
YEAR	32.6	-22.2	9.9									

SPECIFIC CONDUCTANCE, RESERVOIR WATER, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	668	656	661	567	545	559	---	---	---	---	---	---
2	670	667	669	571	561	565	---	---	---	---	---	---
3	673	669	671	566	558	562	---	---	---	---	---	---
4	674	671	672	564	556	560	---	---	---	---	---	---
5	679	673	675	559	506	528	---	---	---	---	---	---
6	680	677	678	---	---	---	---	---	---	---	---	---
7	689	679	682	---	---	---	---	---	---	---	---	---
8	686	682	683	---	---	---	---	---	---	---	---	---
9	698	684	688	---	---	---	---	---	---	---	---	---
10	695	684	689	---	---	---	---	---	---	---	---	---
11	698	684	688	---	---	---	---	---	---	---	---	---
12	689	678	684	---	---	---	---	---	---	---	---	---
13	695	681	686	---	---	---	---	---	---	---	---	---
14	701	689	693	---	---	---	---	---	---	---	---	---
15	698	650	683	---	---	---	---	---	---	---	---	---
16	686	669	679	---	---	---	---	---	---	---	---	---
17	687	678	684	---	---	---	---	---	---	---	---	---
18	683	662	677	---	---	---	---	---	---	---	---	---
19	675	668	670	---	---	---	---	---	---	---	---	---
20	670	646	667	---	---	---	---	---	---	---	---	---
21	663	632	656	---	---	---	---	---	---	---	---	---
22	661	656	659	---	---	---	---	---	---	---	---	---
23	659	656	657	---	---	---	---	---	---	---	---	---
24	657	653	654	---	---	---	---	---	---	---	---	---
25	655	626	645	---	---	---	---	---	---	---	---	---
26	640	615	632	---	---	---	---	---	---	---	---	---
27	632	619	627	---	---	---	---	---	---	---	---	---
28	623	604	618	---	---	---	---	---	---	---	---	---
29	624	574	613	---	---	---	---	---	---	---	---	---
30	600	575	591	---	---	---	---	---	---	---	---	---
31	594	551	576	---	---	---	---	---	---	---	---	---
MONTH	701	551	662	---	---	---	---	---	---	---	---	---

Table 10. Discharge, reservoir altitude and capacity, precipitation, air temperature, reservoir pH, dissolved oxygen, turbidity, and specific conductance for U.S. Geological Survey station number 01104480, Stony Brook Reservoir at dam near Waltham, Massachusetts.—Continued

DISSOLVED OXYGEN, UNFILTERED RESERVOIR WATER, MILLIGRAMS PER LITER, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.2	5.5	5.8	8.8	7.9	8.4	---	---	---	---	---	---
2	6.6	5.7	6.3	8.9	8.3	8.5	---	---	---	---	---	---
3	6.3	5.9	6.1	9.0	8.6	8.8	---	---	---	---	---	---
4	6.1	5.5	5.9	9.1	8.6	8.8	---	---	---	---	---	---
5	5.7	4.5	5.0	9.0	8.7	8.8	---	---	---	---	---	---
6	4.5	3.0	3.6	---	---	---	---	---	---	---	---	---
7	3.6	2.8	3.1	---	---	---	---	---	---	---	---	---
8	4.1	3.0	3.4	---	---	---	---	---	---	---	---	---
9	4.6	3.8	4.1	---	---	---	---	---	---	---	---	---
10	4.8	3.9	4.2	---	---	---	---	---	---	---	---	---
11	5.8	4.7	5.1	---	---	---	---	---	---	---	---	---
12	6.0	5.5	5.7	---	---	---	---	---	---	---	---	---
13	6.1	5.6	5.9	---	---	---	---	---	---	---	---	---
14	6.0	5.6	5.8	---	---	---	---	---	---	---	---	---
15	6.0	5.5	5.8	---	---	---	---	---	---	---	---	---
16	6.2	5.8	6.1	---	---	---	---	---	---	---	---	---
17	6.4	6.0	6.3	---	---	---	---	---	---	---	---	---
18	6.4	5.6	6.1	---	---	---	---	---	---	---	---	---
19	6.6	6.0	6.3	---	---	---	---	---	---	---	---	---
20	6.8	6.3	6.5	---	---	---	---	---	---	---	---	---
21	6.8	6.2	6.4	---	---	---	---	---	---	---	---	---
22	6.9	6.4	6.7	---	---	---	---	---	---	---	---	---
23	8.9	6.7	8.2	---	---	---	---	---	---	---	---	---
24	8.6	7.9	8.2	---	---	---	---	---	---	---	---	---
25	8.4	7.8	8.0	---	---	---	---	---	---	---	---	---
26	8.9	8.2	8.4	---	---	---	---	---	---	---	---	---
27	8.8	8.0	8.3	---	---	---	---	---	---	---	---	---
28	8.9	8.0	8.2	---	---	---	---	---	---	---	---	---
29	8.6	8.0	8.3	---	---	---	---	---	---	---	---	---
30	8.5	7.9	8.2	---	---	---	---	---	---	---	---	---
31	8.6	7.8	8.2	---	---	---	---	---	---	---	---	---
MONTH	8.9	2.8	6.3	---	---	---	---	---	---	---	---	---

pH, UNFILTERED RESERVOIR WATER, IN STANDARD UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	7.0	---	---	---	---	---	---	---	---	---	---
2	7.1	7.0	---	---	---	---	---	---	---	---	---	---
3	7.1	7.0	---	---	---	---	---	---	---	---	---	---
4	7.1	7.0	---	---	---	---	---	---	---	---	---	---
5	7.1	7.0	---	---	---	---	---	---	---	---	---	---
6	7.1	---	---	---	---	---	---	---	---	---	---	---
7	7.1	---	---	---	---	---	---	---	---	---	---	---
8	7.1	---	---	---	---	---	---	---	---	---	---	---
9	7.1	---	---	---	---	---	---	---	---	---	---	---
10	7.0	---	---	---	---	---	---	---	---	---	---	---
11	7.2	---	---	---	---	---	---	---	---	---	---	---
12	7.2	---	---	---	---	---	---	---	---	---	---	---
13	7.2	---	---	---	---	---	---	---	---	---	---	---
14	7.1	---	---	---	---	---	---	---	---	---	---	---
15	7.1	---	---	---	---	---	---	---	---	---	---	---
16	7.1	---	---	---	---	---	---	---	---	---	---	---
17	7.2	---	---	---	---	---	---	---	---	---	---	---
18	7.1	---	---	---	---	---	---	---	---	---	---	---
19	7.1	---	---	---	---	---	---	---	---	---	---	---
20	7.1	---	---	---	---	---	---	---	---	---	---	---
21	7.1	---	---	---	---	---	---	---	---	---	---	---
22	7.1	---	---	---	---	---	---	---	---	---	---	---
23	7.1	---	---	---	---	---	---	---	---	---	---	---
24	7.1	---	---	---	---	---	---	---	---	---	---	---
25	7.1	---	---	---	---	---	---	---	---	---	---	---

Table 10. Discharge, reservoir altitude and capacity, precipitation, air temperature, reservoir pH, dissolved oxygen, turbidity, and specific conductance for U.S. Geological Survey station number 01104480, Stony Brook Reservoir at dam near Waltham, Massachusetts.—Continued

pH, UNFILTERED RESERVOIR WATER, IN STANDARD UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
26	7.1	---	---	---	---	---	---	---	---	---	---	---
27	7.0	---	---	---	---	---	---	---	---	---	---	---
28	7.1	---	---	---	---	---	---	---	---	---	---	---
29	7.1	---	---	---	---	---	---	---	---	---	---	---
30	7.1	---	---	---	---	---	---	---	---	---	---	---
31	7.1	---	---	---	---	---	---	---	---	---	---	---
MAX	7.3	---	---	---	---	---	---	---	---	---	---	---
MIN	7.0	---	---	---	---	---	---	---	---	---	---	---
MED	7.1	---	---	---	---	---	---	---	---	---	---	--

TURBIDITY, WATER, UNFILTERED RESERVOIR WATER, FORMAZIN NEPHELOMETRIC MULTIBEAM UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	4.8	1.0	1.7	6.0	2.8	4.4	---	---	---	---	---	---
2	1.9	1.5	1.6	5.3	3.7	4.7	---	---	---	---	---	---
3	2.3	1.4	1.7	4.2	3.2	3.6	---	---	---	---	---	---
4	3.0	1.9	2.3	5.6	3.7	4.5	---	---	---	---	---	---
5	3.1	2.4	2.7	6.1	4.3	4.8	---	---	---	---	---	---
6	2.8	2.2	2.4	---	---	---	---	---	---	---	---	---
7	3.3	2.3	2.7	---	---	---	---	---	---	---	---	---
8	3.0	2.6	2.8	---	---	---	---	---	---	---	---	---
9	6.4	2.8	3.3	---	---	---	---	---	---	---	---	---
10	3.9	2.9	3.4	---	---	---	---	---	---	---	---	---
11	3.5	2.7	3.1	---	---	---	---	---	---	---	---	---
12	3.3	2.7	2.9	---	---	---	---	---	---	---	---	---
13	3.7	2.8	3.0	---	---	---	---	---	---	---	---	---
14	3.4	2.8	3.0	---	---	---	---	---	---	---	---	---
15	4.6	2.9	3.5	---	---	---	---	---	---	---	---	---
16	9.9	4.1	5.3	---	---	---	---	---	---	---	---	---
17	5.5	4.3	4.8	---	---	---	---	---	---	---	---	---
18	6.8	4.3	5.0	---	---	---	---	---	---	---	---	---
19	8.1	4.4	5.1	---	---	---	---	---	---	---	---	---
20	6.2	4.0	4.6	---	---	---	---	---	---	---	---	---
21	5.0	2.8	4.0	---	---	---	---	---	---	---	---	---
22	5.7	2.1	3.2	---	---	---	---	---	---	---	---	---
23	8.5	2.1	3.9	---	---	---	---	---	---	---	---	---
24	6.4	2.5	3.6	---	---	---	---	---	---	---	---	---
25	5.2	2.1	2.7	---	---	---	---	---	---	---	---	---
26	4.7	1.4	2.4	---	---	---	---	---	---	---	---	---
27	4.6	1.4	2.3	---	---	---	---	---	---	---	---	---
28	3.5	1.0	1.7	---	---	---	---	---	---	---	---	---
29	7.5	.9	2.2	---	---	---	---	---	---	---	---	---
30	13	1.3	3.4	---	---	---	---	---	---	---	---	---
31	4.7	1.7	2.8	---	---	---	---	---	---	---	---	---
MONTH	13	0.9	3.1	---	---	---	---	---	---	---	---	---

Table 11. Records of reservoir altitude and capacity, precipitation, air temperature, and reservoir water temperature and specific conductance for U.S. Geological Survey station number 422302071083801, Fresh Pond gate house at Cambridge, Massachusetts.

PERIOD OF RECORD.—Water year 1998; Oct. 1, 2003, to current year.

PERIOD OF DAILY RECORD.—

RESERVOIR ALTITUDE AND CAPACITY: Oct. 1, 2003, to current year.
PRECIPITATION: June 8, 2004, to current year.
AIR TEMPERATURE: Oct. 1, 2003, to current year.
WATER TEMPERATURE: Oct. 1, 2003, to current year.
SPECIFIC CONDUCTANCE: Oct. 1, 2003, to current year.

GAGE.--Maximum reservoir altitude without causing local flooding is 17.0 ft (city of Cambridge datum). Add 10.34 ft to altitudes to adjust to National Geodetic Vertical Datum of 1929. Reservoir capacity at 17.0 ft is 1,448 Mgal.

REMARKS.--Records for air temperature, water temperature, reservoir elevation, reservoir capacity, and specific conductance prior to June 08, 2004 are fair. Records for air temperature, water temperature, reservoir elevation, reservoir capacity, and specific conductance after June 08, 2004, are excellent. Records for precipitation are excellent except for measurements made during high wind which are poor.
e, estimated.

EXTREMES FOR CURRENT YEAR.--

RESERVOIR ALTITUDE AND CAPACITY: Maximum recorded, 16.66 ft, 1,532 Mgal, Sept. 30, 2004; minimum, 15.29 ft, 1,463 Mgal, Jan. 30, 2004.
PRECIPITATION: Maximum recorded, 0.53 in. per 15-minute inteval, Aug. 20, 2004.
AIR TEMPERATURE: Maximum recorded, 33.1°C, June 9, 2004; minimum, -22°C, Jan. 16, 2004.
WATER TEMPERATURE: Maximum recorded, 25.8°C, Aug.31, 2004; minimum, -0.4°C, Jan. 13 and Feb. 4, 2004.
SPECIFIC CONDUCTANCE: Maximum recorded, 700 µS/cm, Aug. 25, 2004; minimum, 452 µS/cm, Jan. 4–5, 2004.

RESERVOIR ALTITUDE, FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.86	15.78	15.83	16.20	15.42	15.89	16.28	15.70	16.23	16.34	16.41	16.02
2	15.84	15.78	15.87	16.14	15.48	15.92	16.54	15.76	16.28	16.30	16.45	16.00
3	15.86	15.78	15.90	16.01	15.51	15.94	16.49	15.85	16.32	16.24	16.42	15.99
4	15.92	15.78	15.94	15.92	15.63	15.88	16.43	15.99	16.31	16.27	16.33	15.98
5	15.97	15.79	15.97	15.81	15.71	15.84	16.38	16.06	16.30	16.34	16.35	15.97
6	15.95	15.82	16.00	15.72	15.77	15.91	16.28	16.11	16.32	16.37	16.37	15.99
7	15.91	15.71	16.12	15.69	15.83	15.96	16.27	16.10	16.35	16.37	16.37	16.02
8	15.85	15.76	16.15	15.64	15.82	16.02	16.17	16.01	16.37	16.34	16.39	16.03
9	15.84	15.80	16.11	15.64	15.82	15.97	16.06	15.93	16.38	16.35	16.40	16.17
10	15.83	15.71	16.09	15.64	15.79	15.92	15.96	15.91	16.34	16.35	16.38	16.20
11	15.86	15.60	16.08	15.62	15.79	15.91	15.96	15.98	16.27	16.36	16.32	16.17
12	15.98	15.52	16.07	15.60	15.80	15.92	16.01	16.11	16.21	16.36	16.29	16.15
13	16.16	15.58	15.85	15.63	15.81	15.92	15.94	16.07	16.20	16.35	16.40	16.17
14	16.19	15.65	15.75	15.58	15.85	15.91	15.93	15.98	16.19	16.44	16.37	16.16
15	16.26	15.72	15.90	15.49	15.88	15.90	15.84	16.01	16.18	16.47	16.38	16.17
16	16.17	15.78	15.76	15.50	15.90	15.87	15.82	16.07	16.14	16.47	16.28	16.24
17	16.05	15.84	15.66	15.51	15.91	15.87	15.80	16.15	16.11	16.48	16.27	16.18
18	15.97	15.91	15.63	15.52	15.99	15.87	15.76	16.22	16.09	16.49	16.25	16.22
19	15.89	15.96	15.62	15.56	15.92	15.86	15.74	16.25	16.11	16.50	16.19	16.22
20	15.75	15.94	15.70	15.56	15.82	15.86	15.75	16.20	16.14	16.51	16.14	16.14
21	15.61	15.95	15.81	15.54	15.75	15.90	15.71	16.12	16.17	16.51	16.14	16.16
22	15.60	15.92	15.89	15.53	15.77	15.90	15.72	16.05	16.19	16.45	16.23	16.15
23	15.61	15.88	15.87	15.53	15.80	15.87	15.83	16.03	16.21	16.41	16.25	16.16
24	15.59	15.86	15.98	15.56	15.84	15.88	15.89	16.04	16.20	16.49	16.23	16.19
25	15.59	15.85	15.89	15.58	15.87	15.88	15.89	16.07	16.15	16.57	16.19	16.22
26	15.64	15.80	15.80	15.58	15.88	15.85	15.82	16.08	16.16	16.55	16.13	16.25
27	15.71	15.75	15.83	15.61	15.88	15.88	15.81	16.11	16.18	16.51	16.12	16.27
28	15.73	15.73	15.71	15.62	15.88	15.90	15.75	16.14	16.22	16.51	16.12	16.35
29	15.79	15.88	e15.97	15.44	15.88	15.91	15.66	16.17	16.27	16.50	16.11	16.52
30	15.81	15.85	16.23	15.34	---	15.93	15.66	16.17	16.31	16.48	16.08	16.61
31	15.79	---	16.22	15.33	---	16.00	---	16.18	---	16.43	16.06	---
MEAN	15.86	15.79	15.91	15.63	15.79	15.90	15.97	16.05	16.23	16.42	16.27	16.17
MAX	16.26	15.96	16.23	16.20	15.99	16.02	16.54	16.25	16.38	16.57	16.45	16.61
MIN	15.59	15.52	15.62	15.33	15.42	15.84	15.66	15.70	16.09	16.24	16.06	15.97

Table 11. Records of reservoir altitude and capacity, precipitation, air temperature, and reservoir water temperature and specific conductance for U.S. Geological Survey station number 422302071083801, Fresh Pond gate house at Cambridge, Massachusetts.—Continued

RESERVOIR CAPACITY (MILLIONS OF GALLONS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,492	1,488	1,490	1,509	1,469	1,493	1,513	1,484	1,510	1,516	1,520	1,500
2	1,491	1,488	1,492	1,506	1,472	1,495	1,526	1,487	1,513	1,514	1,522	1,499
3	1,492	1,488	1,494	1,500	1,474	1,496	1,524	1,491	1,515	1,511	1,520	1,498
4	1,495	1,488	1,496	1,495	1,480	1,493	1,521	1,498	1,515	1,513	1,516	1,498
5	1,497	1,488	1,498	1,489	1,484	1,491	1,518	1,502	1,514	1,516	1,516	1,497
6	1,496	1,490	1,499	1,485	1,487	1,494	1,513	1,504	1,515	1,518	1,518	1,498
7	1,494	1,484	1,505	1,483	1,490	1,497	1,512	1,504	1,517	1,518	1,518	1,500
8	1,491	1,486	1,506	1,481	1,490	1,500	1,507	1,499	1,517	1,516	1,519	1,500
9	1,491	1,489	1,505	1,480	1,490	1,497	1,502	1,495	1,518	1,517	1,519	1,507
10	1,490	1,484	1,504	1,481	1,488	1,495	1,497	1,495	1,516	1,517	1,518	1,509
11	1,492	1,479	1,503	1,480	1,488	1,494	1,497	1,498	1,512	1,517	1,515	1,507
12	1,498	1,474	1,502	1,478	1,489	1,495	1,499	1,504	1,509	1,517	1,514	1,506
13	1,507	1,477	1,491	1,480	1,489	1,495	1,496	1,502	1,509	1,517	1,519	1,508
1,4	1,509	1,481	1,486	1,477	1,491	1,494	1,495	1,498	1,508	1,521	1,517	1,507
1,5	1,512	1,485	1,494	1,473	1,493	1,494	1,491	1,499	1,508	1,523	1,518	1,508
16	1,507	1,487	1,487	1,473	1,494	1,492	1,490	1,502	1,506	1,523	1,513	1,511
17	1,501	1,491	1,481	1,474	1,494	1,492	1,488	1,507	1,504	1,523	1,512	1,508
18	1,497	1,494	1,480	1,475	1,499	1,492	1,486	1,510	1,503	1,523	1,512	1,510
19	1,493	1,497	1,480	1,477	1,495	1,492	1,486	1,511	1,505	1,524	1,508	1,510
20	1,486	1,496	1,484	1,476	1,490	1,492	1,486	1,509	1,506	1,525	1,506	1,506
21	1,479	1,497	1,489	1,476	1,486	1,494	1,484	1,505	1,507	1,525	1,506	1,507
22	1,479	1,495	1,493	1,475	1,487	1,494	1,485	1,501	1,509	1,522	1,510	1,506
23	e1,478	1,493	1,492	1,475	1,489	1,492	1,490	1,500	1,509	1,519	1,512	1,507
24	1,478	1,492	1,498	1,476	1,491	1,493	1,493	1,501	1,509	1,524	1,511	1,509
25	1,478	1,491	1,493	1,478	1,492	1,493	1,493	1,503	1,507	1,528	1,508	1,510
26	1,481	1,489	1,489	1,478	1,493	1,491	1,490	1,503	1,507	1,527	1,506	1,512
27	1,484	1,486	1,490	1,479	1,493	1,493	1,489	1,505	1,508	1,525	1,505	1,512
28	1,485	1,485	e1484	1,479	1,493	1,494	1,486	1,506	1,510	1,525	1,505	1,516
29	1,488	1,493	e1500	1,470	1,493	1,494	1,482	1,507	1,513	1,524	1,504	1,525
30	1,489	1,491	e1510	1,465	---	1,495	1,482	1,508	1,515	1,523	1,503	1,530
31	1,488	---	1,510	1,465	---	1,499	---	1,508	---	1,521	1,502	---
MEAN	1,492	1,488	1,494	1,480	1,488	1,494	1,497	1,501	1,510	1,520	1,513	1,507
MAX	1,512	1,497	1,510	1,509	1,499	1,500	1,526	1,511	1,518	1,528	1,522	1,530
MIN	1,478	1,474	1,480	1,465	1,469	1,491	1,482	1,484	1,503	1,511	1,502	1,497

PRECIPITATION TOTAL (INCHES),WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	0.00	0.01	0.00
2	---	---	---	---	---	---	---	---	---	.00	.01	.00
3	---	---	---	---	---	---	---	---	---	.00	.01	.00
4	---	---	---	---	---	---	---	---	---	.00	.01	.00
5	---	---	---	---	---	---	---	---	---	.00	.40	.00
6	---	---	---	---	---	---	---	---	---	.00	.00	.00
7	---	---	---	---	---	---	---	---	---	.00	.00	.00
8	---	---	---	---	---	---	---	---	---	.00	.01	.29
9	---	---	---	---	---	---	---	---	0.17	.00	.01	1.02
10	---	---	---	---	---	---	---	---	.06	.00	.00	.00
11	---	---	---	---	---	---	---	---	.00	.00	.00	.00
12	---	---	---	---	---	---	---	---	.00	.00	.69	.00
13	---	---	---	---	---	---	---	---	.00	.00	1.07	.00
14	---	---	---	---	---	---	---	---	.00	.00	.01	.00
15	---	---	---	---	---	---	---	---	.00	.00	.97	.00
16	---	---	---	---	---	---	---	---	.00	.00	.10	.03
17	---	---	---	---	---	---	---	---	.03	.00	.08	.00
18	---	---	---	---	---	---	---	---	.10	.01	.00	2.09
19	---	---	---	---	---	---	---	---	.01	.04	.00	.00
20	---	---	---	---	---	---	---	---	.00	.02	.69	.00

Table 11. Records of reservoir altitude and capacity, precipitation, air temperature, and reservoir water temperature and specific conductance for U.S. Geological Survey station number 422302071083801, Fresh Pond gate house at Cambridge, Massachusetts.—Continued

PRECIPITATION TOTAL (INCHES),WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
21	---	---	---	---	---	---	---	---	0.00	0.02	1.14	0.00
22	---	---	---	---	---	---	---	---	.01	.00	.00	.00
23	---	---	---	---	---	---	---	---	.03	.00	.00	.00
24	---	---	---	---	---	---	---	---	.02	1.53	.00	.00
25	---	---	---	---	---	---	---	---	.00	.00	.00	.00
26	---	---	---	---	---	---	---	---	.00	.01	.00	.00
27	---	---	---	---	---	---	---	---	.00	.00	.00	.00
28	---	---	---	---	---	---	---	---	.00	.44	.01	1.72
29	---	---	---	---	---	---	---	---	.00	.00	.00	.84
30	---	---	---	---	---	---	---	---	.00	.00	.04	.10
31	---	---	---	---	---	---	---	---	---	.00	.11	---
TOTAL	---	---	---	---	---	---	---	---	---	2.07	5.37	6.09
MAX	---	---	---	---	---	---	---	---	---	1.53	1.14	2.09

AIR TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.2	8.6	12.8	24.4	12.7	17.7	9.2	1.6	6.2	5.4	0.6	3.7
2	17.1	8.4	13.0	17.7	11.5	13.6	1.6	-7.3	-2.1	1.5	-2.2	.2
3	14.9	5.9	9.7	18.9	12.2	14.1	-1.4	-8.6	-5.2	6.3	.9	2.7
4	15.4	6.4	11.6	12.5	6.4	9.0	2.1	-5.7	-2.5	9.1	.8	5.8
5	14.7	8.8	11.6	10.2	4.1	6.7	.6	-7.8	-3.6	2.4	-.8	.5
6	14.5	5.4	10.0	13.0	10.1	12.0	-1.0	-6.1	-4.0	.9	-5.2	-1.0
7	16.1	4.4	10.6	12.6	8.8	10.2	-1.5	-3.6	-2.4	-5.1	-8.0	-6.4
8	22.1	9.0	15.3	10.1	-1.4	4.4	2.3	-3.3	-1.1	-5.9	-12.7	-8.6
9	22.9	12.8	17.2	4.1	-2.7	.4	2.2	-7.2	-1.8	-12.6	-17.8	-15.3
10	18.6	12.2	14.9	8.9	-2.3	2.9	4.9	-.5	2.7	-11.0	-19.1	-15.4
11	18.1	10.6	13.4	8.6	-.3	4.6	11.6	4.8	8.2	-4.4	-16.6	-10.2
12	14.8	10.4	12.7	12.2	7.9	9.6	6.8	-.2	3.1	-.6	-6.3	-3.1
13	20.2	11.6	15.9	14.1	5.5	10.4	-.1	-6.0	-2.2	4.1	-13.9	-3.1
14	17.2	7.6	12.8	5.5	1.8	3.3	2.2	-8.7	-4.3	-13.9	-20.0	-16.6
15	17.2	12.9	15.5	6.1	.5	2.8	4.5	-.9	1.2	-14.4	-20.9	-17.3
16	15.9	8.2	12.2	8.3	-.3	4.0	4.8	-3.0	.0	-10.8	-22.0	-15.8
17	13.9	7.3	10.7	6.5	2.6	4.2	12.7	-1.6	7.4	1.6	-11.2	-4.3
18	12.7	6.7	9.9	10.3	1.1	5.7	8.9	.2	2.7	1.0	-3.0	-.7
19	8.2	4.5	6.3	15.7	6.1	11.8	4.1	-1.6	.4	-2.8	-8.8	-5.8
20	11.8	.8	6.9	16.9	5.7	10.9	2.0	-2.5	.0	-4.9	-10.0	-7.9
21	19.8	7.8	15.4	9.4	5.0	7.0	1.7	-5.6	-1.4	-2.8	-10.1	-7.1
22	14.8	4.4	7.3	12.2	3.8	6.9	8.6	.9	4.1	1.7	-10.2	-3.8
23	e4.7	e3.1	e3.8	10.0	2.6	5.3	12.1	2.0	6.9	-6.4	-12.3	-9.2
24	8.1	1.5	4.7	9.6	.3	5.4	15.7	6.3	11.7	-8.8	-15.1	-11.7
25	13.5	-.1	6.6	9.2	1.2	6.0	12.5	2.5	7.9	-9.6	-17.9	-14.0
26	17.8	9.4	14.8	7.7	-.7	4.0	3.8	.6	2.4	-7.6	-15.2	-11.3
27	19.6	13.7	16.8	9.4	3.4	6.3	8.3	1.1	3.9	-4.8	-11.5	-7.7
28	15.2	10.0	12.0	16.9	5.5	9.8	e11.6	e-4.8	e1.6	-2.9	-5.9	-4.1
29	20.7	10.8	14.2	16.9	4.2	9.0	e13.8	e-2.5	e5.2	-3.7	-8.2	-5.4
30	14.4	7.5	10.5	7.8	3.8	5.5	e12.1	e2.3	e6.8	-4.4	-9.7	-7.1
31	18.9	5.4	12.0	---	---	---	7.3	2.9	4.7	-3.4	-10.3	-7.1
MONTH	22.9	-0.1	11.6	24.4	-2.7	7.5	15.7	-8.7	1.8	9.1	-22.0	-6.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.8	-10.6	-5.0	10.5	2.4	7.1	6.7	3.7	4.9	25.6	13.1	19.5
2	2.7	-7.6	-2.9	16.9	4.6	9.5	4.5	3.3	3.9	24.0	16.1	18.9
3	4.8	-7.5	-1.4	10.6	2.5	7.2	5.4	3.7	4.4	19.4	11.6	16.2
4	6.3	-1.9	2.4	9.0	2.0	5.1	7.2	4.5	5.8	13.8	5.8	10.1
5	1.8	-3.7	-1.0	7.8	.7	5.1	4.9	-.3	2.2	18.1	4.7	12.2
6	.6	-2.4	-.6	14.4	4.5	9.4	10.0	-.4	4.0	20.7	8.7	14.8
7	4.2	-2.9	.7	7.9	2.1	4.4	12.3	2.9	7.4	26.7	12.1	19.1
8	-2.9	-9.8	-5.6	3.9	-1.2	.5	12.0	2.1	7.8	15.2	7.6	11.2
9	5.9	-5.3	.6	.2	-1.8	-.7	14.1	4.5	9.7	15.2	8.6	10.9
10	6.6	-1.5	2.7	4.5	-2.2	1.2	13.4	4.1	8.3	19.3	8.7	13.8

Table 11. Records of reservoir altitude and capacity, precipitation, air temperature, and reservoir water temperature and specific conductance for U.S. Geological Survey station number 422302071083801, Fresh Pond gate house at Cambridge, Massachusetts.—Continued

AIR TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
11	2.3	-3.9	-0.3	8.8	-0.1	3.1	10.2	4.4	6.9	28.4	14.2	21.0
12	1.7	-8.6	-2.4	8.4	-.4	2.3	10.3	3.8	6.5	26.4	16.1	20.3
13	4.1	-2.0	1.2	4.8	-.8	1.6	6.6	4.8	5.2	18.5	9.1	13.4
14	4.5	-.4	1.7	5.9	-3.4	1.2	15.5	6.6	13.3	24.5	8.3	14.9
15	-.2	-10.5	-7.1	9.0	3.0	6.1	12.6	4.9	8.1	30.8	17.0	23.6
16	-2.3	-12.1	-7.3	3.0	-2.7	.2	10.9	3.2	6.8	22.8	11.6	16.4
17	-1.3	-11.0	-5.3	-.9	-4.6	-2.5	22.9	2.1	12.5	20.5	11.9	15.4
18	.2	-2.9	-1.4	-.5	-3.5	-2.4	16.9	10.9	14.3	25.0	12.8	18.7
19	4.3	-5.7	-.2	1.5	-3.1	-.3	29.3	9.0	18.4	21.4	13.5	18.2
20	5.1	-3.7	.5	7.1	-4.6	1.3	21.3	8.4	15.4	23.8	10.9	17.3
21	4.4	.9	2.6	8.3	-.8	4.4	16.9	6.2	10.9	26.4	13.2	19.1
22	4.7	.6	2.8	-.8	-5.0	-3.0	25.1	10.9	18.3	17.9	8.9	12.1
23	6.0	-2.0	1.4	5.1	-6.0	-.4	20.2	5.6	8.3	18.1	9.6	12.5
24	3.1	-3.8	-.1	8.8	-2.0	3.8	17.3	4.5	10.9	13.7	9.7	11.6
25	4.3	-5.3	-.6	12.8	5.2	8.6	10.9	3.5	6.6	12.7	9.6	10.7
26	4.5	-3.4	.2	19.3	8.1	12.1	11.3	4.4	8.0	12.7	8.4	10.6
27	7.1	-5.1	.8	17.5	8.9	11.1	17.1	8.3	11.1	19.9	10.3	13.7
28	11.0	-4.0	3.4	9.1	1.2	5.2	13.4	7.7	10.2	18.0	12.4	14.5
29	10.7	-3.0	5.1	5.3	.1	2.5	23.8	6.9	15.6	17.0	11.0	13.7
30	---	---	---	4.6	.7	2.5	26.2	13.8	19.4	21.6	10.2	15.5
31	---	---	---	5.1	3.5	4.3	---	---	---	19.7	9.6	15.6
MONTH	11.0	-12.1	-0.5	19.3	-6.0	3.6	29.3	-0.4	9.5	30.8	4.7	15.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.1	9.2	11.3	29.8	17.3	23.3	27.9	23.3	26.0	26.2	17.9	22.1
2	22.0	10.3	15.4	28.7	17.4	23.0	29.4	21.7	25.1	22.9	16.2	19.3
3	21.7	12.4	16.0	26.4	17.4	22.0	31.2	21.7	26.4	27.1	14.5	21.1
4	23.3	11.0	17.0	25.9	17.0	22.2	26.7	22.2	24.2	27.8	17.1	21.2
5	19.6	13.3	16.1	22.9	19.4	21.0	24.0	16.5	19.7	19.7	14.9	17.3
6	15.4	10.6	12.7	25.9	20.5	22.7	22.1	16.2	18.8	20.4	11.6	16.8
7	20.5	10.7	14.7	25.9	18.4	22.2	22.4	13.3	18.4	27.9	14.6	21.5
8	---	---	---	24.6	18.7	21.6	24.4	14.4	19.4	23.9	19.9	21.9
9	33.1	20.6	26.6	24.2	18.5	21.5	27.4	16.1	22.0	28.4	18.8	23.3
10	22.0	15.4	19.1	27.0	17.0	22.4	29.6	17.4	23.8	24.7	16.9	20.8
11	21.6	11.8	17.3	24.6	18.2	21.2	28.3	21.3	24.0	21.8	14.5	17.8
12	20.7	11.6	16.6	26.2	16.5	21.0	29.9	21.5	25.1	26.4	11.1	18.9
13	25.0	12.1	18.2	19.9	17.0	18.3	26.9	22.3	24.2	24.9	15.7	19.6
14	22.4	14.6	19.2	19.4	16.9	17.7	28.3	21.3	24.4	20.0	13.4	16.3
15	30.5	19.0	24.8	26.6	17.2	21.2	23.7	17.8	19.2	22.4	11.6	17.2
16	29.0	20.8	25.0	26.3	17.9	22.5	18.9	17.1	18.0	21.9	16.7	18.9
17	28.0	20.4	23.6	29.3	19.5	24.6	24.3	15.8	19.6	27.1	19.2	22.7
18	20.4	17.6	19.0	28.6	20.0	24.1	27.6	16.2	21.8	22.8	13.2	15.8
19	25.9	16.1	21.1	23.3	18.8	20.7	28.2	20.5	24.4	16.0	8.8	12.6
20	22.0	12.9	17.8	29.6	20.2	24.7	31.7	20.8	25.4	21.3	9.4	14.8
21	24.9	14.5	20.1	31.2	19.1	24.9	26.3	17.4	22.3	21.4	14.6	17.5
22	24.6	16.4	21.0	31.4	20.6	25.7	22.0	13.6	18.0	26.4	14.9	21.1
23	27.2	18.3	22.8	30.3	21.3	25.0	28.2	14.1	21.2	23.5	14.9	20.0
24	26.2	15.1	20.9	23.7	17.2	20.2	22.9	16.8	19.9	23.7	13.3	17.5
25	24.7	16.8	20.9	22.9	16.7	19.1	25.5	14.0	19.5	25.4	14.1	19.8
26	24.3	17.3	20.4	23.6	16.2	20.0	26.7	12.4	19.8	24.8	15.2	20.3
27	24.3	13.9	19.5	22.9	17.0	19.8	28.3	18.1	23.1	25.6	11.9	18.7
28	23.7	15.7	20.1	19.9	15.1	17.7	32.3	21.5	26.7	18.3	16.0	17.2
29	22.2	15.5	18.7	28.5	18.0	22.6	31.9	21.6	26.5	17.1	11.2	13.5
30	26.7	16.5	21.6	30.6	19.2	24.9	31.7	21.9	26.1	19.8	8.3	14.7
31	---	---	---	31.3	22.6	26.7	26.1	20.3	23.7	---	---	---
MONTH	---	---	---	31.4	15.1	22.1	32.3	12.4	22.5	28.4	8.3	18.7

Table 11. Records of reservoir altitude and capacity, precipitation, air temperature, and reservoir water temperature and specific conductance for U.S. Geological Survey station number 422302071083801, Fresh Pond gate house at Cambridge, Massachusetts.—Continued

RESERVOIR WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	22.2	22.0	22.1	15.8	15.8	15.8	10.5	10.2	10.4	3.6	3.4	3.5
2	22.0	21.7	21.8	15.9	15.8	15.9	10.2	9.6	10.0	3.5	3.3	3.5
3	21.7	21.4	21.5	15.9	15.8	15.8	9.7	9.1	9.4	3.3	3.2	3.2
4	21.4	21.0	21.2	15.9	15.8	15.8	9.1	8.8	8.9	3.4	3.2	3.3
5	21.0	20.6	20.8	15.8	15.5	15.6	8.8	8.4	8.6	3.5	3.4	3.4
6	20.6	20.2	20.4	15.5	15.3	15.4	8.4	7.5	8.0	3.4	3.2	3.4
7	20.2	20.0	20.1	15.4	15.2	15.3	7.5	6.9	7.1	3.2	2.4	2.8
8	20.0	19.9	19.9	15.2	14.8	15.1	7.0	6.6	6.8	2.4	1.8	2.0
9	19.9	19.8	19.9	14.8	14.4	14.7	6.6	6.6	6.6	1.9	1.1	1.4
10	19.8	19.7	19.7	14.4	14.1	14.3	6.6	6.6	6.6	1.1	.5	.7
11	19.7	19.6	19.6	14.2	13.9	14.0	6.6	6.5	6.6	.6	.5	.5
12	19.6	19.4	19.5	13.9	13.7	13.8	6.6	6.3	6.5	.7	.6	.6
13	19.4	19.3	19.3	13.7	13.2	13.6	6.7	6.5	6.6	.8	.4	.6
14	19.3	19.2	19.2	13.2	12.6	12.8	6.5	6.3	6.4	.7	.5	.6
15	19.2	18.7	19.0	12.6	12.2	12.4	6.4	6.1	6.3	.9	.7	.8
16	18.8	18.6	18.7	12.2	11.8	12.0	6.3	3.8	4.7	.9	.8	.9
17	18.6	18.3	18.4	11.8	11.7	11.8	4.0	3.7	3.8	.9	.8	.8
18	18.4	18.1	18.2	11.7	11.5	11.6	5.7	4.0	4.4	.8	.8	.8
19	18.1	17.9	18.0	11.6	11.3	11.4	4.1	3.5	3.7	.8	.7	.8
20	17.9	17.6	17.7	11.4	11.3	11.3	3.8	3.6	3.7	.9	.6	.7
21	17.6	17.4	17.5	11.4	11.3	11.3	3.7	3.3	3.5	.7	.6	.6
22	17.4	17.2	17.3	11.4	11.3	11.3	3.4	3.1	3.3	.8	.7	.7
23	e17.2	e16.7	e17.1	11.4	11.2	11.3	3.6	3.3	3.4	.8	.6	.7
24	16.8	16.3	16.5	11.3	11.2	11.3	3.7	3.5	3.6	.8	.6	.7
25	16.3	16.0	16.1	11.2	11.0	11.1	4.1	3.7	3.9	.8	.7	.8
26	16.0	15.9	15.9	11.1	10.9	11.0	4.1	3.7	3.9	.9	.8	.8
27	15.9	15.9	15.9	10.9	10.8	10.8	3.8	3.4	3.6	.9	.8	.9
28	16.0	15.9	15.9	10.8	10.7	10.8	e3.4	e3.2	e3.3	.9	.9	.9
29	16.0	15.9	15.9	10.7	10.6	10.6	---	---	---	1.0	.8	.9
30	15.9	15.8	15.9	10.6	10.4	10.5	e3.8	e3.4	e3.6	.9	.8	.8
31	15.9	15.8	15.8	---	---	---	3.8	3.5	3.6	.9	.8	.9
MONTH	22.2	15.8	18.5	15.9	10.4	12.9	---	---	---	3.6	0.4	1.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.9	0.9	0.9	4.3	4.2	4.3	6.4	6.3	6.3	16.0	15.1	15.4
2	1.0	.9	1.0	4.3	4.1	4.2	6.4	6.3	6.4	16.1	15.9	16.0
3	1.1	1.0	1.0	4.3	4.1	4.2	6.4	6.4	6.4	16.6	16.1	16.3
4	1.1	.4	.8	4.5	4.3	4.5	6.5	6.4	6.4	16.6	16.1	16.4
5	.9	.7	.8	4.6	4.5	4.6	6.5	6.4	6.4	16.2	15.9	16.1
6	1.1	.9	1.0	4.6	4.5	4.6	6.5	6.2	6.3	16.4	16.0	16.1
7	1.2	1.1	1.1	5.5	4.5	5.2	7.2	6.4	6.7	17.7	16.4	17.0
8	1.2	1.0	1.1	5.5	5.4	5.5	7.2	7.0	7.1	17.6	16.9	17.2
9	1.3	1.0	1.1	5.6	5.4	5.6	8.2	7.2	7.6	16.9	16.6	16.8
10	1.2	1.1	1.2	5.8	5.5	5.6	8.6	8.2	8.4	16.8	16.5	16.6
11	1.6	1.2	1.3	5.8	5.7	5.7	8.6	8.5	8.5	18.5	16.8	17.5
12	1.4	1.3	1.4	5.9	5.6	5.7	8.5	8.4	8.5	18.5	18.2	18.3
13	1.5	1.4	1.4	5.9	5.8	5.9	8.5	8.4	8.4	18.5	18.2	18.3
14	1.7	1.4	1.5	6.0	5.8	5.9	8.9	8.4	8.6	18.6	18.0	18.2
15	1.7	1.5	1.6	5.9	5.6	5.8	9.6	8.9	9.2	19.9	18.6	19.1
16	1.8	1.7	1.8	5.9	5.4	5.7	9.5	9.3	9.5	20.0	19.5	19.8
17	1.9	1.8	1.8	6.0	5.6	5.9	10.2	9.3	9.5	19.5	19.1	19.2
18	1.9	1.8	1.9	5.7	4.4	4.6	10.5	10.2	10.4	19.4	19.0	19.2
19	2.2	1.8	1.9	4.6	4.5	4.6	12.1	10.5	11.2	19.6	19.4	19.5
20	2.4	1.9	2.1	4.6	4.4	4.4	13.3	12.0	12.6	19.9	19.4	19.5
21	2.9	2.4	2.7	4.8	4.4	4.6	13.2	12.6	12.8	20.3	19.7	20.0
22	4.0	2.8	3.2	4.8	4.6	4.7	14.1	12.5	13.1	20.3	19.6	20.1
23	4.1	4.0	4.1	5.1	4.6	4.8	14.1	13.6	13.8	19.6	19.2	19.4
24	4.2	4.0	4.1	5.1	4.9	5.0	13.6	13.3	13.4	19.2	18.9	19.1
25	4.2	4.1	4.2	5.3	5.1	5.2	13.6	13.2	13.4	18.9	18.7	18.8

Table 11. Records of reservoir altitude and capacity, precipitation, air temperature, and reservoir water temperature and specific conductance for U.S. Geological Survey station number 422302071083801, Fresh Pond gate house at Cambridge, Massachusetts.—Continued

RESERVOIR WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
26	4.3	4.1	4.2	5.8	5.3	5.5	13.2	13.1	13.1	18.7	18.4	18.5
27	4.3	4.2	4.2	6.4	5.8	6.2	13.3	13.1	13.2	18.6	18.3	18.4
28	4.2	4.2	4.2	6.4	6.2	6.3	14.0	13.3	13.6	18.6	18.4	18.5
29	4.3	4.2	4.2	6.5	6.4	6.4	14.6	13.7	14.0	18.6	18.3	18.5
30	---	---	---	6.5	6.5	6.5	15.2	14.5	14.8	18.9	18.3	18.6
31	---	---	---	6.5	6.3	6.4	---	---	---	18.8	18.6	18.7
MONTH	4.3	0.4	2.1	6.5	4.1	5.3	15.2	6.2	10.0	20.3	15.1	18.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.7	18.5	18.6	22.8	21.7	22.2	24.6	24.4	24.5	25.3	24.4	24.9
2	19.1	18.4	18.6	22.9	22.2	22.5	24.8	24.2	24.5	24.8	24.2	24.5
3	19.9	18.9	19.3	23.0	22.2	22.7	25.6	24.4	24.9	24.9	24.0	24.4
4	20.4	19.4	19.8	23.1	22.5	22.8	25.4	25.0	25.2	25.1	24.0	24.4
5	20.4	19.6	19.9	23.0	22.6	22.8	25.1	24.6	24.8	24.2	23.6	23.9
6	19.6	19.3	19.4	23.3	22.5	22.9	25.0	24.2	24.5	24.0	23.3	23.6
7	19.3	19.0	19.2	23.4	22.6	22.9	24.9	23.9	24.4	24.0	23.3	23.7
8	19.5	19.0	19.4	23.3	22.9	23.0	24.6	23.8	24.2	23.8	23.6	23.7
9	21.8	18.8	19.6	23.6	22.8	23.2	24.7	23.6	24.2	24.0	23.4	23.7
10	20.1	19.6	19.9	23.9	22.8	23.3	24.8	23.8	24.3	23.9	23.3	23.6
11	20.5	19.1	19.8	23.7	23.1	23.4	24.4	24.1	24.3	23.7	23.1	23.3
12	19.9	19.1	19.5	23.7	23.0	23.3	24.6	24.0	24.3	23.8	22.9	23.3
13	20.2	19.1	19.7	23.3	22.6	23.0	24.5	24.0	24.3	23.9	23.1	23.4
14	19.8	19.4	19.5	22.8	22.4	22.6	25.2	24.2	24.7	23.4	22.8	23.0
15	21.1	19.4	20.1	23.0	22.3	22.6	24.9	23.9	24.3	23.2	22.6	22.9
16	21.0	20.2	20.6	23.2	22.5	22.9	24.0	23.6	23.8	22.9	22.6	22.8
17	21.3	20.8	21.0	24.0	22.7	23.3	24.3	23.5	23.9	23.2	22.5	22.8
18	21.1	20.6	20.8	23.7	23.2	23.5	24.4	23.6	24.0	23.1	22.1	22.5
19	21.7	20.5	21.0	23.6	23.3	23.5	24.4	23.8	24.1	22.1	21.5	21.8
20	21.4	20.3	20.8	24.2	23.2	23.7	25.1	24.0	24.4	22.1	21.1	21.6
21	21.5	20.3	20.9	24.2	23.6	23.9	24.6	24.1	24.4	21.7	21.2	21.4
22	21.0	20.6	20.8	24.9	23.8	24.3	24.4	23.7	24.0	22.3	21.1	21.6
23	22.0	20.7	21.3	24.7	24.2	24.5	24.6	23.5	24.1	21.7	21.4	21.6
24	21.6	21.1	21.4	24.5	23.8	24.1	24.3	23.7	24.0	21.9	21.2	21.5
25	22.0	21.2	21.6	24.2	23.5	23.8	24.4	23.6	23.9	21.8	21.1	21.5
26	22.2	21.5	21.7	24.1	23.4	23.8	24.6	23.6	24.0	22.0	21.3	21.6
27	22.1	21.1	21.6	24.0	23.6	23.8	24.6	23.8	24.2	21.8	21.1	21.5
28	22.0	21.1	21.6	23.6	23.3	23.4	25.0	24.0	24.5	21.6	21.1	21.3
29	22.0	21.3	21.6	24.0	23.2	23.6	25.3	24.6	24.9	21.1	20.4	20.8
30	22.5	21.3	21.9	24.5	23.6	24.0	25.4	24.8	25.0	21.1	20.2	20.5
31	---	---	---	24.9	24.0	24.4	25.8	24.9	25.2	---	---	---
MONTH	22.5	18.4	20.4	24.9	21.7	23.3	25.8	23.5	24.4	25.3	20.2	22.7

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	577	525	528	509	508	508	480	479	480	464	463	463
2	525	523	524	509	508	509	480	479	480	464	462	463
3	524	523	523	508	507	507	480	478	479	463	462	463
4	524	522	523	508	504	507	480	478	479	462	452	458
5	522	519	520	507	503	506	480	479	480	456	452	454
6	519	517	518	507	505	506	481	479	480	459	455	457
7	520	518	519	506	504	505	480	476	478	462	459	461
8	519	518	518	505	503	504	480	476	477	463	461	462
9	519	518	519	503	501	502	478	477	477	468	462	464
10	520	518	519	502	499	500	477	475	476	474	468	471

Table 11. Records of reservoir altitude and capacity, precipitation, air temperature, and reservoir water temperature and specific conductance for U.S. Geological Survey station number 422302071083801, Fresh Pond gate house at Cambridge, Massachusetts.—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
11	520	519	520	500	498	499	477	475	475	476	474	474
12	520	516	519	499	498	498	478	476	477	476	472	475
13	520	518	519	498	497	498	478	477	477	472	469	470
14	519	518	519	497	495	496	478	477	477	471	469	469
15	519	517	519	496	494	494	478	477	477	474	471	472
16	520	516	518	495	493	494	478	471	474	477	473	476
17	517	515	516	494	492	493	472	470	471	481	477	479
18	516	515	515	493	492	493	476	468	471	481	479	480
19	516	515	515	493	491	492	470	469	470	480	477	478
20	516	514	514	492	490	491	470	464	466	482	477	478
21	514	513	514	490	487	489	466	462	464	482	481	481
22	514	513	514	488	487	487	464	462	463	482	480	481
23	514	512	514	487	485	486	463	462	463	482	480	481
24	513	511	512	486	484	485	464	462	463	483	481	482
25	512	510	511	485	483	484	464	463	463	486	482	483
26	511	510	510	484	483	483	465	463	464	484	483	484
27	511	510	511	484	483	483	470	464	465	485	484	484
28	512	510	511	483	482	483	470	469	470	485	483	483
29	511	510	511	483	482	482	e466	e472	e465	484	482	483
30	511	509	510	482	479	480	462	475	461	485	483	484
31	509	508	508	---	---	---	463	461	462	486	484	485
MONTH	577	508	516	509	479	495	481	461	472	486	452	473

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	486	485	485	504	503	503	509	504	506	464	462	463
2	485	484	485	504	498	500	505	497	501	464	462	463
3	485	484	485	504	497	500	499	497	498	463	461	462
4	486	483	484	504	503	504	500	498	499	463	461	462
5	484	483	484	505	504	504	502	498	500	462	461	462
6	484	483	484	505	504	505	501	500	501	463	461	462
7	485	483	484	506	504	505	500	495	498	466	462	464
8	486	484	485	505	504	505	497	494	495	467	465	466
9	488	486	487	505	504	504	495	488	492	466	464	466
10	489	487	488	506	504	505	489	487	488	465	464	465
11	490	488	489	507	505	506	487	487	487	471	464	467
12	492	489	491	508	504	507	488	484	486	472	470	471
13	492	491	491	506	504	505	486	483	485	472	470	471
14	493	491	492	509	506	508	484	477	480	472	468	470
15	496	492	494	509	508	508	478	473	476	480	470	473
16	498	495	497	509	506	508	474	473	474	481	478	480
17	498	497	498	511	509	510	475	471	473	479	478	478
18	499	497	498	511	509	510	471	468	469	478	473	477
19	499	497	498	510	509	509	469	467	468	479	477	478
20	499	498	499	510	509	509	468	465	466	480	476	479
21	500	498	499	510	509	510	466	465	466	485	480	482
22	501	497	499	511	510	510	467	463	465	486	482	484
23	498	497	498	511	508	510	464	463	463	482	480	481
24	499	498	498	511	508	509	464	462	463	481	478	480
25	500	498	499	510	509	509	463	462	463	479	477	478
26	501	499	500	510	508	509	464	462	462	478	476	477
27	502	500	501	508	506	507	463	461	462	479	477	478
28	503	501	502	509	504	507	462	460	461	479	477	478
29	504	502	503	505	504	505	462	461	461	478	477	477
30	---	---	---	506	505	505	463	461	462	481	477	479
31	---	---	---	509	506	508	---	---	---	481	480	480
MONTH	504	483	493	511	497	507	509	460	479	486	461	473

Table 11. Records of reservoir altitude and capacity, precipitation, air temperature, and reservoir water temperature and specific conductance for U.S. Geological Survey station number 422302071083801, Fresh Pond gate house at Cambridge, Massachusetts.—Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	480	479	480	517	501	506	593	580	587	590	579	585
2	482	478	480	517	504	508	592	586	588	587	580	584
3	486	481	483	523	501	512	599	588	594	597	583	590
4	489	485	486	527	507	516	602	591	595	607	592	598
5	491	487	488	533	514	521	599	585	590	602	596	599
6	488	485	486	525	508	519	592	581	586	605	597	601
7	486	483	485	526	510	519	594	580	586	609	601	605
8	491	484	486	526	516	522	587	580	584	616	608	612
9	503	487	492	533	520	528	593	581	587	623	614	618
10	499	492	494	536	522	528	594	583	588	620	611	616
11	502	491	495	539	526	531	606	588	594	617	608	612
12	503	492	495	539	530	534	594	587	591	622	612	617
13	501	493	495	539	527	533	613	587	593	622	614	617
14	501	493	497	532	524	528	600	585	594	614	608	611
15	506	494	499	537	527	532	616	592	600	614	607	610
16	521	493	500	545	530	535	596	584	587	614	610	612
17	522	497	505	547	532	539	601	582	588	621	612	617
18	509	499	503	549	538	544	603	584	592	622	613	617
19	505	497	502	557	547	553	652	603	627	614	605	610
20	505	498	501	566	545	557	656	633	642	606	593	599
21	510	499	502	575	560	568	654	635	645	595	591	593
22	512	499	504	598	572	584	671	654	663	601	591	596
23	516	499	506	599	587	594	686	669	678	597	594	595
24	510	491	501	603	584	589	696	684	690	600	593	595
25	510	489	503	584	571	575	700	687	693	598	593	595
26	514	500	507	588	567	576	687	680	684	599	594	596
27	510	499	503	577	570	574	688	678	683	595	591	593
28	511	498	505	574	567	571	688	679	684	594	590	592
29	511	500	505	579	567	573	679	633	648	590	582	586
30	513	490	502	582	573	577	633	616	619	585	579	581
31	---	---	---	584	579	581	619	587	607	---	---	---
MONTH	522	478	496	603	501	546	700	580	619	623	579	602
YEAR	700	452	514									