Water Resources Data for New Hampshire and Vermont

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NH-VT-78-1

WATER YEAR 1978

Prepared in cooperation with the States of New Hampshire and Vermont and with other agencies

CALENDAR FOR WATER YEAR 1978

1977

OCTOBER

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1978

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Water Resources Data for New Hampshire and Vermont

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NH-VT-78-1

WATER YEAR 1978

Prepared in cooperation with the States of New Hampshire and Vermont and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

For additional information write to
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Boston, MA 02114

1979

PREFACE

This report was prepared by personnel of the New England District of the Water Resources Division of the U. S. Geological Survey under the supervision of J. A. Baker, District Chief, and F. T. Schaefer, Acting Regional Hydrologist, succeeded by J.E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the States of Massachusetts and Rhode Island, and with other agencies.

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

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16. Abstract

Water-resources data for the 1978 water year for New Hampshire and Vermont consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of wells. This report contains discharge records for 83 gaging stations, stage records for 4 lakes, monthend contents for 25 lakes and reservoirs, water-quality data for 7 gaging stations, and water levels for 42 observation wells. Also included are data for 37 crest-stage partial-record stations and 6 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. A few pertinent stations (not included above) in bordering States and Province of Quebec are also included in this report. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in New Hampshire and Vermont.

17. Document Analysis a. Descriptors

*New Hampshire, *Vermont, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses.

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(Letters after station name designate type of data:
(d), discharge; (l), lake; (c) chemical; (b), biological; (t), water temperature)

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Baker River:
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WATER RESOURCES DATA FOR NEW HAMPSHIRE AND VERMONT, 1978

INTRODUCTION

Water-resources data for the 1978 water year for New Hampshire and Vermont consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of wells. This report contains discharge records for 83 gaging stations, stage records for 4 lakes, monthend contents for 25 lakes and reservoirs, water-quality data for 7 gaging stations, and water levels for 42 observation wells. Also included are data for 37 crest-stage partial-record stations and 6 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. Locations of gaging stations, partial-record stations, and observation wells are shown in figure 1. A few pertinent stations (not included above) in bordering States and Province of Quebec are also included in this report. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in New Hampshire and Vermont.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface water supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of surface waters of the United States." Records of ground-water levels were published from 1939 to 1974 in a series of water-supply papers entitled, "Ground-water levels in the United States." Water-supply papers may be consulted in libraries of the principal cities of the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey water-data report NH-VT-78-1." Water-data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

COOPERATION

Organizations that assisted in collecting data through cooperative agreements with the Geological Survey in 1978 are:

New Hampshire: State Water Resources Board, George M. McGee, Sr., chairman; State Water Supply and Pollution Control Commission, William A. Healy, executive director.

Vermont: State Department of Water Resources, Reginald A. LaRosa, acting commissioner; town of Springfield, Paul T. McCarthy, town manager.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 39 gaging stations, and by the U.S. Environmental Protection Agency, for 2 water-quality stations published in this report.

Organizations supplying data are acknowledged in the station descriptions.

On waters adjacent to the international boundary, certain gaging stations are maintained by the United States (or Canada) under agreement with Canada (or the United States), and the records are obtained and compiled in a manner equally acceptable to both countries. These stations are designated as "international gaging stations."

HYDROLOGIC CONDITIONS

At the beginning of the water year and throughout October, streamflow was excessive (in the upper quartile of record) in New Hampshire and Vermont.

Runoff in October was the highest for October for period of record at Lamprey River near Newmarket, NH (July 1934-) and Pemigewasset River at Plymouth, NH (October 1903-), and was the second highest for October at Batten Kill at Arlington, VT (October 1928-), Passumpsic River at Passumpsic, VT (October 1928-), and White River at West Hartford, VT (June 1915-). The second highest November runoff for period of record occurred at Passumpsic River at Passumpsic, VT.

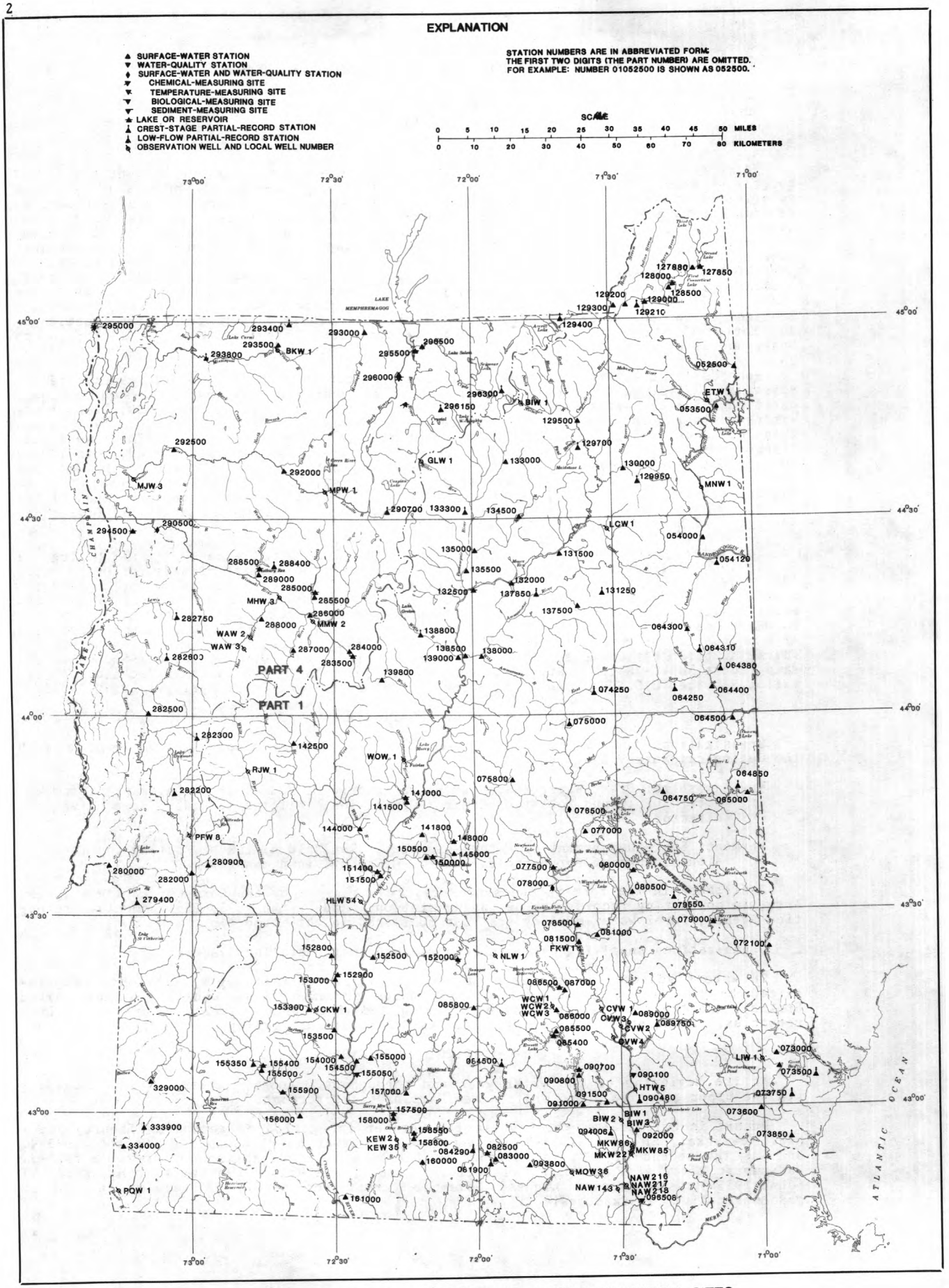

FIGURE 1. LOCATION OF DATA-COLLECTION SITES

Runoff continued to be excessive through February in central and northern Vermont, then declined to normal in March. Runoff declined to normal in November and December in central New Hampshire, increased and was excessive in January and February, then declined again into the normal range in March. Runoff was excessive through January in the southeast, declined to normal in February, and declined further into the deficient range (lower quartile of record) in March. In southwestern Vermont, runoff declined to normal in November, increased and was excessive in December and January, and declined again to normal in February and March.

Rain, warm temperatures, and snowmelt combined to produce moderate to substantial rises, generally, about Jan. 9-10 and Jan. 26-28. The effect of these rises was such that streamflow was maintained at above-median levels throughout the month and in January runoff was excessive throughout the State. Runoff was the highest for January for period of record at Passumpsic River at Passumpsic, VT and Pemigewasset River at Plymouth, NH; the second highest for January at White River at West Hartford, VT; and the third highest for January at Lamprey River near Newmarket, NH.

Cumulative runoff for October to March was excessive throughout New Hampshire and Vermont. Spring peak discharges were moderate and only the usual lowland flooding occurred.

Runoff was mostly in the normal range during the months April to September. However, it was excessive in May in central Vermont and central New Hampshire, in June in northeastern Vermont and central and northern New Hampshire, and in August in southern Vermont. Runoff was deficient in July in central and southeastern New Hampshire, in August, in central and northern New Hampshire and northern Vermont, and in September in northern Vermont and practically all of New Hampshire. Runoff was the second lowest for September for period of record at Passumpsic River at Passumpsic, VT and the third lowest for September at Lamprey River near Newmarket, NH and Pemigewasset River at Plymouth, NH.

At the end of the year, streamflow was deficient except in central and southern Vermont, where it was normal. Cumulative runoff for April to September was normal; however, cumulative runoff for the water year was excessive throughout New Hampshire and Vermont.

Figure 2 on page 4, for which records of two long-term gaging stations were used, shows a comparison of the monthly and yearly mean discharge for the 1978 water year with the median discharge for the period 1941-70.

During the 1978 water year, ground-water levels in the States of New Hampshire and Vermont fluctuated as follows:

New Hampshire: At the beginning of the water year, ground-water levels were above normal throughout New Hampshire and continued above normal throughout the State until early March and in the southern part of the State until early April. In the northern half of the State, levels generally rose throughout fall and winter while in the southern half, levels generally rose in October and December and generally declined during November, January, and February.

In response to spring recharge, ground-water levels rose in March and April and were normal except in northern New Hampshire, where they were below normal. Seasonal water-level declines began in April and May; however, levels rose in northern New Hampshire during June to above normal. Levels in the rest of the State declined during June and remained in the normal range. Seasonal water-level declines continued and levels were normal in July and August and fell to below normal in September.

Vermont: Ground-water levels were above normal throughout Vermont from October through February, with new highs being recorded by several wells each month. Water levels in March and April varied from below normal (in the southwestern and northeastern sections of the State in March and northeastern section again in April) to above normal in the northwestern quarter of the State for both months. Water levels were normal or above in May and June. In July, levels were normal except in the southern third of the State, where they were below normal. Water levels were normal in August, but by the end of September, levels in all but the southwestern corner of the State were below normal, with five observation wells recording new lows for the month.

DEFINITION OF TERMS

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

During water year 1978, revisions were made in terminology used to define 143 water-quality parameter codes that have been used by the U.S. Geological Survey in its publication of water-quality data and in its WATSTORE (National Water Data Storage and Retrieval System) data system. The revisions were made to achieve consistency in terminology and to conform to a joint U.S. Geological Survey-U.S. Environmental Protection Agency agreement on terminology. They do not represent a change in the way codes were used in the past or in the association of specific code numbers with identified analytical procedures.

Use of the new terminology began with data for the 1978 water year and, therefore, it first appears in this publication. A table showing both old and new terminology is attached as an appendix to the report.

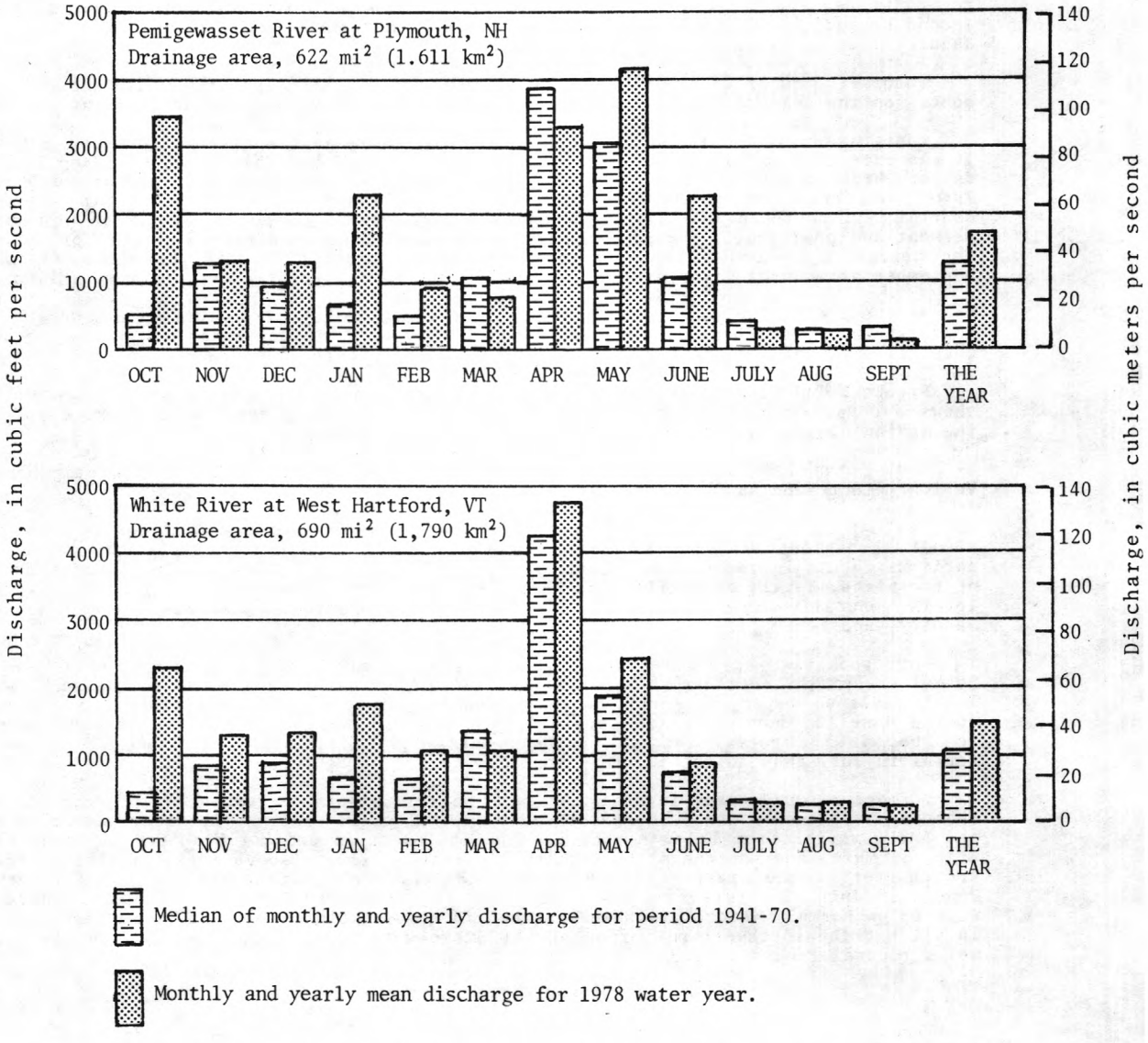

Figure 2.--Comparison of discharge at two long-term index gaging stations during 1978 water year with median discharge for period 1941-70.

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

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

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

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

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

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warmblooded animals. They are often used as indicators of the sanitary quality of water. These bacteria are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ±0.2°C on M-FC medium (nutrient medium for bacterial growth). Concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found in the intestines of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. These bacteria are defined as all organisms which produce red or pink colonies within 48 hours at 35°C ±1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Concentrations are expressed as number of colonies per 100 mL of sample.

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

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

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

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

Biomass pigment ratio is the ratio of organic mass in mg/m^2 (milligrams per square meter) to the mass of chlorophyll a, mg/m^2.

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash, and sediment in the sample. Dry-mass values are expressed in the same units as ash mass.

Bottom material: See Bed material.

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

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

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

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

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in water, and gives an approximation of the amount of organic and reducing material present.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the most commonly reported green pigments in plants.

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

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

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

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

Cubic foot per second (FT^3/S, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.2832 cubic meters per second.

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

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

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

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

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

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

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

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

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

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

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

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

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

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

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

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

Micrograms per gram (ug/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (gram) of sediment.

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

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

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

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

Organisms count/volume refers to the number of organisms enumerated in a sample and adjusted to the number per unit volume, usually in cells per milliliter (mL) or liter (L). Numbers of planktonic organisms are expressed in these terms.

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

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

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

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.062 - 2	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

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

Periphyton refers to the assemblage of organisms attached to and growing upon submerged surfaces. While primarily consisting of algae, the assemblage may include bacteria, fungi, protozoa, rotifer, and other small organisms.

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

pH is a symbol denoting the negative logarithm (base 10) of the hydrogen ion concentration of a solution; pH values range from 0 to 14--the lower the value, the more acid is the solution; i.e., the more hydrogen ions it contains.

Phytoplankton are the plant part of the plankton communities which exist in standing waters. They are the primary source of food in their aquatic environments, and are commonly known as algae.

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

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

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

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

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

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

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

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

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

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

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

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

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

Substrate is the physical surface upon which an organism lived.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

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

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

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

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

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

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

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

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

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

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

Total (as used in tables of chemical analysis):

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

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

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

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

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 01094400, which appears just to the left of the station name includes the 2-digit part number "01" plus the 6-digit downstream-order number "094400."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify wells or other sites within a 1-second grid. See figure 3 below.

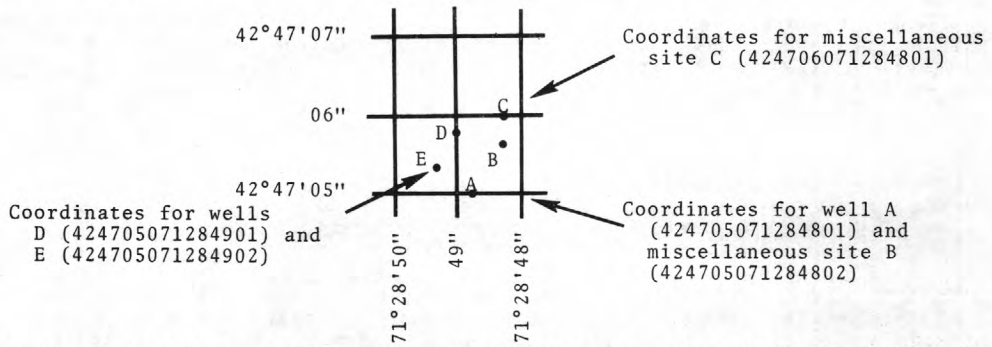

Figure 3.--System for numbering wells and miscellaneous sites (latitude and longitude)

A local well-numbering system is also used in this report. The local well number consists of a 2-letter code for the town in which the well is located followed by a "W" signifying that it is a well, and a sequential number. The local number is used to identify the location of observation wells on figure 1.

SPECIAL NETWORKS AND PROGRAMS

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

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

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

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

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

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

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

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge, This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins.

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

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge and stage. Location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

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

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." "National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 7.

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

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance.

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

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

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

For gaging stations on lakes and reservoirs, the data presented comprise a description of the station and a monthly summary table of contents. For some reservoirs, a table showing daily stage is given. A skeleton table of capacity at given stages is published for some reservoirs for which records are published on a daily basis.

Data collected at partial-record stations and miscellaneous sites are contained in three tables following the information for continuous record sites. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of Field Data and Computed Results

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

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

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

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

Other Data Available

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

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

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

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

Water Analysis

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

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

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

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

Water Temperature

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

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

Sediment

Suspended-sediment concentrations are determined periodically from samples collected by using depth-integrating samplers. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow when predicting long-term sediment discharge characteristics of the stream.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Collection of the Data

Only ground-water-level data from a basic network of 42 observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

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

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

Water-level measurements are reported to the nearest hundredth of a foot with reference to land-surface datum (lsd), which is a datum plane that is approximately at land surface at each well. If known, the altitude of land-surface datum above National Geodetic Vertical Datum of 1929 is given in the well description. Height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom); water levels in wells not equipped with recording gages are reported for the end of each month.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-five manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. Material is grouped under major subject headings called books and further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. Reports listed below are for sale by U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office). Prices, effective July 1979, are subject to change. When ordering these publications, please give the series (U.S. Geological Survey Techniques of Water-Resources Investigations), title, book number, and chapter number.

1-D1 Water temperature-influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages. $1.60.

1-D2 Guidelines for collection and field analysis of ground-water samples for selected unstable constituents by W.W. Wood: USGS-TWRI Book 1, Chapter D2 1976 24 pages. $0.85

2-D1 Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages. $1.90.

2-E1 Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages. $1.75.

3-A1 General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS-TWRI Book 3, Chapter A1. 1967. 30 pages $1.00.

3-A2 Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages. $0.35.

3-A3 Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages. $0.40.

3-A4 Measurement of peak discharge at width contractions by indirect methods, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages. $1.00.

3-A5 Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3 Chapter A5. 1967. 29 pages. $0.35.

3-A6 General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages. $1.00.

3-A7 Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS-TWRI Book 3, Chapter A7. 1968. 28 pages. $1.40.

3-A8 Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages. $1.25.

3-A11 Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages. $1.20.

3-A12 Fluorometric procedures for dye tracing, by J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. $0.35. Not currently available.

3-B1 Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages. $0.70.

3-B2 Introduction to ground-water hydraulics, a programed text for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages. $2.50.

3-C1 Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages. $2.50.

3-C2 Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages. $2.50.

3-C3 Computation of fluvial-sediment discharge, by George Porterfield: USGS-TWRI Book 3, Chapter C3 1972. 66 pages. $2.10.

4-A1 Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages. $1.60.

4-A2 Frequency curves, by H.C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages. $1.20.

4-B1 Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages. $0.65.

4-B2 Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages. $0.75.

4-B3 Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3 1973. 15 pages. $0.65.

4-D1 Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages. $1.10.

5-A1 Methods for determination of inorganic substances in water and fluvial sediments, by M. W. Skougstad, M. J. Fishman, L. C. Friedman, D. E. Erdmann, and S. S. Duncan, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages. $10.00.

5-A2 Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages. $0.80.

5-A3 Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages. $0.90.

5-A4 Methods for collection and analysis of aquatic biological and microbiological samples, edited by P. E. Greeson, T.A. Ehlke, G.A. Irwin, B.W. Lium, and K.V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages. $9.25.

5-A5 Methods for determination of radioactive substances in water and fluvial sediments, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages. $5.75.

5-C1 Laboratory theory and methods for sediment analysis, by H.P. Guy: USGS-TWRI Book 5, Chapter C1 1969. 58 pages. $2.10.

7-C1 Finite difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages. $2.30.

7-C2 Computer model of two-dimensional solute transport and dispersion in ground water by L. F. Konikow and J.D. Bredehoeft: USGS-TWRI Book 7, Chapter C2. 1978. 90 pages. $2.75

8-A1 Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages. $1.30.

8-B2 Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages. $1.10.

01052500 DIAMOND RIVER NEAR WENTWORTH LOCATION, NH

LOCATION.--Lat 44°52'40", long 71°03'25", Coos County, Hydrologic Unit 01040001, on left bank 1.0 mi (1.6 km) upstream from mouth and 1.6 mi (2.6 km) north of Wentworth Location.

DRAINAGE AREA.--153 mi² (396 km²).

PERIOD OF RECORD.--Discharge: July 1941 to current year.
Water-quality records: Water year 1954.

GAGE.--Water-stage recorder. Altitude of gage is 1,275 ft (389 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--37 years, 352 ft³/s (9.969 m³/s), 31.24 in/yr (793 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,630 ft³/s (244 m³/s) June 16, 1943, gage height, 10.66 ft (3.249 m), from rating curve extended above 4,300 ft³/s (120 m³/s); minimum, 6.8 ft³/s (0.19 m³/s) Aug. 27, 28, 1949, Sept. 1, 1952, gage height, 0.81 ft (0.247 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft³/s (100 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0400	3760	106	7.51	2.289	May 10	0400	*5600	159	8.81	2.685

Minimum discharge, 16 ft³/s (0.45 m³/s) Aug. 23, 24, gage height, 1.06 ft (0.323 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	200	228	145	310	87	147	1160	250	203	35	32
2	3110	187	262	135	275	85	169	775	212	166	35	26
3	1660	180	247	125	255	83	213	603	658	145	33	23
4	853	198	208	120	235	81	178	548	419	126	72	25
5	704	535	168	115	225	79	184	847	260	110	67	25
6	540	338	153	110	220	77	244	1450	349	97	42	22
7	457	347	150	110	210	75	219	1950	287	86	34	85
8	376	280	150	106	205	74	198	2910	586	78	30	102
9	874	514	150	562	200	73	178	4150	1760	73	41	51
10	1870	498	145	1140	190	73	156	4600	2220	81	48	36
11	845	492	145	870	185	97	158	3330	790	77	33	32
12	577	538	145	667	170	120	323	3100	477	60	28	72
13	497	381	150	530	165	105	435	2920	358	53	27	121
14	415	323	175	465	160	97	705	2840	743	49	26	59
15	612	274	185	410	150	91	562	2940	804	53	24	41
16	629	275	175	375	145	87	403	2350	469	57	22	38
17	1100	386	165	345	140	84	346	2730	325	63	21	35
18	1520	810	160	320	130	81	334	2100	264	69	19	30
19	955	555	155	300	125	79	522	1420	629	46	19	27
20	827	400	150	285	120	77	756	1310	1410	45	18	25
21	739	342	150	270	115	76	939	1630	1250	44	18	24
22	581	451	150	260	110	105	1050	1340	824	53	19	35
23	591	379	150	250	105	220	967	783	667	77	17	39
24	467	328	145	240	100	190	937	604	477	81	23	30
25	401	303	150	235	99	165	969	504	387	58	52	27
26	359	283	556	800	95	150	1160	422	299	41	38	25
27	323	218	483	1000	92	139	1680	354	242	36	30	24
28	289	199	326	750	89	154	1950	289	435	59	30	23
29	260	223	244	550	---	233	2190	242	279	59	107	23
30	235	188	185	430	---	236	2040	208	251	45	81	24
31	214	---	162	355	---	177	---	217	---	38	44	---
TOTAL	23880	10625	6167	12375	4620	3550	20312	50626	18381	2328	1133	1181
MEAN	770	354	199	399	165	115	677	1633	613	75.1	36.5	39.4
MAX	3110	810	556	1140	310	236	2190	4600	2220	203	107	121
MIN	214	180	145	106	89	73	147	208	212	36	17	22
CFSM	5.03	2.31	1.30	2.61	1.08	.75	4.43	10.7	4.01	.49	.24	.26
IN.	5.81	2.58	1.50	3.01	1.12	.86	4.94	12.31	4.47	.57	.28	.29

CAL YR 1977 TOTAL 147057 MEAN 403 MAX 3610 MIN 25 CFSM 2.63 IN 35.75
WTR YR 1978 TOTAL 155178 MEAN 425 MAX 4600 MIN 17 CFSM 2.78 IN 37.73

01053500 ANDROSCOGGIN RIVER AT ERROL, NH

LOCATION.--Lat 44°46'57", long 71°07'46", Coos County, Hydrologic Unit 01040001, on right bank 0.4 mi (0.6 km) downstream from Errol Dam, 0.4 mi (0.6 km) northeast of Errol, and 0.6 mi (1.0 km) upstream from Clear Stream.

DRAINAGE AREA.--1,045 mi² (2,707 km²).

PERIOD OF RECORD.--Discharge: January 1905 to current year. October 1922 to November 1943, monthly discharge only, published in WSP 1301. Prior to 1922, published as "at Errol Dam."
Water-quality records: Water years 1955, 1958-59.

REVISED RECORDS.--WSP 1001: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,227.30 ft (374.081 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 8, 1943, nonrecording gage at Errol Dam at datum 5.0 ft (1.52 m) higher.

REMARKS.--Records good. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Aziscohos, and Umbagog Lakes, (Reservoirs in Androscoggin River basin), combined usable capacity, 28,100,000,000 ft³ (796,000,000 m³), with final regulation at Errol Dam. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--73 years, 1,912 ft³/s (54.15 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 16,100 ft³/s (456 m³/s) May 22, 1969; minimum daily, leakage only at various times when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,200 ft³/s (204 m³/s) June 11; minimum daily, 996 ft³/s (28.2 m³/s) June 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2500	2760	2450	2050	2360	4070	2280	4070	1400	2300	1830	1840
2	3170	2990	2480	2070	2310	4230	2210	3000	996	2070	1830	1840
3	3980	2890	2480	2100	2290	4460	2190	2350	1540	1970	1830	1830
4	2860	2760	2480	2080	2290	4710	2000	2290	1710	1660	1780	1820
5	2050	2760	2430	2120	2290	4840	1620	2280	1730	1660	1750	1830
6	2030	2740	2420	2130	2290	4560	1710	2340	1740	1840	1770	1840
7	2020	2630	2420	2130	2390	4780	1960	2470	1750	1890	1820	1840
8	2010	2240	2440	2130	2430	4770	2010	2910	2180	1860	1830	1820
9	2150	2010	2420	2200	2420	4760	1970	3980	4340	1870	1810	1800
10	2790	2010	2410	2260	2330	4750	1770	3590	6980	1850	1800	1840
11	3040	2020	2390	2300	2290	4770	1810	5440	7200	1880	1810	1870
12	3010	2030	2380	2160	2290	4770	1920	5510	7050	1890	1800	1810
13	2970	2040	2350	2060	2290	4770	1710	5500	6410	1910	1810	1780
14	2950	2040	2320	2040	2290	4760	1590	5440	5950	1930	1810	1790
15	2980	2040	2270	2030	2290	4710	1610	5260	5080	1910	1830	1810
16	3040	2040	2350	2010	2320	4610	1610	4920	4540	1870	1840	1800
17	3690	2030	2380	1970	2380	4610	1570	4850	3700	1870	1830	1800
18	5200	2220	2360	1970	2390	4530	1550	4830	2570	1840	1830	1820
19	5130	2340	2400	1960	2410	4460	1580	4670	2070	1830	1830	1820
20	5150	2430	2420	2000	2420	4350	1580	4470	3000	1880	1840	1720
21	5130	2590	2400	2060	2370	4310	2260	4380	4950	1900	1840	1870
22	5310	2570	2370	2090	2410	4230	2770	4670	6460	1920	1850	1820
23	5390	2570	2380	2100	2520	3950	2780	4990	6260	1930	1870	1780
24	4900	2560	2370	2110	2770	3690	2820	5200	5740	1940	1840	1790
25	3840	2560	2340	2120	3140	3460	2850	5130	4410	1950	1810	1830
26	3440	2450	2370	2180	3450	3270	2910	5000	3950	1950	1830	1800
27	2870	2240	2360	2240	3680	2930	3120	4210	3660	1950	1830	1840
28	2530	2380	2420	2300	3870	2590	3450	3180	2480	1940	1820	1810
29	2640	2480	2350	2340	---	2470	3820	2540	2490	1930	1820	1760
30	2870	2450	2170	2370	---	2380	4110	1450	2480	1930	1830	1740
31	2800	---	2070	2380	---	2150	---	1660	---	1920	1840	---
TOTAL	104440	71870	73650	66060	70980	127700	67140	122580	114816	59040	56460	54360
MEAN	3369	2396	2376	2131	2535	4119	2238	3954	3827	1905	1821	1812
MAX	5390	2990	2480	2380	3870	4840	4110	5510	7200	2300	1870	1870
MIN	2010	2010	2070	1960	2290	2150	1550	1450	996	1660	1750	1720

CAL YR 1977 TOTAL 803901 MEAN 2202 MAX 5390 MIN 597
WTR YR 1978 TOTAL 989096 MEAN 2710 MAX 7200 MIN 996

01054000 ANDROSCOGGIN RIVER NEAR GORHAM, NH

LOCATION.--Lat 44°26'10", long 71°11'27", Coos County, Hydrologic Unit 01040001, on right bank at Pulsifer Rips, 2.2 mi (3.5 km) downstream from Dead River, and 4.0 mi (6.4 km) upstream from Gorham.

DRAINAGE AREA.--1,363 mi² (3,530 km²).

PERIOD OF RECORD.--October 1913 to current year. October 1922 to February 1929, monthly discharge only, published in WSP 1301. Prior to October 1928, published as "at Berlin."

REVISED RECORDS.--WSP 1001: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 832.88 ft (253.862 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1922, nonrecording gage showing head and tailwater elevations at site 3 mi (5 km) upstream at different datum.

REMARKS.--Records good. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Aziscohos, and Umbagog Lakes, combined usable capacity, 28,100,000,000 ft³ (796,000,000 m³), with final regulation at Errol Dam 35 mi (56 km) upstream. Diurnal fluctuation caused by powerplant 0.8 mi (1.3 km) upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--65 years, 2,475 ft³/s (70.09 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 20,000 ft³/s (566 m³/s) June 18, 1917, Apr. 30, 1923; minimum daily, 795 ft³/s (22.5 m³/s) Mar. 15, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,000 ft³/s (312 m³/s) May 10, gage height, 7.86 ft (2.396 m); minimum daily, 1,720 ft³/s (48.7 m³/s) July 5.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3060	3170	2910	2300	2930	4060	2630	6780	2310	2820	1990	1900
2	5410	3130	3060	2330	2770	4260	2780	5630	1770	2490	1930	1900
3	5900	3380	3060	2310	2650	4460	2710	4020	1750	2230	1930	1890
4	4880	3170	3020	2240	2580	4730	2660	3640	2320	2290	2050	1890
5	3340	3260	2870	2350	2550	4990	2430	3960	2170	1720	2040	1900
6	2780	3240	2860	2410	2610	4810	2050	4640	2150	2010	1940	1900
7	2620	3280	2850	2370	2630	4920	2460	5050	2110	2060	1920	1980
8	2510	3050	2740	2370	2640	4990	2540	6080	2450	1910	1970	1960
9	2800	3000	2700	3530	2640	4990	2460	8490	4130	2000	2150	1900
10	4990	3050	2560	4320	2630	4980	2400	9960	7400	2060	2080	1890
11	4660	3070	2470	3680	2600	4990	2210	8530	7840	1980	1980	1950
12	4110	3050	2650	3310	2580	5000	2920	8790	7580	2000	1930	2030
13	3820	2780	2700	2940	2600	4990	3090	8430	7090	1980	1930	2030
14	3620	2650	2720	2850	2490	4990	3140	8040	7110	2020	1920	1920
15	3720	2540	2790	2710	2490	4990	3080	7870	6460	2100	1910	1910
16	3950	2510	2820	2590	2500	4860	2840	7340	5380	2060	1920	1910
17	5830	2580	2850	2450	2580	4790	2720	8440	4660	2150	1920	1900
18	7900	2980	2710	2470	2610	4790	2720	7940	3720	2140	1910	1890
19	7130	3260	2750	2350	2610	4720	3030	6780	2730	2030	1890	1910
20	6700	3070	2770	2340	2550	4560	3400	6180	4340	2000	1900	1880
21	6510	3140	2740	2370	2570	4600	3830	5990	5860	2030	1890	1820
22	6270	3270	2740	2400	2530	4730	5010	6120	7150	2060	1890	1950
23	6470	3260	2700	2480	2620	4640	5200	5970	7950	2100	1910	1880
24	6230	3200	2730	2430	2770	4290	5250	5990	6980	2170	1970	1860
25	5160	3140	2720	2500	3050	3910	5230	5960	6020	2110	1970	1900
26	4130	3140	2910	2810	3370	3650	5400	5730	4600	2050	1930	1900
27	3900	2950	2850	3350	3680	3500	6240	5410	4350	2040	1910	1870
28	3110	2740	2740	3500	3910	3140	7000	4050	3830	2080	1910	1930
29	3020	2920	2730	3270	---	3020	7700	3450	3240	2030	1950	1860
30	3160	2850	2600	3130	---	2880	7920	2330	3030	2060	1940	1830
31	3340	---	2470	3080	---	2660	---	2100	---	2040	1930	---
TOTAL	141030	90830	85790	85540	76740	136890	113050	189690	138480	64820	60410	57240
MEAN	4549	3028	2767	2759	2741	4416	3768	6119	4616	2091	1949	1908
MAX	7900	3380	3060	4320	3910	5000	7920	9960	7950	2820	2150	2030
MIN	2510	2510	2470	2240	2490	2660	2050	2100	1750	1720	1890	1820

CAL YR 1977 TOTAL 1050720 MEAN 2879 MAX 8730 MIN 1680
WTR YR 1978 TOTAL 1240510 MEAN 3399 MAX 9960 MIN 1720

01064300 ELLIS RIVER NEAR JACKSON, NH

LOCATION.--Lat 44°13'12", long 71°15'00", Carroll County, Hydrologic Unit 01060002, in White Mountain National Forest, on right bank 0.4 mi (0.6 km) upstream from small left-bank tributary, 1.3 mi (2.1 km) upstream from bridge on State Highway 16, and 6 mi (10 km) northwest of Jackson.

DRAINAGE AREA.--10.9 mi^2 (28.2 km^2).

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,500 ft (457 m), from topographic map. Prior to Oct. 14, 1969, at site 0.3 mi (0.5 km) downstream at different datum.

REMARKS.--Records good except those for winter period and periods of no gage-height record Oct. 16 to Nov. 29, Dec. 7 to Jan. 10, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--14 years (water years 1965-78), 34.0 ft^3/s (0.963 m^3/s), 42.36 in/yr (1,076 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft^3/s (127 m^3/s) Nov. 3, 1966, gage height, 10.34 ft (3.152 m), from recorder, affected by drawdown, 18.9 ft (5.76 m), from floodmarks, site and datum then in use, from rating curve extended above 390 ft^3/s (11 m^3/s) on basis of slope-area measurement at gage height 10.34 ft (3.152 m); minimum not determined, occurred during ice effect in February 1977. Minimum daily, 2.7 ft^3/s (0.076 m^3/s) Feb. 23, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft^3/s (11 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 9	1630	758	21.2	4.00	1.219	May 17	0445	*864	24.5	4.22	1.286
May 10	0030	571	16.2	3.56	1.085	May 21	1300	410	11.6	3.16	.963

Minimum discharge 5.0 ft^3/s (0.14 m^3/s) Aug. 21-24, Sept. 3-6, 26-30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	17	22	12	30	9.2	11	42	104	27	9.0	6.8
2	130	17	26	11	27	9.0	13	38	71	24	8.9	6.1
3	90	16	21	10	25	8.8	14	43	94	22	8.6	5.7
4	60	16	19	9.0	23	8.6	11	52	74	20	13	5.0
5	40	15	16	8.6	21	8.4	25	63	54	19	11	5.0
6	30	15	14	8.0	19	8.2	20	66	48	18	9.7	5.1
7	25	15	13	7.8	18	8.0	16	90	46	17	9.0	11
8	19	40	12	7.5	17	7.8	14	131	118	17	8.3	7.1
9	271	100	12	150	16	7.7	13	328	87	16	8.1	5.7
10	104	54	11	60	16	7.6	14	269	70	15	7.6	5.8
11	52	130	11	40	15	7.4	17	176	52	16	7.4	7.4
12	41	70	10	35	15	7.6	27	172	46	15	7.2	21
13	36	50	10	30	14	8.0	29	183	44	13	7.6	10
14	28	40	10	25	14	8.2	36	196	49	13	7.3	8.3
15	44	34	55	22	14	9.0	27	196	48	15	6.6	8.0
16	33	33	35	20	13	8.0	22	303	39	15	6.4	8.6
17	160	32	25	19	13	8.0	19	492	36	16	6.2	7.7
18	70	29	20	17	12	7.9	21	149	34	15	6.1	7.0
19	50	27	15	16	12	7.8	27	174	34	14	6.1	6.8
20	40	24	14	15	12	7.7	28	254	39	13	5.8	6.7
21	35	23	13	15	11	7.6	52	254	62	12	5.7	6.4
22	32	22	20	14	11	13	54	112	62	12	5.0	5.8
23	29	23	18	13	11	11	47	99	49	12	5.0	5.8
24	27	25	17	13	10	10	41	105	37	12	13	5.5
25	26	24	30	13	10	9.5	40	97	32	11	9.6	5.5
26	24	28	45	100	10	9.0	52	105	30	10	7.1	5.5
27	23	24	65	60	10	15	65	100	28	9.4	6.6	5.0
28	21	22	30	50	9.5	20	74	97	28	11	8.2	5.0
29	20	21	20	45	---	15	79	87	29	9.9	12	5.0
30	19	20	17	40	---	13	68	102	38	10	7.7	5.0
31	18	---	14	35	---	12	---	92	---	9.8	7.0	---
TOTAL	1667	1006	660	920.9	428.5	298.0	976	4667	1582	459.1	246.8	209.3
MEAN	53.8	33.5	21.3	29.7	15.3	9.61	32.5	151	52.7	14.8	7.96	6.98
MAX	271	130	65	150	30	20	79	492	118	27	13	21
MIN	18	15	10	7.5	9.5	7.4	11	38	28	9.4	5.0	5.0
CFSM	4.94	3.07	1.95	2.73	1.40	.88	2.98	13.9	4.84	1.36	.73	.64
IN.	5.69	3.43	2.25	3.14	1.46	1.02	3.33	15.93	5.40	1.57	.84	.71

CAL YR 1977 TOTAL 12532.2 MEAN 34.3 MAX 513 MIN 2.7 CFSM 3.15 IN 42.77
WTR YR 1978 TOTAL 13120.6 MEAN 35.9 MAX 492 MIN 5.0 CFSM 3.29 IN 44.77

01064400 LUCY BROOK NEAR NORTH CONWAY, NH

LOCATION.--Lat 44°04'10", long 71°10'30", Carroll County, Hydrologic Unit 01060002, on left bank 1.6 mi (2.6 km) upstream from mouth and 2.5 mi (4.0 km) northwest of North Conway.

DRAINAGE AREA.--4.68 mi² (12.12 km²).

PERIOD OF RECORD.--June 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 710 ft (216 m), from topographic map.

REMARKS.--Records good except those for winter period, and those for periods of no gage-height record Oct. 1-6, Dec. 10 to Feb. 27, Mar. 7 to May 12, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--14 years, 11.0 ft³/s (0.312 m³/s), 31.92 in/yr (811 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 992 ft³/s (28.1 m³/s) Nov. 3, 1966, Apr. 25, 1968, June 30, 1973, gage height, 9.20 ft (2.804 m), from floodmarks, from rating curve extended above 140 ft³/s (4.0 m³/s) on basis of slope-area measurement of peak flow; maximum recorded gage height, 8.14 ft (2.481 m) Nov. 3, 1966 (affected by drawdown); minimum discharge, 0.32 ft³/s (0.009 m³/s) Sept. 2, 3, 29, 30, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 190 ft³/s (5.4 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 9	1600	*880	24.9	8.00	2.438	May 17	0045	278	7.87	6.84	2.085
Oct. 17	0730	378	10.7	7.10	2.164						

Minimum discharge, 0.52 ft³/s (0.015 m³/s) Aug. 23, 24, Sept. 5-11, 22-30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	6.4	8.8	5.0	12	3.5	4.2	14	7.5	2.6	1.0	.80
2	40	6.1	11	4.5	11	3.4	5.0	12	6.2	2.4	1.0	.70
3	25	5.9	9.8	4.0	10	3.3	7.0	14	11	2.4	1.0	.70
4	19	5.7	8.5	3.5	9.0	3.2	4.5	17	10	2.2	1.0	.61
5	14	5.5	7.7	3.3	8.0	3.1	9.0	20	6.2	2.2	1.0	.52
6	10	5.5	8.0	3.1	7.5	3.1	6.0	22	5.9	2.2	.92	.52
7	8.2	6.0	7.4	3.0	7.0	3.0	5.2	40	5.2	2.0	.92	.52
8	7.4	7.2	7.7	2.9	6.5	2.9	4.5	60	13	1.8	.80	.52
9	224	53	5.0	56	6.2	2.9	4.2	90	17	1.6	.80	.52
10	81	21	4.8	30	6.0	2.8	4.5	60	15	1.6	.80	.52
11	37	66	4.6	20	5.8	2.8	6.0	48	9.6	1.6	.70	.52
12	24	28	4.4	15	5.6	2.8	9.0	41	7.5	1.5	.70	.92
13	18	18	4.3	12	5.4	2.9	9.4	43	5.9	1.5	.70	.80
14	15	14	4.2	11	5.2	3.1	11	39	5.9	1.5	.70	.70
15	19	12	22	9.4	5.1	3.3	9.0	64	5.6	2.6	.70	.61
16	18	11	15	8.4	5.0	3.1	7.0	120	4.9	2.2	.70	.61
17	148	11	11	7.6	4.8	3.0	6.0	150	4.3	2.2	.61	.61
18	52	11	9.0	7.0	4.7	2.9	7.0	52	4.0	2.4	.61	.61
19	32	9.3	7.0	6.5	4.6	2.9	8.4	40	3.8	1.6	.61	.61
20	28	8.4	6.0	6.0	4.5	2.8	9.0	36	4.9	1.5	.61	.61
21	21	8.2	5.0	5.8	4.4	2.8	16	29	5.9	1.3	.61	.61
22	14	7.5	7.5	5.5	4.3	4.7	17	22	5.6	1.3	.61	.61
23	13	7.9	7.0	5.2	4.1	4.2	14	18	4.6	1.3	.61	.52
24	11	8.8	6.4	5.0	4.0	3.7	13	15	3.8	1.5	.70	.52
25	9.8	8.4	10	4.7	3.9	3.5	12	14	3.3	1.2	1.0	.52
26	9.5	11	15	37	3.8	3.3	17	12	3.0	1.2	.80	.52
27	8.5	7.7	24	25	3.7	5.0	20	11	3.0	1.0	.80	.52
28	8.0	7.2	15	20	3.6	7.0	23	9.6	3.0	1.2	.92	.52
29	7.4	7.0	9.0	18	---	6.0	25	8.5	2.6	1.2	1.5	.52
30	7.1	6.5	7.0	16	---	5.0	20	7.5	2.6	1.2	.92	.52
31	6.6	---	5.5	14	---	4.3	---	6.2	---	1.0	.80	---
TOTAL	950.5	391.2	277.6	374.4	165.7	110.3	312.9	1134.8	190.8	53.0	25.15	17.91
MEAN	30.7	13.0	8.95	12.1	5.92	3.56	10.4	36.6	6.36	1.71	.81	.60
MAX	224	66	24	56	12	7.0	25	150	17	2.6	1.5	.92
MIN	6.6	5.5	4.2	2.9	3.6	2.8	4.2	6.2	2.6	1.0	.61	.52
CFSM	6.56	2.78	1.91	2.59	1.27	.76	2.22	7.82	1.36	.37	.17	.13
IN.	7.55	3.11	2.21	2.98	1.32	.88	2.49	9.02	1.52	.42	.20	.14

CAL YR 1977 TOTAL 4166.20 MEAN 11.4 MAX 300 MIN .69 CFSM 2.44 IN 33.11
WTR YR 1978 TOTAL 4004.26 MEAN 11.0 MAX 224 MIN .52 CFSM 2.35 IN 31.82

01064500 SACO RIVER NEAR CONWAY, NH

LOCATION.--Lat 43°59'27", long 71°05'29", Carroll County, Hydrologic Unit 01060002, on left bank at Odell Falls 1.8 mi (2.9 km) downstream from Swift River and Conway.

DRAINAGE AREA.--386 mi² (1,000 km²).

PERIOD OF RECORD.--Discharge: August 1903 to December 1909, January 1910 to June 1912 (gage heights only), February 1929 to current year. Monthly discharge only for some periods, published in WSP 1301. Prior to 1912, published as "at Center Conway."

REVISED RECORDS.--WSP 756: Drainage area. WSP 1301: 1908-9.

GAGE.--Water-stage recorder. Datum of gage is 418.19 ft (127.464 m) National Geodetic Vertical Datum of 1929. Aug. 26, 1903, to June 30, 1912, nonrecording gage at site 0.8 mi (1.3 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--55 years (water years 1904-9, 1930-78), 932 ft³/s (26.39 m³/s), 32.79 in/yr (833 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43,900 ft³/s (1,240 m³/s) Mar. 27, 1953, gage height, 17.20 ft (5.243 m), from rating curve extended above 23,000 ft³/s (650 m³/s) on basis of slope-area measurement of peak flow; minimum, 40 ft³/s (1.13 m³/s) Mar. 16, 1932, gage height, 1.61 ft (0.491 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,700 ft³/s (250 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0800	9920	281	8.39	2.557	Jan. 9	2200	*20400	578	11.41	3478
Oct. 10	0100	15500	439	10.08	3.072	May 9	1600	10600	300	8.63	2630
Oct. 17	1700	14200	402	9.70	2.957	May 17	1000	14900	422	9.92	3024

Minimum discharge, 102 ft³/s (2.89 m³/s) Sept. 25, gage height, 1.92 ft (0.585 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	754	774	590	740	310	727	3040	1350	472	182	147
2	6220	687	1020	560	690	305	723	2490	1080	412	185	137
3	2560	651	933	530	650	305	678	2580	1350	381	179	130
4	1600	624	819	520	610	300	653	2560	1430	361	209	126
5	1220	635	733	500	590	295	712	2810	1060	346	211	121
6	996	613	650	480	560	295	849	2930	977	329	188	120
7	846	580	610	460	540	290	840	3260	856	310	178	116
8	739	577	580	450	520	290	794	4260	2300	294	166	121
9	4170	2660	550	3000	500	285	782	8250	2040	282	164	116
10	8320	1870	530	9280	485	285	826	7840	1960	274	158	112
11	3060	2680	510	3620	470	285	1010	5530	1310	261	150	116
12	2090	2190	490	2680	455	290	1440	4990	1060	251	153	166
13	1630	1520	480	2230	445	300	1610	4890	926	243	157	180
14	1340	1260	480	1600	435	350	1830	4660	1020	231	147	152
15	1620	1090	885	1350	420	540	1840	5240	1010	258	141	139
16	1660	997	1440	1200	410	490	1660	9720	816	325	136	138
17	8370	964	1190	1050	400	450	1510	11800	712	283	128	135
18	6440	1180	877	970	390	420	1490	6130	648	371	125	122
19	3400	1050	795	900	380	390	1750	4500	625	290	123	120
20	2670	900	700	830	370	380	2100	4660	774	254	119	117
21	2170	824	683	770	365	379	2590	4560	927	238	116	113
22	1780	850	906	730	355	500	3030	3280	1040	227	112	110
23	1520	815	861	1500	345	662	3110	2700	1200	222	110	111
24	1320	822	740	3000	340	483	3020	2420	818	235	140	109
25	1190	859	862	2000	335	430	3100	2190	672	213	190	104
26	1090	874	1760	1450	330	421	3180	1960	593	198	154	105
27	1010	951	958	1200	325	466	3860	1790	542	190	136	108
28	931	758	767	1050	320	1100	4200	1580	508	200	165	110
29	857	735	700	950	---	988	4520	1410	483	199	228	111
30	795	684	660	870	---	834	4380	1330	517	192	183	114
31	773	---	620	800	---	745	---	1220	---	185	157	---
TOTAL	73427	31654	24563	47120	12775	13863	58814	126580	30604	8527	4890	3726
MEAN	2369	1055	792	1520	456	447	1960	4083	1020	275	158	124
MAX	8370	2680	1760	9280	740	1100	4520	11800	2300	472	228	180
MIN	739	577	480	450	320	285	653	1220	483	185	110	104
CFSM	6.14	2.73	2.05	3.94	1.18	1.16	5.08	10.6	2.64	.71	.41	.32
IN.	7.08	3.05	2.37	4.54	1.23	1.34	5.67	12.20	2.95	.82	.47	.36

CAL YR 1977 TOTAL 385953 MEAN 1057 MAX 13200 MIN 125 CFSM 2.74 IN 37.20
WTR YR 1978 TOTAL 436543 MEAN 1196 MAX 11800 MIN 104 CFSM 3.10 IN 42.07

01065000 OSSIPEE RIVER AT EFFINGHAM FALLS, NH

LOCATION.--Lat 43°47'44", long 71°03'36", Carroll County, Hydrologic Unit 01060002, on left bank 0.3 mi (0.5 km) upstream from bridge on State Highway 153 at Effingham Falls, 0.3 mi (0.5 km) downstream from outlet of Ossipee Lake, and 4 mi (6 km) northwest of Effingham.

DRAINAGE AREA.--330 mi² (855 km²).

PERIOD OF RECORD.--Discharge: September 1942 to current year.
Water-quality records: Water year 1955.

GAGE.--Water-stage recorder. Altitude of gage is 390 ft (119 m), from topographic map.

REMARKS.--Records excellent except those for period of no gage-height record, Feb. 20 to Mar. 30, which are fair. Flow regulated by Ossipee and Silver Lakes and Pine River Pond, combined capacity, 1,430,000,000 ft³ (40,500,000 m³). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--36 years, 695 ft³/s (19.68 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft³/s (331 m³/s) Mar. 28, 1953, gage height, 11.64 ft (3.548 m); minimum, about 5 ft³/s (0.14 m³/s) during part of several days Nov. 4-20, 1968 (caused by unusual regulation); minimum daily, 11 ft³/s (0.31 m³/s) Oct. 10, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,840 ft³/s (80.4 m³/s) Oct. 11, gage height, 7.09 ft (2.161 m); minimum, 129 ft³/s (3.65 m³/s) July 14; minimum daily, 131 ft³/s (3.71 m³/s) July 14, 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1020	270	822	787	1470	560	1030	2270	773	268	145	144
2	1500	276	913	778	1400	600	1090	2030	760	269	146	142
3	2440	293	923	769	1330	650	1100	1840	756	273	163	141
4	2540	440	926	762	1290	650	1100	1700	757	276	172	140
5	2140	542	922	757	1260	650	1110	1350	719	273	147	140
6	1550	539	922	752	1120	650	1160	1200	654	268	145	140
7	1140	533	914	752	1050	650	1240	1260	654	200	145	138
8	990	532	905	749	980	640	1300	1220	865	132	145	138
9	1070	730	897	754	930	600	1320	1270	1220	138	145	136
10	2030	1130	889	1040	880	530	1350	1640	1370	150	145	134
11	2800	1280	873	1510	830	470	1420	1810	1380	143	146	134
12	2660	1270	860	1620	780	410	1600	1760	1330	141	146	144
13	2360	1230	850	1840	740	380	1870	1650	1260	137	147	152
14	2000	1190	847	1890	700	400	2150	1530	1210	131	146	150
15	1770	1160	844	1740	680	430	2320	1310	1160	133	145	149
16	1630	763	842	1660	665	450	2360	1720	879	131	145	149
17	1750	509	844	1650	766	440	2330	2430	508	132	145	149
18	2440	656	840	1480	791	420	2240	2780	508	132	144	149
19	2710	760	835	1350	762	400	2200	2750	508	132	145	148
20	2590	754	828	956	740	390	2310	2560	508	134	144	147
21	2370	687	822	767	720	390	2490	2350	508	217	143	147
22	2080	645	827	763	700	430	2640	1990	509	283	142	145
23	1820	643	584	755	680	520	2710	1750	510	281	142	145
24	1490	642	418	746	650	530	2700	1290	509	224	142	145
25	1290	558	425	936	620	530	2670	1010	531	146	142	206
26	995	505	437	1220	590	540	2620	579	558	145	142	242
27	842	515	617	1340	560	570	2570	306	526	145	142	240
28	637	713	782	1490	530	680	2530	326	489	145	144	238
29	511	995	818	1560	---	800	2490	360	500	145	144	175
30	514	846	806	1560	---	900	2430	614	358	146	144	134
31	392	---	796	1530	---	964	---	789	---	145	144	---
TOTAL	52071	21606	24828	36263	24214	17224	58450	47444	22777	5615	4522	4681
MEAN	1680	720	801	1170	865	556	1948	1530	759	181	146	156
MAX	2800	1280	926	1890	1470	964	2710	2780	1380	283	172	242
MIN	392	270	418	746	530	380	1030	306	358	131	142	134

CAL YR 1977 TOTAL 281123 MEAN 770 MAX 3960 MIN 47
WTR YR 1978 TOTAL 319695 MEAN 876 MAX 2800 MIN 131

NOTE.--No gage-height record Feb. 4-15, Feb. 20 to Mar. 30.

01072100 SALMON FALLS RIVER AT MILTON, NH

LOCATION.--Lat 43°24'50", long 70°59'15", Strafford County, Hydrologic Unit 01060003, on right bank just downstream from Milton Pond at Milton.

DRAINAGE AREA.--108 mi² (280 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 405 ft (123 m), from topographic map.

REMARKS.--Records good. Flow regulated by Great East and Lovell Lakes and Horn, Wilson, and Milton (also controls Northeast and Town House) Ponds, combined usable capacity, 1,280,000,000 ft³ (36,250,000 m³). See table below for figures of monthend contents.

AVERAGE DISCHARGE.--10 years, 209 ft³/s (5.919 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft³/s (99.1 m³/s) Mar. 15, 1977, gage height, 6.50 ft (1.981 m); minimum daily, 19 ft³/s (0.54 m³/s) Aug. 30, Sept. 13, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,820 ft³/s (51.5 m³/s) May 17, gage height, 5.55 ft (1.692 m); minimum daily, 35 ft³/s (0.99 m³/s) Sept. 21-30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	254	348	235	429	194	537	215	95	39	37	36
2	285	244	458	225	388	168	537	156	98	39	37	36
3	431	233	486	216	352	153	438	126	108	39	37	36
4	436	248	469	209	315	147	373	45	125	39	37	36
5	357	279	414	202	286	143	402	52	127	39	37	36
6	295	257	374	192	276	135	501	52	154	39	37	36
7	309	253	354	188	265	135	537	62	172	39	37	36
8	329	236	321	184	248	130	535	78	163	39	37	36
9	346	351	300	269	234	122	529	107	236	39	37	36
10	516	494	295	703	228	117	508	173	347	39	37	36
11	665	502	271	806	222	117	492	204	308	39	37	36
12	570	467	251	671	210	115	567	207	181	39	37	36
13	550	403	245	542	207	114	704	197	92	39	37	36
14	547	337	242	477	202	114	736	181	106	38	37	36
15	477	295	263	408	193	115	736	185	109	38	36	36
16	456	279	319	366	187	125	692	969	95	38	36	36
17	909	273	352	348	184	137	611	1770	72	38	36	36
18	1360	273	352	339	178	138	536	1540	69	38	36	36
19	1130	273	347	318	172	138	494	957	54	39	36	36
20	787	273	327	302	169	138	611	699	40	39	36	36
21	607	264	325	299	163	138	864	640	40	39	36	35
22	557	237	387	286	154	138	880	452	40	39	36	35
23	505	226	457	274	153	139	789	316	40	39	36	35
24	443	226	459	261	151	158	664	330	44	39	36	35
25	405	229	439	253	142	172	572	329	45	38	36	35
26	381	275	428	301	135	174	482	311	45	38	36	35
27	365	409	403	517	183	194	433	286	45	38	36	35
28	344	435	309	694	214	300	391	262	45	38	36	35
29	322	395	290	706	---	449	289	212	44	38	36	35
30	304	345	270	613	---	531	317	159	43	38	36	35
31	274	---	250	512	---	537	---	133	---	37	36	---
TOTAL	15478	9265	10805	11916	6240	5625	16757	11405	3182	1196	1130	1070
MEAN	499	309	349	384	223	181	559	368	106	38.6	36.5	35.7
MAX	1360	502	486	806	429	537	880	1770	347	39	37	36
MIN	216	226	242	184	135	114	289	45	40	37	36	35

CAL YR 1977 TOTAL 86304 MEAN 236 MAX 3220 MIN 35
WTR YR 1978 TOTAL 94069 MEAN 258 MAX 1770 MIN 35

† Monthend contents, in millions of cubic feet, in Great East and Lovell Lakes, and Horn, Wilson, Milton, Northeast and Town House Ponds; records furnished by New Hampshire Water Resources Board.

01073000 OYSTER RIVER NEAR DURHAM, NH

LOCATION.--Lat 43°08'55", long 70°57'56", Strafford County, Hydrologic Unit 01060003, on left bank 200 ft (60 m) upstream from highway bridge, 2.5 mi (4.0 km) west of Durham, and 7 mi (11 km) upstream from mouth.

DRAINAGE AREA.--12.1 mi² (31.3 km²).

PERIOD OF RECORD.--October 1934 to current year. October and November 1934 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 70 ft (21 m), from topographic map. Prior to Oct. 1, 1964, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter period, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--44 years, 19.4 ft³/s (0.549 m³/s), 21.77 in/yr (553 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 862 ft³/s (24.4 m³/s) Sept. 11, 1954, gage height, 6.47 ft (1.972 m), present datum; maximum gage height, 8.45 ft (2.576 m), present datum, Mar. 19, 1936; minimum discharge, 0.23 ft³/s (0.007 m³/s) Aug. 18, 19, 25, 26, 27, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 170 ft³/s (4.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	0730	*278	7.87	3.81	1.161	Jan. 9	1330	245	6.94	3.63	1.106
Nov. 9	0300	189	5.35	3.30	1.006	Mar. 27	2015	208	5.89	3.42	1.042
Dec. 22	0645	171	4.84	3.19	.972	May 16	0430	254	7.19	3.68	1.122

Minimum discharge not determined; minimum daily, 0.46 ft³/s (0.013) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	7.9	83	16	33	9.2	83	18	20	1.7	1.6	1.5
2	20	7.3	83	15	27	9.0	99	14	16	1.4	1.9	1.1
3	8.3	7.3	57	14	23	8.8	80	12	14	1.3	1.6	1.1
4	5.0	7.1	43	14	21	8.7	65	11	32	1.3	1.6	1.5
5	3.8	12	33	14	20	8.5	81	9.8	19	1.4	1.9	1.1
6	3.1	15	28	13	18	8.4	86	9.4	15	1.5	2.0	1.3
7	2.8	11	25	13	17	8.3	73	9.3	11	1.3	2.0	1.0
8	2.6	15	23	13	16	8.2	62	8.7	19	1.1	2.0	.84
9	19	133	21	139	15	8.1	56	17	27	1.1	1.9	.76
10	26	80	19	114	15	8.0	50	19	25	1.1	1.5	.76
11	12	56	17	76	14	8.4	50	23	15	1.0	1.3	.84
12	8.7	41	15	44	14	9.0	74	21	11	1.0	1.1	1.4
13	7.2	31	16	33	14	11	65	18	9.2	1.0	1.4	1.3
14	6.6	25	18	29	13	13	53	16	9.8	1.1	1.3	1.4
15	14	21	44	26	13	18	41	84	7.2	1.3	1.1	1.3
16	17	19	50	24	13	30	34	235	5.8	1.7	1.1	.84
17	176	22	46	23	12	27	30	206	5.0	1.6	1.1	1.0
18	100	34	37	21	12	22	26	110	4.4	1.7	1.1	.92
19	61	24	33	20	12	21	25	77	6.5	1.4	.84	.92
20	49	20	29	19	11	22	100	58	11	1.1	.84	1.0
21	43	17	59	18	11	23	86	50	9.1	1.0	.84	.69
22	31	23	150	17	11	51	60	40	7.8	.92	1.6	1.1
23	23	24	100	16	10	67	46	32	5.9	.92	2.4	1.1
24	16	25	71	15	10	70	56	26	3.9	.84	1.3	1.0
25	14	22	59	16	10	60	47	22	3.0	.84	2.1	1.1
26	12	48	45	105	9.9	49	38	19	2.5	.76	1.5	1.0
27	11	50	30	128	9.7	97	30	16	2.3	.84	1.0	.62
28	10	33	25	90	9.5	162	26	14	2.2	1.1	1.1	.54
29	9.4	26	21	66	---	139	25	12	2.0	1.1	2.9	.50
30	8.7	22	19	50	---	114	21	16	2.0	1.1	1.4	.46
31	7.8	---	17	40	---	91	---	16	---	.92	1.4	---
TOTAL	731.1	878.6	1316	1241	414.1	1189.6	1668	1239.2	323.6	36.44	46.72	29.99
MEAN	23.6	29.3	42.5	40.0	14.8	38.4	55.6	40.0	10.8	1.18	1.51	1.00
MAX	176	133	150	139	33	162	100	235	32	1.7	2.9	1.5
MIN	2.6	7.1	15	13	9.5	8.0	21	8.7	2.0	.76	.84	.46
CFSM	1.95	2.42	3.51	3.31	1.22	3.17	4.60	3.31	.89	.10	.13	.08
IN.	2.25	2.70	4.05	3.81	1.27	3.66	5.13	3.81	.99	.11	.14	.09

CAL YR 1977 TOTAL 8348.73 MEAN 22.9 MAX 511 MIN .41 CFSM 1.89 IN 25.67
WTR YR 1978 TOTAL 9114.35 MEAN 25.0 MAX 235 MIN .46 CFSM 2.07 IN 28.02

01073500 LAMPREY RIVER NEAR NEWMARKET, NH

LOCATION.--Lat 43°06'09", long 70°57'11", Rockingham County, Hydrologic Unit 01060003, on right bank 200 ft (60 m) upstream from Packers Falls, 2 mi (3 km) northwest of Newmarket, and 4.6 mi (7.4 km) upstream from mouth.

DRAINAGE AREA.--183 mi² (474 km²).

PERIOD OF RECORD.--Discharge: July 1934 to current year.
Water-quality records: Water year 1954.

REVISED RECORDS.--WSP 1231: 1936-37.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.

REMARKS.--Records excellent except those for winter period, which are fair. Some regulation by Pawtuckaway and Mendums Ponds, combined capacity, about 600,000,000 ft³ (17,000,000 m³). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--44 years, 280 ft³/s (7.930 m³/s), 20.78 in/yr (528 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,490 ft³/s (155 m³/s) Mar. 20, 1936, gage height, 14.88 ft (4.535 m), from rating curve extended above 3,100 ft³/s (88 m³/s) on basis of computation of flow over dam at gage height 14.69 ft (4.478 m); minimum daily, 1 ft³/s (0.03 m³/s) Oct. 21, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,610 ft³/s (45.6 m³/s) Jan. 29, gage height, 6.39 ft (1.948 m); minimum daily, 4.1 ft³/s (0.12 m³/s) Sept. 29, 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	221	640	350	717	170	1180	290	183	54	16	17
2	170	208	850	330	578	165	1140	255	179	55	18	17
3	159	198	885	300	477	160	1050	234	176	44	20	15
4	157	199	807	290	412	158	944	196	313	38	22	13
5	146	234	660	280	359	156	922	205	300	37	24	11
6	126	253	566	275	334	152	954	197	263	33	27	10
7	110	237	540	270	306	149	939	190	217	31	31	10
8	98	245	500	265	290	145	869	182	221	28	32	10
9	143	863	480	724	280	143	792	200	300	26	32	10
10	250	839	470	1210	275	142	723	227	387	25	27	11
11	253	779	460	1260	270	141	686	226	381	24	24	10
12	246	666	450	1180	260	151	770	213	319	22	23	9.7
13	264	551	450	922	250	165	805	194	252	21	21	8.8
14	265	470	450	650	245	186	746	174	216	20	19	8.7
15	266	405	570	550	235	270	620	415	183	24	18	9.0
16	278	418	610	500	230	335	543	1170	163	26	16	9.2
17	961	435	649	460	225	355	480	1470	139	29	15	13
18	1270	482	600	430	220	347	444	1310	119	40	14	22
19	1270	478	550	400	215	311	402	1050	107	44	13	16
20	1100	456	494	380	210	304	743	779	115	38	12	14
21	817	405	562	360	205	316	900	615	132	31	11	7.5
22	668	370	1120	350	200	463	889	521	142	29	11	5.4
23	589	336	1200	340	195	597	748	433	131	23	11	5.1
24	488	329	1130	330	190	724	606	363	117	19	12	6.8
25	445	319	962	338	185	719	513	323	107	19	14	5.6
26	410	415	844	740	180	653	447	319	92	21	15	6.2
27	360	543	688	1210	175	733	384	291	82	20	14	4.4
28	325	549	575	1480	173	1140	338	265	73	19	15	4.2
29	286	500	483	1590	---	1380	313	236	63	17	18	4.1
30	259	433	410	1330	---	1460	289	209	59	17	18	4.1
31	238	---	390	967	---	1310	---	180	---	15	17	---
TOTAL	12524	12836	20045	20061	7891	13600	21179	12932	5531	889	580	297.8
MEAN	404	428	647	647	282	439	706	417	184	28.7	18.7	9.93
MAX	1270	863	1200	1590	717	1460	1180	1470	387	55	32	22
MIN	98	198	390	265	173	141	289	174	59	15	11	4.1
CFSM	2.21	2.34	3.54	3.54	1.54	2.40	3.86	2.28	1.01	.16	.10	.05
IN.	2.55	2.61	4.07	4.08	1.60	2.76	4.31	2.63	1.12	.18	.12	.06

CAL YR 1977 TOTAL 127042.0 MEAN 348 MAX 4620 MIN 13 CFSM 1.90 IN 25.82
WTR YR 1978 TOTAL 128365.8 MEAN 352 MAX 1590 MIN 4.1 CFSM 1.92 IN 26.09

01073600 DUDLEY BROOK NEAR EXETER, NH

LOCATION.--Lat 42°59'37", long 71°01'24", Rockingham County, Hydrologic Unit 01060003, on right bank 2.4 mi (3.9 km) upstream from mouth and 3.5 mi (5.6 km) west of Exeter.

DRAINAGE AREA.--4.97 mi² (12.87 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 90 ft (27 m), from topographic map.

REMARKS.--Records fair except those for winter period and period of no gage-height record Jan. 13 to Feb. 15, which are poor. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--16 years, 7.15 ft³/s (0.202 m³/s), 19.54 in/yr (496 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 358 ft³/s (10.14 m³/s) Apr. 2, 1973, gage height, 7.74 ft (2.36 m), from rating curve extended above 210 ft³/s (5.9 m³/s); no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.8 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1300	187	5.30	6.52	1.987	Jan. 11	1015	ice jam		*7.39	2.252
Nov. 9	1045	190	5.38	6.54	1.993	Mar. 27	2230	128	3.62	5.99	1.826
Dec. 22	0730	119	3.37	5.91	1.801	May 15	2315	162	4.59	6.30	1.920
Jan. 9	1415	*264	7.48	7.12	2.170						

Minimum discharge, .03 ft³/s (0.001 m³/s) Aug. 22-24, Sept. 7-12, 27, 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.1	43	3.9	14	3.8	33	4.3	1.7	.55	.09	.12
2	12	2.9	53	3.6	12	3.7	49	3.9	1.8	.30	.11	.15
3	16	2.9	24	3.5	10	3.7	37	3.6	1.8	.20	.13	.12
4	7.8	2.8	16	3.4	9.0	3.6	21	3.4	6.9	.16	.19	.07
5	4.5	4.0	11	3.3	8.5	3.5	24	3.4	8.4	.19	.42	.06
6	2.6	5.8	7.5	3.3	7.8	3.5	33	3.2	4.7	.18	.45	.04
7	1.8	4.9	6.2	3.2	7.3	3.4	25	2.8	3.1	.14	.42	.04
8	1.5	5.4	5.4	3.2	6.8	3.4	19	2.6	3.1	.10	.51	.03
9	4.3	131	5.2	129	6.5	3.3	18	3.4	6.0	.08	.51	.03
10	20	51	4.7	47	6.2	3.3	16	5.8	11	.18	.34	.03
11	15	23	4.4	29	6.0	3.3	16	4.6	6.2	.28	.22	.03
12	8.3	15	4.2	19	5.9	3.5	32	3.2	3.1	.18	.18	.04
13	5.2	11	4.0	14	5.7	4.3	25	2.6	1.9	.11	.16	.05
14	3.9	8.9	3.9	12	5.6	5.0	17	2.2	1.9	.07	.13	.05
15	6.7	7.4	12	11	5.5	6.5	12	40	1.5	.08	.11	.05
16	11	6.8	28	10	5.3	14	9.5	98	1.0	.16	.07	.05
17	125	7.0	31	9.5	5.2	12	8.4	87	.78	.20	.07	.05
18	58	12	24	9.0	5.0	10	8.6	32	.62	.34	.06	.05
19	22	13	16	8.5	4.9	9.2	9.2	17	.66	.45	.05	.05
20	15	9.7	14	8.0	4.8	9.2	63	11	1.5	.26	.04	.05
21	13	7.5	22	7.6	4.6	9.8	42	8.6	2.1	.15	.04	.04
22	11	8.7	104	7.2	4.5	15	23	8.2	1.5	.11	.04	.04
23	8.1	9.4	53	6.8	4.4	25	12	5.8	1.1	.08	.03	.04
24	6.2	9.8	27	6.3	4.3	27	8.8	4.4	.78	.11	.03	.04
25	5.3	9.0	19	6.4	4.2	25	7.6	4.3	.55	.14	.07	.04
26	4.8	14	16	15	4.1	21	6.4	6.2	.42	.10	.10	.04
27	4.6	32	12	70	4.0	50	5.7	6.2	.34	.08	.09	.03
28	4.4	15	9.0	45	3.9	94	5.2	4.9	.26	.07	.06	.04
29	4.1	10	6.4	30	---	73	5.0	3.6	.39	.09	.08	.04
30	3.7	8.5	4.8	23	---	49	4.9	2.7	.93	.10	.10	.04
31	3.3	---	4.3	18	---	35	---	2.0	---	.09	.10	---
TOTAL	411.3	451.5	595.0	568.7	176.0	536.0	596.3	390.9	76.03	5.33	5.00	1.55
MEAN	13.3	15.1	19.2	18.3	6.29	17.3	19.9	12.6	2.53	.17	.16	.052
MAX	125	131	104	129	14	94	63	98	11	.55	.51	.15
MIN	1.5	2.8	3.9	3.2	3.9	3.3	4.9	2.0	.26	.07	.03	.03
CFSM	2.68	3.04	3.86	3.68	1.27	3.48	4.00	2.54	.51	.03	.03	.01
IN.	3.08	3.38	4.45	4.26	1.32	4.01	4.46	2.93	.57	.04	.04	.01

CAL YR 1977 TOTAL 3154.95 MEAN 8.64 MAX 176 MIN .03 CFSM 1.74 IN 23.61
WTR YR 1978 TOTAL 3813.61 MEAN 10.4 MAX 131 MIN .03 CFSM 2.09 IN 28.54

01075800 STEVENS BROOK NEAR WENTWORTH, NH

LOCATION.--Lat 43°50'12", long 71°53'07", Grafton County, Hydrologic Unit 01070001, on left bank 150 ft (46 m) upstream from highway bridge, 0.2 mi (0.3 km) upstream from mouth, and 2.5 mi (4.0 km) southeast of Wentworth.

DRAINAGE AREA.--2.94 mi² (7.61 km²).

PERIOD OF RECORD.--May 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 595 ft (181 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair, and those below 0.1 ft³/s (0.003 m³/s), which are poor. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--15 years, 4.79 ft³/s (0.136 m³/s), 22.13 in/yr (562 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft³/s (31.7 m³/s) June 30, 1973, gage height, 6.36 ft (1.939 m), from rating curve extended above 120 ft³/s (3.4 m³/s); minimum, 0.01 ft³/s (0.001 m³/s) several days in 1963-65, 1971, 1975, 1977, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 90 ft³/s (2.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0030	113	3.20	3.02	.920	Jan. 9	1400	255	7.22	3.81	1.161
Oct. 9	1700	130	3.68	3.14	.957	Jan. 26	1000	250	7.08	3.79	1.155
Oct. 17	0645	*391	11.07	4.36	1.329						

Minimum discharge, 0.01 ft³/s (0.001 m³/s) Aug. 22-24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	1.8	14	2.7	8.0	1.8	8.0	11	4.7	.60	.15	.08
2	33	1.7	16	2.4	7.0	1.8	11	6.0	3.1	.55	.13	.06
3	8.6	1.7	9.7	2.2	6.2	1.8	8.3	5.3	15	.55	.10	.04
4	5.7	1.7	7.0	2.0	5.4	1.7	8.0	5.3	13	.55	.60	.03
5	4.3	1.8	4.5	1.9	5.0	1.7	14	7.2	5.5	.51	.28	.02
6	3.1	1.8	3.7	1.8	4.5	1.7	13	8.1	6.0	.47	.19	.02
7	2.2	1.7	3.2	1.7	4.2	1.7	13	9.8	4.7	.40	.16	.04
8	2.0	1.6	2.8	1.7	4.0	1.6	8.6	13	27	.34	.13	.04
9	55	5.3	2.6	100	3.8	1.6	6.4	34	23	.31	.12	.04
10	43	4.5	2.4	30	3.6	1.6	7.2	25	14	.28	.13	.04
11	9.6	9.9	2.3	16	3.4	1.7	12	15	6.4	.25	.11	.04
12	6.1	6.0	2.2	12	3.2	1.8	24	13	4.3	.21	.09	.23
13	4.5	3.9	2.1	10	3.0	1.9	28	10	3.9	.19	.16	.23
14	4.1	3.1	2.1	8.0	2.9	2.7	33	9.1	8.4	.18	.12	.13
15	7.2	2.7	20	7.0	2.8	4.0	19	15	5.3	.55	.08	.10
16	7.1	2.5	12	6.0	2.7	3.6	16	27	3.6	.47	.05	.10
17	122	2.9	5.5	5.2	2.6	3.1	17	20	2.6	.40	.04	.10
18	31	8.0	5.0	4.5	2.5	2.9	20	16	2.2	.34	.03	.08
19	14	6.2	3.2	4.0	2.4	2.6	25	11	2.2	.28	.02	.06
20	9.5	4.3	3.1	3.8	2.3	2.4	35	7.5	2.0	.23	.02	.04
21	7.3	3.5	3.0	3.5	2.3	2.3	30	7.2	2.6	.19	.02	.04
22	5.8	3.4	4.6	3.2	2.2	2.5	20	6.2	2.4	.18	.01	.03
23	4.5	3.2	4.5	3.0	2.1	3.4	19	4.9	2.1	.25	.01	.03
24	3.7	4.1	3.8	2.8	2.1	3.2	20	3.9	1.7	.40	.02	.03
25	3.4	4.3	3.5	3.0	2.0	3.1	18	3.3	1.3	.16	.04	.06
26	3.0	9.4	3.2	90	2.0	3.0	18	3.1	1.1	.10	.07	.07
27	2.7	8.8	15	35	1.9	3.5	22	2.8	.94	.08	.07	.06
28	2.5	5.4	6.0	15	1.9	9.0	22	2.4	.82	.47	.08	.06
29	2.1	4.2	4.5	12	---	8.2	21	2.1	.70	.25	.19	.06
30	2.0	3.5	3.5	10	---	7.4	17	1.8	.70	.31	.12	.06
31	1.8	---	3.0	9.0	---	6.6	---	2.3	---	.21	.08	---
TOTAL	422.8	122.9	178.0	409.4	96.0	95.9	533.5	308.3	171.26	10.26	3.42	2.02
MEAN	13.6	4.10	5.74	13.2	3.43	3.09	17.8	9.95	5.71	.33	.11	.067
MAX	122	9.9	20	100	8.0	9.0	35	34	27	.60	.60	.23
MIN	1.8	1.6	2.1	1.7	1.9	1.6	6.4	1.8	.70	.08	.01	.02
CFSM	4.63	1.40	1.95	4.49	1.17	1.05	6.05	3.38	1.94	.11	.04	.02
IN.	5.35	1.55	2.25	5.18	1.21	1.21	6.75	3.90	2.17	.13	.04	.03

CAL YR 1977 TOTAL 1813.08 MEAN 4.97 MAX 122 MIN .01 CFSM 1.69 IN 22.93
WTR YR 1978 TOTAL 2353.76 MEAN 6.45 MAX 122 MIN .01 CFSM 2.19 IN 29.77

01076500 PEMIGEWASSET RIVER AT PLYMOUTH, NH

LOCATION.--Lat 43°45'33", long 71°41'10", Grafton County, Hydrologic Unit 01070001, on right bank 150 ft (46 m) downstream from bridge at Plymouth and 0.3 mi (0.5 km) downstream from Baker River.
DRAINAGE AREA.--622 mi² (1,611 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1903 to current year. Records for April 1886 to September 1903, published in WSP 124, are unreliable and should not be used.
REVISED RECORDS.--WSP 471: 1912-14. WSP 726: Drainage area. WSP 1231: 1904-11, 1913-14, 1917-18, 1919(M), 1920-25, 1926-27(M), 1929-31(M). WSP 1721: 1959(M). See also PERIOD OF RECORD.
GAGE.--Water-stage recorder. Datum of gage is 457.07 ft (139.315 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1910, nonrecording gage at sites 150 ft (46 m) and 200 ft (60 m) upstream at present datum or datum 1.11 ft (0.338 m) lower. Jan. 1, 1910, to Sept. 30, 1926, nonrecording gage at site 200 ft (60 m) upstream at present datum.
REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation during period 1940-52 caused by powerplants upstream. Several observations of water temperature and specific conductance were made during the year.
AVERAGE DISCHARGE.--75 years, 1,360 ft³/s (38.52 m³/s), 26.69 in/yr (754 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65,400 ft³/s (1,850 m³/s) Mar. 19, 1936, gage height, 29.0 ft (8.84 m), from floodmarks, from rating curve extended above 43,000 ft³/s (1,220 m³/s) on basis of computations of flow over dam at gage heights 23.0 ft (7.01 m), 27.4 ft (8.35 m), and 29.0 ft (8.84 m); minimum, 39 ft³/s (1.10 m³/s) Oct. 1, 3, 4, 1948; minimum daily, 45 ft³/s (1.27 m³/s) Sept. 20, 1923.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 12,600 ft³/s (357 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0900	13700	388	9.63	2.935	Oct. 17	1900	14700	416	10.25	3.124
Oct. 9	2400	*22900	649	-	-	Jan. 10	0045	ice jam		*16.29	4.965
Oct. 10	0315	-	-	13.01	3.965						

Minimum discharge, 121 ft³/s (3.43 m³/s) Aug. 23, 24, Sept. 26-30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2300	811	1620	1050	1800	570	1400	3510	2760	514	223	175
2	9980	764	2410	910	1600	550	1800	2810	1900	465	216	170
3	4440	729	1930	900	1400	540	1550	2560	3190	438	210	156
4	2770	708	1530	880	1350	530	1300	2370	3970	403	325	151
5	2080	926	1280	860	1250	520	1750	2640	2430	386	614	138
6	1650	871	1100	850	1200	520	2000	2860	2370	353	345	133
7	1380	794	1050	840	1150	510	1970	3000	1860	330	276	138
8	1170	754	960	800	1100	510	1590	3730	7440	308	250	146
9	6300	1600	900	4000	1050	510	1470	8460	6160	308	232	146
10	13700	1690	880	10000	1050	500	1440	10300	5590	338	226	129
11	5020	2640	840	4000	1000	500	2070	6310	3220	294	210	133
12	3190	2600	820	3000	970	500	3470	5480	2400	274	201	196
13	2440	1740	800	2300	930	500	3730	5250	1940	261	201	280
14	1960	1450	1000	2100	890	600	4200	5250	2580	261	197	196
15	2020	1230	1430	1800	870	750	3260	5670	2400	456	187	175
16	2060	1120	2380	1600	840	800	2730	8200	1720	447	178	185
17	7260	1130	1630	1500	820	700	2670	7720	1400	369	169	196
18	10400	1880	1220	1400	780	650	2860	5640	1200	465	166	170
19	4970	1780	1230	1300	760	630	3560	4340	1110	346	159	156
20	3550	1390	1120	1200	740	620	4970	4420	1150	280	155	146
21	2960	1200	1320	1150	720	640	5230	4650	1780	267	148	133
22	2450	1260	1330	1050	700	700	4500	3700	1840	248	141	133
23	2050	1200	1230	1000	690	1000	4710	3000	1780	230	125	133
24	1760	1250	1190	950	670	720	4390	2640	1300	274	133	133
25	1560	1370	1250	920	650	750	4620	2400	1020	252	224	133
26	1400	1480	2660	3000	630	760	4370	2120	845	206	218	129
27	1270	1960	1620	9000	610	1200	5230	1900	752	224	175	124
28	1160	1370	1450	4500	580	2000	5590	1660	702	254	170	124
29	1040	1210	1300	3200	---	1900	5570	1530	620	301	280	122
30	947	1040	1200	2500	---	1800	5190	1660	576	254	274	123
31	873	---	1100	2000	---	1500	---	2590	---	236	206	---
TOTAL	106110	39947	41780	70560	26800	24480	99190	128370	68005	10042	6834	4602
MEAN	3423	1332	1348	2276	957	790	3306	4141	2267	324	220	153
MAX	13700	2640	2660	10000	1800	2000	5590	10300	7440	514	614	280
MIN	873	708	800	800	580	500	1300	1530	576	206	125	122
CFSM	5.50	2.14	2.17	3.66	1.54	1.27	5.32	6.66	3.65	.52	.35	.25
IN.	6.35	2.39	2.50	4.22	1.60	1.46	5.93	7.68	4.07	.60	.41	.28

CAL YR 1977 TOTAL 560617 MEAN 1536 MAX 17000 MIN 138 CFSM 2.47 IN 33.53
WTR YR 1978 TOTAL 626720 MEAN 1717 MAX 13700 MIN 122 CFSM 2.76 IN 37.48

01076500 PEMIGEWASSET RIVER AT PLYMOUTH, NH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953, 1967-74, 1976 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L)
JUN 05...	0915	2500	34	8.0	20.0	16.0	30	2	6.5	15

DATE	C.O.D. TOTAL IN BOTTOM MA-TERIAL (MG/KG)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
JUN 05...	5700	65,	24	K4	2.7	.5	4	0	3	.1

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	SOLIDS, VOLA-TILE IN BOTTOM MA-TERIAL (MG/KG)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)
JUN 05...	7.6	3.7	20	32	7370	.12	.04	.12	.16	.28

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	OIL AND GREASE (MG/L)	CHLORO-PHYLL A PHYTO-PLANK-TON, UNCORR. (UG/L)	CHLORO-PHYLL B PHYTO-PLANK-TON, UNCORR. (UG/L)	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)
JUN 05...	.01	10	10	0	.000	.000	.8	.00	.00	.0

DATE	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
JUN 05...	.00	.00	.00	.00	.00	.00	.00	.00	.00	0

K, NON-IDEAL COLONY COUNT.

01077000 SQUAM RIVER AT ASHLAND, NH

LOCATION.--Lat 43°42'19", long 71°37'49", Grafton County, Hydrologic Unit 01070001, on right bank 200 ft (60 m) upstream from highway bridge, 0.7 mi (1.1 km) north of Ashland, and 1.4 mi (2.3 km) downstream from Little Squam Lake.

DRAINAGE AREA.--57.6 mi² (149.2 km²).

PERIOD OF RECORD.-Discharge: August 1939 to current year.
Water-quality records: Water year 1957.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 545 ft (166 m), from topographic map.

REMARKS.--Records good. Flow completely regulated by Squam and Little Squam Lakes. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--39 years, 88.9 ft³/s (2.518 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,090 ft³/s (30.9 m³/s) July 4, 1973, gage height, 14.29 ft (4.356 m); minimum daily, 1.0 ft³/s (0.029 m³/s) July 4-7, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 256 ft³/s (7.25 m³/s) Jan. 26, gage height, 11.22 ft (3.420 m); minimum daily, 1.8 ft³/s (0.051 m³/s) July 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	113	110	109	244	117	61	110	101	3.9	68	64
2	61	113	109	109	244	117	61	110	101	3.5	68	35
3	61	113	109	109	242	117	61	110	103	3.5	69	19
4	62	113	109	109	241	117	61	110	103	3.2	69	50
5	61	113	109	109	242	117	63	110	113	3.0	69	63
6	60	113	109	109	240	117	63	110	130	3.0	69	61
7	62	111	109	109	240	117	63	110	130	3.0	69	61
8	59	111	109	109	239	117	63	110	133	3.0	69	61
9	60	113	109	136	239	104	63	109	124	3.2	69	61
10	60	112	109	164	238	91	63	109	111	3.0	69	60
11	77	112	109	164	237	91	89	109	111	3.0	69	60
12	91	111	109	164	236	91	103	109	111	2.7	69	60
13	97	111	109	164	236	91	103	111	111	2.3	69	60
14	101	111	109	165	235	91	105	111	111	19	69	60
15	100	110	109	165	233	91	105	113	109	52	69	60
16	100	110	109	165	232	75	105	158	109	53	69	60
17	102	109	109	165	231	61	105	207	107	52	69	60
18	107	109	109	165	229	61	107	207	107	52	66	60
19	111	109	109	203	228	61	111	201	107	52	63	60
20	141	109	109	241	227	61	111	196	107	52	63	60
21	156	109	109	244	225	61	111	196	107	52	63	60
22	142	109	109	244	224	61	111	196	107	52	63	60
23	136	109	109	244	223	61	111	196	107	52	63	60
24	131	109	109	242	221	61	111	201	107	59	63	60
25	128	109	109	242	220	61	110	204	107	68	63	60
26	126	109	109	249	220	60	110	154	107	68	63	59
27	124	109	109	247	220	61	110	103	105	69	61	59
28	115	109	109	247	170	61	110	101	105	69	63	59
29	113	109	109	246	---	61	110	100	105	68	63	59
30	113	109	109	246	---	61	110	101	66	68	61	59
31	113	---	109	246	---	61	---	101	---	68	61	---
TOTAL	3029	3316	3380	5630	6456	2575	2770	4273	3262	1065.3	2050	1730
MEAN	97.7	111	109	182	231	83.1	92.3	138	109	34.4	66.1	57.7
MAX	156	113	110	249	244	117	111	207	133	69	69	64
MIN	59	109	109	109	170	60	61	100	66	2.3	61	19

CAL YR 1977 TOTAL 33304.8 MEAN 91.2 MAX 576 MIN 8.4
WTR YR 1978 TOTAL 39536.3 MEAN 108 MAX 249 MIN 2.3

01078000 SMITH RIVER NEAR BRISTOL, NH

LOCATION.--Lat 43°34'04", long 71°44'54", Merrimack County, Hydrologic Unit 01070001, on right bank in Hill, 1.5 mi (2.4 km) upstream from mouth, and 1.8 mi (2.9 km) southwest of Bristol.

DRAINAGE AREA.--85.8 mi² (222.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1918 to current year.

REVISED RECORDS.--WSP 711: Drainage area. WSP 781: 1934. WSP 1231: 1919, 1920-21(M), 1922-31, 1932-33(M), 1941-43.

GAGE.--Water-stage recorder. Datum of gage is 449.80 ft (137.099 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Nov. 25, 1933, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Prior to 1954, some diurnal fluctuation caused by small mill upstream; greater fluctuation prior to 1941. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--60 years, 143 ft³/s (4.050 m³/s), 22.63 in/yr (575 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,100 ft³/s (229 m³/s) Mar. 19, 1936, gage height, 16.09 ft (4.904 m), from floodmarks, from rating curve extended above 2,700 ft³/s (76 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 2.7 ft³/s (0.076 m³/s) Aug. 2, 1933.
Maximum stage since at least 1885, that of Mar. 19, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,150 ft³/s (32.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1930	1170	33.1	5.63	1.716	May 17	0100	*1240	35.1	5.77	1.759

Minimum discharge, 7.1 ft³/s (0.20 m³/s) Sept. 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	79	256	101	200	62	294	313	238	38	25	18
2	438	75	410	97	180	60	410	263	188	34	24	15
3	317	73	336	87	160	60	342	234	294	31	23	14
4	173	72	251	85	150	60	291	217	442	29	28	13
5	115	73	185	88	140	60	438	186	344	27	26	12
6	85	75	150	87	130	58	613	166	228	25	24	11
7	69	77	135	83	120	58	528	152	168	24	23	11
8	59	80	120	81	110	56	398	141	283	22	23	9.8
9	245	178	105	550	105	56	369	230	540	21	24	9.4
10	633	172	100	900	100	56	384	372	602	20	25	8.9
11	472	166	96	430	98	57	518	278	369	19	20	10
12	253	167	92	300	96	59	814	212	225	18	20	20
13	176	141	92	230	94	62	950	178	168	17	22	23
14	140	130	100	200	92	68	989	157	168	16	22	19
15	162	109	160	180	90	75	885	410	150	33	20	17
16	192	101	240	160	88	115	674	1040	119	35	18	16
17	886	99	190	150	86	110	597	1040	99	44	17	14
18	1080	121	150	140	84	105	621	754	84	113	15	14
19	728	130	142	130	82	100	691	519	87	67	14	13
20	412	110	129	120	78	95	1020	361	190	44	13	12
21	275	97	127	115	76	98	1100	284	146	35	12	11
22	222	92	191	110	74	105	956	246	114	29	11	10
23	174	86	177	100	72	120	827	202	103	26	11	8.9
24	147	128	152	95	72	160	729	174	81	23	13	8.5
25	134	155	156	90	70	155	653	152	67	20	19	8.3
26	124	223	211	350	68	150	600	134	58	19	16	7.8
27	115	319	166	850	66	160	553	120	54	18	16	7.4
28	106	212	137	500	64	289	507	106	49	41	17	7.4
29	95	167	116	330	---	352	443	95	44	37	20	7.6
30	88	139	104	250	---	339	384	92	43	32	16	7.6
31	83	---	111	220	---	298	---	90	---	27	17	---
TOTAL	8273	3846	5087	7209	2845	3658	18578	8918	5745	984	594	364.6
MEAN	267	128	164	233	102	118	619	288	192	31.7	19.2	12.2
MAX	1080	319	410	900	200	352	1100	1040	602	113	28	23
MIN	59	72	92	81	64	56	291	90	43	16	11	7.4
CFSM	3.11	1.49	1.91	2.72	1.19	1.38	7.21	3.36	2.24	.37	.22	.14
IN.	3.59	1.67	2.21	3.13	1.23	1.59	8.05	3.87	2.49	.43	.26	.16

CAL YR 1977 TOTAL 56466.8 MEAN 155 MAX 2310 MIN 7.1 CFSM 1.81 IN 24.48
WTR YR 1978 TOTAL 66101.6 MEAN 181 MAX 1100 MIN 7.4 CFSM 2.11 IN 28.66

01078000 SMITH RIVER NEAR BRISTOL, NH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1976 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L)
JUN 05...	1115	346	32	8.0	20.0	16.0	40	2	6.0	30

DATE	C.O.D. TOTAL IN BOTTOM MA-TERIAL (MG/KG)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
JUN 05...	3100	120	33	K12	2.9	.4	22	0	18	.4

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	SOLIDS, VOLA-TILE IN BOTTOM MA-TERIAL (MG/KG)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)
JUN 05...	8.0	4.2	6	38	4380	.06	.06	.94	1.0	1.1

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	OIL AND GREASE (MG/L)	CHLORO-PHYLL A PHYTO-PLANK-TON, UNCORR. (UG/L)	CHLORO-PHYLL B PHYTO-PLANK-TON, UNCORR. (UG/L)	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)
JUN 05...	.02	<10	<10	0	.000	.000	.0	.00	.00	.0

DATE	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
JUN 05...	.00	.00	.00	.00	.00	.00	.00	.00	.00	0

K, NON-IDEAL COLONY COUNT.

01080000 LAKE WINNIPESAUKEE AT WEIRS BEACH, NH

LOCATION.--Lat 43°36'27", long 71°27'30", Belknap County, Hydrologic Unit 01070002, 1,300 ft (400 m) north of highway bridge at Weirs Beach.
DRAINAGE AREA.--363 mi² (940 km²) at outlet at Lakeport.
PERIOD OF RECORD.--Gage heights: September 1933 to current year. Prior to November 1937, monthend contents only, published in WSP 1301. Prior to October 1970, published as "at The Weirs."
GAGE.--Water-stage recorder. Datum of gage is 499.92 ft (revised) (152.376 m) National Geodetic Vertical Datum of 1929. Prior to November 1937, nonrecording gage at lake outlet at Lakeport at datum 0.53 ft (0.162 m) higher. Nov. 24, 1937, to Nov. 7, 1965, water-stage recorder at site 500 ft (150 m) south at present datum.
REMARKS.--Lake used for recreation and conservation for development of water power. Usable capacity, 7,220,000,000 ft³ (204,000,000 m³) between elevations 500.65 ft (152.598 m) and 504.32 ft (153.717 m) National Geodetic Vertical Datum of 1929. Stage regulated at outlet and by Wentworth, Merrymeeting (Reservoirs in Merrimack River basin), and other lakes. Contents given herein are computed from gage height at 2400 on last day of month, eliminating the effect of seiche and wind action.

Capacity table (gage height, in feet, and contents, in millions of cubic feet)

2.0	13,880
3.0	15,840
4.0	17,840
5.0	19,850

EXTREMES FOR PERIOD OF RECORD.--Maximum daily gage height, 5.86 ft (1.786 m) May 22, 23, 1954; minimum daily, 0.63 ft (0.192 m) Dec. 11, 1941.
EXTREMES FOR CURRENT YEAR.--Maximum daily gage height, 4.71 ft (1.436 m) May 19; minimum daily, 2.33 ft (0.710 m) Mar. 13.
CORRECTIONS.--The correct contents, in millions of cubic feet, at 2400 on last day of September 1976 is 16,580. The correct changes in contents, equivalent in cubic feet per second, for September 1976 and water year 1976 are -247 and -19.6, respectively. These figures supersede those published in WDR NH-VT-76-1.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.60	3.75	4.05	3.56	3.47	2.50	2.85	4.25	4.34	4.29	3.96	3.49
2	3.77	3.75	4.03	3.53	3.43	2.46	2.93	4.25	4.35	4.27	3.93	3.47
3	3.79	3.75	4.01	3.49	3.38	2.44	2.97	4.25	4.36	4.26	3.90	3.45
4	3.78	3.76	3.99	3.46	3.36	2.43	3.00	4.27	4.37	4.25	3.90	3.42
5	3.80	3.77	4.00	3.42	3.33	2.42	3.08	4.27	4.37	4.21	3.88	3.40
6	3.81	3.76	4.00	3.37	3.28	2.40	3.15	4.26	4.35	4.20	3.92	3.38
7	3.78	3.80	3.97	3.33	3.29	2.38	3.21	4.26	4.36	4.18	3.91	3.38
8	3.78	3.81	3.95	3.33	3.28	2.38	3.25	4.26	4.43	4.17	3.90	3.35
9	3.90	3.87	3.94	3.48	3.24	2.37	3.31	4.29	4.50	4.16	3.89	3.32
10	4.00	3.90	3.90	3.57	3.19	2.36	3.35	4.30	4.51	4.14	3.87	3.29
11	4.05	3.92	3.85	3.61	3.16	2.35	3.46	4.30	4.53	4.10	3.85	3.30
12	4.06	3.95	3.85	3.61	3.12	2.34	3.56	4.32	4.53	4.06	3.82	3.32
13	4.06	3.92	3.85	3.59	3.08	2.33	3.66	4.34	4.53	4.05	3.81	3.30
14	4.05	3.90	3.85	3.65	3.04	2.34	3.75	4.35	4.49	4.03	3.79	3.28
15	4.02	3.91	3.87	3.66	3.00	2.37	3.80	4.42	4.46	4.05	3.77	3.27
16	4.02	3.93	3.87	3.64	2.98	2.37	3.85	4.60	4.47	4.05	3.74	3.27
17	4.16	3.93	3.85	3.62	2.93	2.38	3.89	4.68	4.47	4.08	3.76	3.26
18	4.22	3.93	3.85	3.62	2.89	2.38	3.93	4.70	4.47	4.13	3.73	3.25
19	4.24	3.90	3.83	3.61	2.84	2.39	3.97	4.71	4.48	4.12	3.70	3.24
20	4.22	3.90	3.80	3.59	2.81	2.39	4.08	4.70	4.51	4.10	3.67	3.23
21	4.19	3.90	3.80	3.58	2.76	2.39	4.13	4.67	4.52	4.08	3.65	3.20
22	4.15	3.87	3.80	3.55	2.70	2.40	4.15	4.65	4.51	4.07	3.61	3.20
23	4.10	3.87	3.78	3.49	2.66	2.44	4.15	4.60	4.49	4.07	3.57	3.18
24	4.06	3.90	3.75	3.45	2.63	2.45	4.16	4.56	4.45	4.05	3.57	3.16
25	4.03	3.90	3.74	3.45	2.61	2.46	4.17	4.53	4.45	4.02	3.56	3.14
26	3.98	3.93	3.73	3.53	2.58	2.47	4.17	4.49	4.44	4.00	3.53	3.12
27	3.95	3.93	3.72	3.58	2.55	2.55	4.20	4.45	4.40	3.98	3.50	3.10
28	3.90	3.95	3.69	3.57	2.52	2.62	4.24	4.40	4.38	4.00	3.51	3.06
29	3.85	3.95	3.66	3.54	---	2.67	4.25	4.35	4.35	4.00	3.51	3.02
30	3.80	3.95	3.63	3.52	---	2.71	4.25	4.34	4.32	3.99	3.50	3.02
31	3.75	---	3.60	3.50	---	2.75	---	4.34	---	3.96	3.50	---
MEAN	3.96	3.88	3.85	3.53	3.00	2.44	3.70	4.42	4.44	4.10	3.73	3.26
MAX	4.24	3.95	4.05	3.66	3.47	2.75	4.25	4.71	4.53	4.29	3.96	3.49
MIN	3.60	3.75	3.60	3.33	2.52	2.33	2.85	4.25	4.32	3.96	3.50	3.02
(†)	17340	17900	17000	16800	14880	15410	18340	18520	18440	17760	16820	15860
(‡)	+142	+216	-336	-74.7	-794	+198	+1130	+67.2	-30.9	-254	-351	-370

CAL YR 1977 MEAN 3.81 MAX 4.57 MIN 2.40 ‡ +69.1
WTR YR 1978 MEAN 3.70 MAX 4.71 MIN 2.33 ‡ -34.9

† Contents, in millions of cubic feet at 2400 on last day of month.
‡ Change in contents, equivalent in cubic feet per second.

01080500 LAKE WINNIPESAUKEE OUTLET AT LAKEPORT, NH

LOCATION.--Lat 43°32'57", long 71°27'54", Belknap County, Hydrologic Unit 01070002, 100 ft (30 m) upstream from highway bridge across Paugus Bay at Lakeport.

DRAINAGE AREA.--363 mi² (940 km²).

PERIOD OF RECORD.--Discharge: January 1860 to December 1911 (monthly gage heights only, published in WSP 301), June 1933 to current year.
Water-quality records: Water years 1954-55.

GAGE.--Water-stage recorder, Keeler deflection meter, and measuring flume. Datum of gage is 500.55 ft (152.568 m) National Geodetic Vertical Datum of 1929. January 1860 to December 1911, nonrecording gage at site 150 ft (46 m) downstream at same datum. June 1, 1933, to Sept. 30, 1936, nonrecording gage and continuous-recording current meter at present site and datum. Oct. 1, 1936, to May 23, 1944, discharge computed from flow over spillway and through gates and wheels at site 150 ft (46 m) downstream.

REMARKS.--Records good. Flow completely regulated by Winnipesaukee (station 01080000), Wentworth, Merrymeeting (Reservoirs in Merrimack River basin), and other lakes. Daily discharge computed from relation between discharge, stage and deflection of vane in measuring flume. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--45 years, 535 ft³/s (15.15 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,890 ft³/s (81.8 m³/s) Mar. 31, 1936; no flow Sept. 29, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,820 ft³/s (51.5 m³/s) Jan. 20; minimum daily, 260 ft³/s (7.36 m³/s) Aug. 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	320	800	1140	1550	960	285	630	370	325	320	275
2	325	305	1000	1200	1560	960	285	635	365	325	310	280
3	325	290	1010	1190	1550	750	290	635	395	315	300	280
4	315	305	1020	1150	1540	500	290	635	355	315	295	280
5	300	290	1030	1120	1540	520	290	635	350	320	275	300
6	300	290	1030	1170	1530	530	295	635	355	320	275	290
7	300	310	1020	1170	1590	530	295	635	350	320	275	280
8	325	310	1020	1130	1570	530	275	635	350	285	280	290
9	330	290	1020	1160	1560	530	280	635	545	280	260	305
10	320	290	1010	1170	1550	530	290	630	635	295	285	295
11	300	290	1010	1170	1500	540	295	455	635	315	290	290
12	265	290	1130	1170	1490	540	300	350	615	325	285	280
13	705	290	1190	1180	1480	540	300	325	625	325	270	295
14	1030	290	1200	1220	1560	540	625	330	445	325	285	295
15	990	290	1200	1220	1550	540	810	330	350	310	290	295
16	990	295	1200	1210	1540	385	810	820	350	295	290	280
17	1250	455	1170	1330	1530	290	820	1350	330	295	285	280
18	1460	575	1170	1610	1430	275	840	1500	330	280	290	280
19	1460	560	1170	1630	1420	275	1020	1550	340	300	300	280
20	1460	560	1190	1820	1400	275	1270	1450	340	300	300	270
21	1490	560	1210	1660	1400	275	1440	1500	520	300	305	280
22	1440	560	1210	1600	1380	275	1530	1490	625	300	310	285
23	1430	560	1180	1630	1180	275	1530	1470	635	315	310	270
24	1420	550	1170	1550	1000	280	1580	1480	635	325	310	270
25	1410	540	1170	1620	980	280	1590	1430	630	325	305	285
26	1440	555	1170	1640	980	280	840	1420	620	320	275	290
27	1430	565	1170	1650	970	280	350	1410	615	295	280	290
28	1420	560	1130	1630	970	285	380	1400	615	305	290	280
29	1400	560	1190	1630	---	290	630	925	450	320	280	280
30	1440	560	1180	1600	---	290	630	615	350	320	280	275
31	790	---	1150	1550	---	290	---	530	---	320	280	---
TOTAL	28170	12465	34520	42920	39300	13640	20465	28470	14125	9615	8985	8525
MEAN	909	416	1114	1385	1404	440	682	918	471	310	290	284
MAX	1490	575	1210	1820	1590	960	1590	1550	635	325	320	305
MIN	265	290	800	1120	970	275	275	325	330	280	260	270

CAL YR 1977 TOTAL 225595 MEAN 618 MAX 2390 MIN 200
WTR YR 1978 TOTAL 261200 MEAN 716 MAX 1820 MIN 260

01081000 WINNIPESAUKEE RIVER AT TILTON, NH

LOCATION.--Lat 43°26'31", long 71°35'20", Belknap County, Hydrologic Unit 01070002, on right bank at Tilton and 0.3 mi (0.5 km) upstream from Packer Brook.

DRAINAGE AREA.--471 mi² (1,220 km²).

PERIOD OF RECORD.--Discharge: January 1937 to current year.
Water-quality records: Water year 1953.

REVISED RECORDS.--WSP 1901: 1960.

GAGE.--Water-stage recorder. Datum of gage is 441.87 ft (134.682 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by powerplants prior to 1967 and by Winnipesaukee (station 01080000), Winnisquam 4.5 mi (7.2 km) upstream, Wentworth, Merrymeeting (Reservoirs in Merrimack River basin), and other lakes upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--41 years, 703 ft³/s (19.91 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,810 ft³/s (108 m³/s) Sept. 21, 1938, gage height, 7.90 ft (2.408 m); maximum gage height, 7.93 ft (2.417 m) Mar. 27, 1953; minimum daily discharge, 48 ft³/s (1.36 m³/s) Aug. 31, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,650 ft³/s (75.0 m³/s) Jan. 27, gage height, 6.63 ft (2.021 m); minimum daily, 251 ft³/s (7.11 m³/s) Mar. 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	474	1370	932	1500	2330	1160	828	916	732	344	328	315
2	732	1170	1110	1480	2330	1130	911	369	673	332	324	306
3	772	995	1160	1460	2330	979	879	273	635	324	316	297
4	659	879	1190	1460	2330	640	864	361	645	328	321	294
5	586	782	1230	1440	2330	613	1030	412	617	320	377	286
6	547	702	1290	1440	2330	599	1160	453	582	320	363	278
7	521	649	1300	1440	2320	555	1120	495	516	344	353	289
8	491	608	1290	1440	2090	466	1030	525	449	340	352	287
9	568	752	1300	1820	1740	437	984	577	626	344	362	290
10	817	757	1310	2200	1720	487	947	645	797	348	356	279
11	859	678	1300	1980	1700	564	963	659	752	344	339	279
12	853	631	1280	1850	1690	586	1070	599	722	328	331	320
13	906	590	1310	1760	1670	538	1120	478	712	312	327	323
14	1230	555	1380	1770	1650	737	1220	458	722	308	320	312
15	1300	525	1500	1740	1640	848	1500	512	688	320	314	310
16	1300	508	1570	1680	1630	864	1480	984	604	344	308	308
17	1580	504	1580	1650	1620	352	1430	1680	478	382	300	306
18	1970	538	1550	1670	1610	258	1430	1930	453	421	296	301
19	1910	573	1540	1680	1600	251	1500	1920	441	407	290	300
20	1870	590	1510	1720	1590	281	1740	1880	399	382	286	295
21	1830	604	1530	1800	1570	336	1890	1870	474	369	282	298
22	1800	622	1620	1840	1560	382	1890	1850	669	361	280	300
23	1770	631	1630	1860	1550	441	1890	1810	683	352	295	297
24	1740	693	1600	1880	1460	458	1890	1770	678	356	304	290
25	1720	717	1600	1920	1370	449	1880	1750	664	340	322	291
26	1710	792	1670	2220	1300	449	1850	1730	654	320	311	301
27	1710	895	1620	2560	1240	521	1630	1700	645	308	299	298
28	1710	853	1580	2590	1190	797	1350	1680	649	352	302	312
29	1700	797	1550	2430	---	869	1160	1460	568	352	316	306
30	1690	777	1520	2340	---	859	1040	833	377	352	310	294
31	1630	---	1510	2340	---	828	---	737	---	336	311	---
TOTAL	38955	21737	44062	56960	49490	18734	39676	33316	18304	10690	9895	8962
MEAN	1257	725	1421	1837	1768	604	1323	1075	610	345	319	299
MAX	1970	1370	1670	2590	2330	1160	1890	1930	797	421	377	323
MIN	474	504	932	1440	1190	251	828	273	377	308	280	278

CAL YR 1977 TOTAL 296270 MEAN 812 MAX 2970 MIN 209
WTR YR 1978 TOTAL 350781 MEAN 961 MAX 2590 MIN 251

01081500 MERRIMACK RIVER AT FRANKLIN JUNCTION, NH

LOCATION.--Lat 43°25'26", long 71°39'12", Merrimack County, Hydrologic Unit 01070002, on right bank at Franklin Junction 1 mi (1.6 km) downstream from confluence of Pemigewasset and Winnipesaukee Rivers.

DRAINAGE AREA.--1,507 mi² (3,903 km²).

PERIOD OF RECORD.--Discharge: July 1903 to January 1904, March 1904 to January 1905, March 1905 to September 1978 (discontinued).
Water-quality records: Water years 1954-55.

REVISED RECORDS.--WSP 401: 1914. WSP 641: 1923(M). WSP 756: Drainage area. WSP 781: 1928(M). WSP 1231: 1911-13, 1916-17(M), 1919(M), 1922(M).

GAGE.--Water-stage recorder. Datum of gage is 250.4 ft (76.32 m) above mean sea level, unadjusted. Prior to Sept. 13, 1923, nonrecording gage at bridge 350 ft (100 m) downstream at same datum.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants, by Franklin Falls Reservoir (4 mi or 6 km upstream) since 1942, and by Squam, Little Squam, Newfound, Winnipesaukee, Winnisquam, Wentworth, Merrymeeting, and other lakes (Reservoirs in Merrimack River basin). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--73 years (water years 1906-78) 2,774 ft³/s (78.56 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 83,000 ft³/s (2,350 m³/s) Mar. 19, 1936, gage height, 36.4 ft (11.09 m), from floodmarks, from rating curve extended above 30,000 ft³/s (850 m³/s) on basis of slope-area measurement and computation of flow over dam at gage height 29.5 ft (8.99 m) and velocity-area study; minimum daily, 169 ft³/s (4.79 m³/s) Aug. 28, 1965. Maximum discharge since construction of Franklin Falls Reservoir in 1942, 22,400 ft³/s (634 m³/s) Apr. 4, 1951, gage height, 16.34 ft (4.980 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,700 ft³/s (447 m³/s) Jan. 10, gage height, 12.81 ft (3.904 m); minimum daily, 421 ft³/s (11.9 m³/s) Sept. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2160	2950	3390	2800	4940	2000	3310	7120	3580	1340	814	682
2	8240	2440	3890	2700	4600	1900	3650	4790	3470	1130	757	726
3	9150	2140	4340	2600	4370	1800	3500	3750	3850	953	661	659
4	5020	2020	4000	2500	4300	1400	3360	3790	5620	962	705	638
5	3440	2040	3500	2400	3680	1300	3800	3550	4690	1060	872	654
6	3230	2030	3200	2300	3830	1300	4210	3740	3540	876	905	663
7	2200	2010	2900	2200	3890	1200	4350	3970	3440	857	917	615
8	2090	1880	2700	2200	3860	1300	4670	4710	6100	788	875	781
9	3570	2820	2600	5950	3560	1300	3870	6640	9420	796	835	911
10	12400	3020	2500	13100	3640	1200	3710	11100	9390	927	767	938
11	11900	3160	2400	13000	3200	1200	4080	9830	7520	844	715	931
12	6700	4210	2400	7500	3100	1200	6700	7270	4710	733	689	1230
13	5000	3510	2500	6000	3000	1200	7850	6280	3680	769	617	810
14	4570	2700	2700	5000	3000	1800	8420	6180	3810	732	705	691
15	4960	2350	3000	4500	3000	1900	9270	7280	3900	699	698	656
16	4310	2490	4220	4100	2900	2000	7780	10300	3340	1030	676	588
17	7970	2570	4360	3800	2900	1600	6480	12100	2570	901	656	598
18	14500	2170	3900	3700	2900	1400	6310	11500	2530	1260	670	596
19	12600	2570	3830	3700	2800	1300	7580	9720	2060	1000	623	592
20	8710	2690	3300	3400	2800	1350	9520	8420	2060	955	596	590
21	6930	2690	3170	3600	2800	1350	10800	8110	2190	896	588	587
22	6520	2450	3720	3500	2700	1450	10500	7880	2740	891	584	588
23	5780	2170	4040	3600	3600	1500	9860	6700	2780	848	612	421
24	4640	2460	3580	3400	2500	1800	9520	5730	2890	810	674	638
25	4420	2890	3400	3700	2300	1850	9200	5010	2450	828	698	430
26	4330	3190	4200	5500	2300	1850	9030	4840	1730	835	633	567
27	3760	3490	4760	9940	2200	2000	8760	4310	1690	929	714	573
28	3720	3240	3860	11100	2100	3260	8920	4030	1770	973	647	583
29	3640	3070	3000	8190	---	3410	8880	3780	1610	935	695	583
30	3540	2690	2900	6590	---	3410	8620	2730	1440	909	681	577
31	3480	---	2900	5070	---	3330	---	3360	---	838	684	---
TOTAL	183480	80110	105160	157640	90770	54860	206510	198520	110570	28304	21963	20096
MEAN	5919	2670	3392	5085	3242	1770	6884	6404	3686	913	708	670
MAX	14500	4210	4760	13100	4940	3410	10800	12100	9420	1340	917	1230
MIN	2090	1880	2400	2200	2100	1200	3310	2730	1440	699	584	421

CAL YR 1977 TOTAL 1093854 MEAN 2997 MAX 15800 MIN 518
WTR YR 1978 TOTAL 1257983 MEAN 3447 MAX 14500 MIN 421

01083000 NUBANUSIT BROOK NEAR PETERBOROUGH, NH

LOCATION.--Lat 42°53'10", long 71°58'24", Hillsborough County, Hydrologic Unit 01070003, on left bank 1.2 mi (1.9 km) downstream from Edward MacDowell Reservoir, 1.3 mi (2.1 km) northwest of Peterborough, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--46.9 mi^2 (121.5 km^2).

PERIOD OF RECORD.--October 1920 to September 1931, July 1945 to current year. Monthly discharge only October 1940, published in WSP 1301.

REVISED RECORDS.--WSP 561: 1921(M). WSP 1051: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 790 ft (241 m), from topographic map. Prior to Oct. 1, 1931, at site 550 ft (170 m) downstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by mills and Nubanusit Lake, Edward MacDowell Reservoir since 1950 (Reservoirs in Merrimack River basin), and other reservoirs upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--44 years, 83.7 ft^3/s (2.370 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,130 ft^3/s (32.0 m^3/s) Apr. 11, 1931, gage height, 5.59 ft (1.704 m), site and datum then in use, from rating curve extended above 380 ft^3/s (11 m^3/s); minimum daily, 0.5 ft^3/s (0.014 m^3/s) Aug. 1, 1926. Maximum discharge since construction of Edward MacDowell Reservoir in 1950, 699 ft^3/s (19.8 m^3/s) Apr. 12, 1960, gage height, 4.54 ft (1.384 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 591 ft^3/s (16.7 m^3/s) Oct. 19, gage height, 4.11 ft (1.253 m); minimum daily, 4.6 ft^3/s (0.13 m^3/s) Sept. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	61	154	100	300	75	228	88	59	16	21	17
2	126	61	234	80	320	70	251	85	67	16	21	13
3	208	61	245	75	310	75	279	69	51	16	21	13
4	188	61	209	75	300	75	289	63	44	16	22	12
5	124	62	137	75	260	90	278	63	43	15	21	13
6	123	63	101	72	215	90	282	61	43	12	22	13
7	94	63	92	72	205	75	299	54	43	9.5	21	13
8	71	65	86	71	200	70	298	54	49	9.4	22	13
9	117	120	80	90	190	70	283	55	87	9.2	22	12
10	213	188	71	50	175	80	269	62	109	10	22	12
11	307	202	65	170	160	85	277	85	105	10	21	13
12	294	164	65	290	150	75	339	79	81	9.7	22	13
13	200	126	65	430	140	75	413	62	56	9.5	21	20
14	141	115	60	500	126	82	447	58	53	9.5	17	36
15	98	101	115	383	105	105	436	61	47	10	13	50
16	108	91	170	350	105	138	385	91	34	10	13	55
17	208	92	189	333	103	141	287	185	27	10	13	48
18	472	93	172	331	95	90	233	235	27	10	12	27
19	535	93	138	298	90	70	211	201	27	9.8	12	5.0
20	469	93	135	209	90	65	243	129	27	9.8	12	4.6
21	377	91	126	207	90	70	315	114	27	10	9.1	16
22	213	76	124	213	90	126	333	113	28	9.7	6.1	50
23	171	60	124	220	85	164	319	97	28	9.5	5.4	68
24	127	40	124	250	85	180	260	73	27	9.5	5.7	44
25	98	40	137	181	85	160	182	67	27	9.5	5.8	13
26	76	46	165	43	80	140	157	59	27	9.5	5.0	21
27	59	64	180	105	80	143	133	42	21	9.5	4.8	27
28	59	102	200	210	75	238	101	43	17	11	5.2	27
29	59	140	170	295	---	288	87	43	17	16	5.2	13
30	60	102	110	310	---	283	88	43	16	21	4.8	7.4
31	60	---	98	305	---	256	---	42	---	21	12	---
TOTAL	5544	2736	4141	6393	4309	3744	8002	2576	1314	363.6	440.1	689.0
MEAN	179	91.2	134	206	154	121	267	83.1	43.8	11.7	14.2	23.0
MAX	535	202	245	500	320	288	447	235	109	21	22	68
MIN	59	40	60	43	75	65	87	42	16	9.2	4.8	4.6

CAL YR 1977 TOTAL 36401.2 MEAN 99.7 MAX 631 MIN 3.4
WTR YR 1978 TOTAL 40251.7 MEAN 110 MAX 535 MIN 4.6

01085500 CONTOOCOOK RIVER BELOW HOPKINTON DAM, AT WEST HOPKINTON, NH

LOCATION.--Lat 43°11'31", long 71°44'51", Merrimack County, Hydrologic Unit 01070003, on right bank 400 ft (100 m) downstream from covered bridge at West Hopkinton, 0.2 mi (0.3 km) downstream from Hopkinton Dam, and 5.9 mi (9.5 km) upstream from Warner River.

DRAINAGE AREA.--427 mi² (1,106 km²).

PERIOD OF RECORD.--August 1903 to April 1907 (no winter records), August 1963 to current year. Published as "at West Hopkinton" 1903-7.

GAGE.--Water-stage recorder. Altitude of gage is 355 ft (108 m), from topographic map. August 1903 to April 1907, nonrecording gage at site 400 ft (100 m) upstream at different datum.

REMARKS.--Records good except those for winter period and period of backwater from grass, which are fair. Flow regulated by powerplants and by Nubanusit Lake, Edward Macdowell Reservoir since 1950, Highland Lake, Lake Franklin Pierce, Hopkinton Lake since 1962 (Reservoirs in Merrimack River basin), and other reservoirs upstream. Diversion from Hopkinton Lake to Everett Lake on Piscataquog River during periods of high flow in March 1968, April 1969, and March 1977. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--15 years (water years 1963-78), 697 ft³/s (19.74 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,620 ft³/s (187 m³/s) Mar. 17, gage height, 10.04 ft (3.060 m); minimum daily, 15 ft³/s (0.42 m³/s) July 22, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,710 ft³/s (105 m³/s) Oct. 19, gage height, 6.86 ft (2.091 m); minimum daily, 35 ft³/s (0.99 m³/s) Aug. 28, Sept. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	669	585	1330	750	2000	440	2220	1050	462	145	60	91
2	903	591	1900	688	1700	420	2290	815	502	68	64	35
3	1100	563	1940	660	1500	410	2360	792	469	46	94	40
4	1100	547	1830	650	1350	400	2250	788	393	135	148	44
5	816	503	1610	630	1200	380	2020	693	454	66	171	48
6	663	394	1330	620	1120	370	2070	622	476	102	141	107
7	593	442	1170	610	1050	360	2130	580	338	102	185	121
8	470	520	1010	600	980	360	2110	568	362	68	86	62
9	724	915	920	1270	920	355	2100	527	733	58	151	48
10	1630	1160	860	2550	870	350	2090	550	523	48	161	60
11	1660	1290	780	2820	840	350	2080	573	503	46	151	82
12	1420	1260	730	2850	800	355	2410	550	431	44	132	38
13	1200	1060	700	2470	760	360	2710	524	447	43	64	40
14	993	1000	789	2070	740	399	3090	487	456	68	138	64
15	954	915	929	1780	730	493	3260	547	454	66	56	49
16	1010	745	1300	1600	700	803	3120	1160	430	56	124	38
17	2100	744	1470	1500	660	901	2790	1950	396	54	55	41
18	3320	744	1500	1400	610	946	2330	2260	304	53	121	62
19	3380	735	1370	1300	567	819	2030	2270	325	51	94	91
20	3180	664	1240	1200	560	709	2450	1760	392	49	41	49
21	2840	711	1130	1100	540	672	2720	1350	375	48	70	75
22	2000	715	1220	1060	530	780	2900	1130	345	48	77	121
23	1500	692	1350	1020	510	1090	2920	1110	330	46	75	43
24	1200	720	1280	980	500	1470	2730	1040	335	44	130	49
25	1080	757	1190	940	490	1520	2390	800	234	43	79	60
26	928	816	1060	1620	470	1410	1910	776	195	41	110	164
27	773	1280	1020	2620	460	1360	1640	503	199	41	68	245
28	765	1270	960	2900	450	1720	1430	468	196	40	35	241
29	672	1020	900	2940	---	2030	1340	478	203	46	118	218
30	539	977	840	2700	---	2340	1210	478	174	75	138	70
31	556	---	800	2300	---	2370	---	465	---	62	66	---
TOTAL	40738	24335	36458	48198	23607	26742	69100	27664	11436	1902	3203	2496
MEAN	1314	811	1176	1555	843	863	2303	892	381	61.4	103	83.2
MAX	3380	1290	1940	2940	2000	2370	3260	2270	733	145	185	245
MIN	470	394	700	600	450	350	1210	465	174	40	35	35

CAL YR 1977 TOTAL 282337 MEAN 774 MAX 5450 MIN 35
WTR YR 1978 TOTAL 315879 MEAN 865 MAX 3380 MIN 35

NOTE.--Backwater from grass July 1 to Sept. 30.

01085800 WEST BRANCH WARNER RIVER NEAR BRADFORD, NH

LOCATION.--Lat 43°15'33", long 72°01'35", Merrimack County, Hydrologic Unit 01070003, on left bank 75 ft (23 m) downstream from small right-bank tributary, 200 ft (60 m) upstream from highway bridge, and 3.5 mi (5.6 km) west of Bradford.

DRAINAGE AREA.--5.75 mi² (14.89 km²).

PERIOD OF RECORD.--Discharge: May 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 950 ft (290 m), from topographic map.

REMARKS.--Records good except those for winter period and periods of no gage-height record Oct. 15 to Nov. 15 and July 20 to Aug. 23, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--16 years, 11.5 ft³/s (0.326 m³/s) 27.16 in/yr (690 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 603 ft³/s (17.1 m³/s) Apr. 1, 1976, gage height, 8.49 ft (2.588 m), from rating curve extended above 210 ft³/s (5.9 m³/s); minimum, about 0.06 ft³/s (0.002 m³/s) about Sept. 20, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 110 ft³/s (3.1 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1	2330	140	3.96	6.21	1.89	Jan. 26	1245	335	9.49	7.55	2.30
Oct. 9	1245	231	6.54	6.94	2.12	Apr. 13	1315	135	3.82	6.17	1.88
Oct. 17	--	*450	12.7	*unknown		Apr. 19	2230	189	5.35	6.63	2.02
Jan. 9	1345	381	10.8	7.78	2.37	May 16	2215	208	5.89	6.77	2.06

Minimum discharge not determined; minimum daily, 0.14 ft³/s (0.004 m³/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	6.0	53	6.3	11	4.1	30	18	12	.57	.60	.78
2	59	5.7	46	5.8	11	4.0	41	16	6.3	.54	.54	.60
3	17	5.4	25	5.3	10	3.9	24	14	9.0	.47	.52	.45
4	9.7	5.2	18	4.7	10	3.8	20	13	16	.47	1.4	.35
5	6.8	6.0	14	4.4	9.5	3.8	35	12	8.6	.47	1.0	.30
6	5.0	5.8	12	4.1	9.0	3.7	36	11	6.5	.47	.50	.26
7	4.2	5.4	11	3.8	8.6	3.6	29	10	5.3	.47	.40	.23
8	3.8	5.2	10	4.5	8.2	3.5	26	9.2	13	.61	.36	.21
9	107	40	9.0	143	8.0	3.4	25	15	19	.41	.34	.19
10	40	26	8.4	117	7.6	3.5	30	20	13	.41	.31	.18
11	18	18	8.0	94	7.3	3.8	48	14	7.1	.41	.29	.17
12	12	13	7.6	49	7.0	4.4	79	11	5.0	.31	.80	1.2
13	9.2	10	7.4	35	6.8	5.2	89	10	4.1	.22	.90	.60
14	10	9.0	7.2	30	6.6	8.4	67	9.2	4.7	.24	.68	.45
15	19	8.0	29	26	6.3	18	44	76	3.6	.26	.54	.38
16	40	9.0	18	23	6.0	11	36	103	2.8	.31	.43	.44
17	200	9.0	13	21	5.9	8.6	37	102	2.5	1.0	.37	.41
18	100	12	9.7	20	5.8	7.7	45	45	2.1	1.7	.33	.36
19	60	9.2	8.8	18	5.6	7.3	67	30	2.2	.72	.30	.36
20	40	7.9	8.4	17	5.4	6.7	99	20	2.9	.50	.27	.36
21	29	7.5	10	16	5.3	9.1	70	22	2.7	.40	.35	.31
22	22	7.3	18	16	5.2	24	62	17	2.6	.33	.32	.26
23	17	6.5	12	15	5.0	21	53	14	2.2	.30	.29	.23
24	14	15	10	14	4.8	18	42	12	1.6	.40	.26	.21
25	12	12	16	20	4.6	15	35	10	1.5	.32	1.5	.19
26	11	54	17	191	4.5	11	32	9.5	1.3	.29	.89	.18
27	9.5	30	13	66	4.4	23	27	8.4	1.3	.25	.51	.17
28	8.8	16	9.0	21	4.3	36	24	6.7	.93	1.0	.32	.16
29	7.8	13	7.9	15	---	34	21	5.5	.72	.59	.70	.15
30	7.2	11	7.3	14	---	26	19	5.0	.68	1.1	.60	.14
31	6.5	---	6.7	12	---	22	---	6.2	---	.90	.36	---
TOTAL	922.5	388.1	450.4	1031.9	193.7	357.5	1292	674.7	161.23	16.44	16.98	10.28
MEAN	29.8	12.9	14.5	33.3	6.92	11.5	43.1	21.8	5.37	.53	.55	.34
MAX	200	54	53	191	11	36	99	103	19	1.7	1.5	1.2
MIN	3.8	5.2	6.7	3.8	4.3	3.4	19	5.0	.68	.22	.26	.14
CFSM	5.18	2.24	2.52	5.79	1.20	2.00	7.50	3.79	.93	.09	.10	.06
IN.	5.97	2.51	2.91	6.67	1.25	2.31	8.36	4.36	1.04	.11	.11	.07

CAL YR 1977 TOTAL 4708.39 MEAN 12.9 MAX 295 MIN .28 CFSM 2.24 IN 30.46
WTR YR 1978 TOTAL 5515.73 MEAN 15.1 MAX 200 MIN .14 CFSM 2.63 IN 35.68

01086000 WARNER RIVER AT DAVISVILLE, NH

LOCATION.--Lat 43°15'06", long 71°43'54", Merrimack County, Hydrologic Unit 01070003, on left bank 60 ft (18 m) downstream from bridge on State Highway 127 at Davisville, 2.2 mi (3.5 km) northwest of Contoocook, and 2.4 mi (3.9 km) upstream from mouth.

DRAINAGE AREA.--146 mi² (378 km²).

PERIOD OF RECORD.--Discharge: October 1939 to September 1978 (discontinued).
Water-quality records: Water year 1954.

REVISED RECORDS.--WSP 1901: 1960.

GAGE.--Water-stage recorder. Altitude of gage is 380 ft (116 m), from topographic map. Prior to Dec. 22, 1939, chain gage at bridge 60 ft (18 m) upstream at same datum.

REMARKS.--Records good except those for winter period, which are fair. Prior to 1948, slight diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--39 years, 238 ft³/s (6.740 m³/s), 22.14 in/yr (562 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,510 ft³/s (128 m³/s) Mar. 27, 1953, gage height, 9.88 ft (3.011 m); minimum, 2.6 ft³/s (0.074 m³/s) Aug. 17, 18, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1938 reached a stage of 12.8 ft (3.90 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0200	*1870	53.0	7.47	2.277	Apr. 14	1100	1530	43.3	7.09	2.161
Jan. 10	1430	1330	37.7	6.87	2.094	Apr. 20	2200	1590	45.0	7.16	2.182
Jan. 27	1400	1450	41.1	7.00	2.134	May 17	1000	1750	49.6	7.33	2.234

Minimum discharge, 6.3 ft³/s (0.18 m³/s) Sept. 29, 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	183	512	230	556	135	715	432	250	45	22	17
2	325	173	892	220	488	130	880	384	240	50	21	18
3	452	166	773	210	428	130	850	348	300	53	20	20
4	334	159	653	205	368	125	750	319	350	50	32	22
5	250	165	551	205	328	125	750	295	320	46	55	20
6	197	189	470	200	310	120	874	268	270	39	52	17
7	162	179	400	190	290	120	910	253	250	30	47	15
8	134	175	350	183	280	120	810	232	350	27	42	12
9	212	393	310	400	270	120	795	226	500	27	36	11
10	798	498	280	1210	250	120	765	276	600	34	30	9.8
11	707	451	260	979	240	126	840	278	500	30	26	9.3
12	543	426	250	779	230	134	1050	248	450	25	24	9.5
13	433	374	230	640	220	148	1320	220	300	21	24	10
14	358	325	270	560	215	168	1490	199	250	19	36	9.5
15	328	287	371	520	210	265	1430	283	200	20	38	9.5
16	354	262	495	470	205	325	1190	1010	170	23	32	9.8
17	1020	246	480	430	202	301	1010	1540	150	23	27	10
18	1670	255	428	400	196	277	892	1220	140	25	23	8.8
19	1170	257	380	370	190	259	845	978	130	28	20	8.8
20	886	231	340	340	180	255	1320	777	289	30	18	8.5
21	701	208	319	320	178	240	1520	638	241	28	16	8.3
22	574	197	428	310	170	300	1300	543	188	27	15	8.0
23	481	186	456	295	165	400	1080	470	155	24	13	7.8
24	406	236	412	285	160	500	910	360	121	21	12	7.5
25	352	298	388	275	155	480	790	300	98	18	13	7.5
26	316	367	450	460	150	430	700	250	83	17	17	7.0
27	291	668	350	1320	145	440	636	220	74	16	17	6.8
28	266	588	315	1130	140	670	580	190	67	19	17	6.8
29	240	472	280	880	---	775	532	170	59	21	17	6.8
30	217	412	260	745	---	810	480	150	51	25	17	6.8
31	197	---	250	644	---	760	---	200	---	24	17	---
TOTAL	14484	9026	12603	15405	6919	9308	28014	13277	7146	885	796	328.8
MEAN	467	301	407	497	247	300	934	428	238	28.5	25.7	11.0
MAX	1670	668	892	1320	556	810	1520	1540	600	53	55	22
MIN	110	159	230	183	140	120	480	150	51	16	12	6.8
CFSM	3.20	2.06	2.79	3.40	1.69	2.06	6.40	2.93	1.63	.20	.18	.08
IN.	3.69	2.30	3.21	3.93	1.76	2.37	7.14	3.38	1.82	.23	.20	.08

CAL YR 1977 TOTAL 102087.0 MEAN 280 MAX 3410 MIN 10 CFSM 1.92 IN 26.01
WTR YR 1978 TOTAL 118191.8 MEAN 324 MAX 1670 MIN 6.8 CFSM 2.22 IN 30.11

01087000 BLACKWATER RIVER NEAR WEBSTER, NH

LOCATION.--Lat 43°17'45", long 71°41'46", Merrimack County, Hydrologic Unit 01070003, on left bank 0.2 mi (0.3 km) west of Dingit Corner, 2.4 mi (3.9 km) downstream from Blackwater Dam, 2.5 mi (4.0 km) southeast of Webster, and 6.5 mi (10.5 km) upstream from mouth.

DRAINAGE AREA.--129 mi² (334 km²).

PERIOD OF RECORD.--Discharge: May 1918 to September 1920, February 1927 to current year. Published as "near Contoocook" 1918-20, 1927-35. Records published for both sites October 1934 to September 1935.
Water-quality records: Water year 1957.

REVISED RECORDS.--WSP 696: Drainage area. WSP 821: 1936(M). WSP 851: 1936. WSP 867: 1936 (flood-report data). WSP 1231: 1919-20, 1927, 1928(M), 1929-32, 1933-34(M), 1936 (calendar-year summaries).

GAGE.--Water-stage recorder. Altitude of gage is 430 ft (131 m), from topographic map. Prior to Oct. 1, 1935, chain gage at site 5 mi (8 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. High flow regulated by Blackwater Reservoir since 1941 (Reservoirs in Merrimack River basin). Some regulation at low flow prior to 1933 by mill above station. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--53 years, 213 ft³/s (6.032 m³/s), 22.42 in/yr (570 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft³/s (312 m³/s) Mar. 19, 1936, gage height, 11.78 ft (3.591 m), from floodmarks, from rating curve extended above 6,700 ft³/s (190 m³/s) on basis of slope-area and critical-depth measurements of peak flow; minimum, 3 ft³/s (0.085 m³/s) Sept. 17, 1941; minimum daily, 7.6 ft³/s (0.22 m³/s) Sept. 29, 1964. Maximum discharge since construction of Blackwater Reservoir in 1941, 2,390 ft³/s (67.7 m³/s) Apr. 16, 1951, Apr. 10, 1952, gage height, 7.18 ft (2.188 m).
Maximum stage since at least 1733, that of Mar. 19, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,500 ft³/s (42.5 m³/s) Oct. 19, gage height, 6.18 ft (1.884 m); minimum, 20 ft³/s (0.57 m³/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	160	337	210	497	108	539	408	226	83	55	41
2	230	155	494	197	412	106	564	359	258	76	53	39
3	371	148	606	190	360	103	650	316	241	70	50	37
4	369	140	526	185	320	100	598	287	285	65	58	35
5	233	137	400	180	296	99	538	266	368	62	62	33
6	166	137	320	178	280	98	644	252	329	59	61	31
7	130	133	270	172	260	97	750	237	268	57	61	29
8	110	134	230	170	250	96	686	222	259	59	60	27
9	148	215	200	312	240	95	593	222	366	51	57	26
10	429	299	185	562	230	94	557	287	557	48	57	27
11	665	321	170	1070	220	100	593	368	663	48	55	43
12	598	300	168	1090	210	110	751	327	503	44	53	54
13	341	274	165	760	200	120	1000	264	329	42	53	56
14	245	230	200	600	190	135	1190	228	271	40	53	72
15	234	198	263	500	180	160	1220	276	234	39	54	66
16	257	179	327	400	175	200	1040	654	198	42	51	80
17	491	173	375	350	170	240	817	1210	174	55	48	90
18	1030	174	363	320	160	220	722	1410	153	88	44	72
19	1460	176	311	300	155	200	713	1340	161	151	41	71
20	947	171	278	280	148	198	895	909	293	142	39	66
21	605	160	262	270	143	195	1220	638	430	108	37	61
22	449	151	317	270	138	190	1320	516	348	84	34	57
23	373	146	379	260	132	260	1130	401	250	70	32	55
24	322	162	365	260	128	310	926	321	201	61	32	52
25	290	211	322	250	125	380	822	274	170	54	38	47
26	265	290	340	450	118	350	744	244	146	50	41	44
27	230	451	357	760	114	330	699	224	128	46	42	39
28	203	542	297	940	112	320	642	199	114	52	41	32
29	188	408	251	1070	---	470	541	177	102	55	42	26
30	176	303	231	901	---	589	458	162	93	58	41	22
31	167	---	230	649	---	591	---	155	---	57	40	---
TOTAL	11828	6678	9539	14106	5963	6664	23562	13153	8118	2016	1485	1430
MEAN	382	223	308	455	213	215	785	424	271	65.0	47.9	47.7
MAX	1460	542	606	1090	497	591	1320	1410	663	151	62	90
MIN	106	133	165	170	112	94	458	155	93	39	32	22
MEAN†	382	223	307	458	210	219	783	422	271	64.9	47.9	47.6
CFSM†	2.96	1.73	2.38	3.55	1.63	1.70	6.07	3.27	2.10	.50	.37	.37
IN.†	3.41	1.93	2.75	4.09	1.69	1.96	6.78	3.78	2.34	.58	.43	.41

CAL YR 1977 TOTAL 88849 MEAN 243 MAX 1860 MIN 15 MEAN† 243 CFSM† 1.88 IN† 25.63
WTR YR 1978 TOTAL 104542 MEAN 286 MAX 1460 MIN 22 MEAN† 286 CFSM† 2.22 IN† 30.14

† Adjusted for change in contents in Blackwater Reservoir.

01089000 SOUCOOK RIVER NEAR CONCORD, NH

LOCATION.--Lat 43°14'22", long 71°27'44", Merrimack County, Hydrologic Unit 01070002, on left bank 500 ft (150 m) upstream from U.S. Highway 4, 0.9 mi (1.4 km) upstream from Cemetery Brook, and 4.4 mi (7.1 km) northeast of State Capitol at Concord.

DRAINAGE AREA.--76.8 mi² (198.9 km²).

PERIOD OF RECORD.--Discharge: October 1951 to current year.
Water-quality records: Water years 1967-74.

REVISED RECORDS.--WSP 1331: 1952(M).

GAGE.--Water-stage recorder. Altitude of gage is 290 ft (88 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--27 years, 111 ft³/s (3.144 m³/s), 19.63 in/yr (499 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft³/s (105 m³/s) Mar. 14, 1977, gage height, 14.50 ft (4.420 m); minimum, 1.5 ft³/s (0.042 m³/s) Aug. 7, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (20 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0030	953	27.0	9.48	2.890	Jan. 27	2000	806	22.8	9.03	2.752
Jan. 10	0630	*1130	32.0	9.95	3.033						

Minimum discharge, 5.4 ft³/s (0.15 m³/s) Aug. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	70	295	97	211	52	388	120	85	24	8.7	11
2	239	68	459	93	182	52	477	110	85	19	8.9	11
3	191	66	313	89	154	50	395	105	73	18	8.7	9.5
4	113	64	237	85	140	50	335	97	85	16	12	8.9
5	83	65	187	83	125	49	383	90	81	20	18	8.5
6	74	67	155	82	120	47	480	86	77	21	16	8.0
7	69	65	145	81	110	45	447	81	68	16	14	8.0
8	56	64	135	80	105	43	375	78	93	15	13	8.7
9	117	313	125	496	100	42	365	100	182	15	13	9.3
10	553	300	120	926	98	43	339	120	234	14	12	11
11	308	228	115	496	94	45	373	110	150	13	11	9.2
12	207	205	110	310	90	48	498	100	109	13	9.3	10
13	169	162	110	240	86	52	525	94	87	12	9.3	9.4
14	135	135	105	210	82	60	480	86	85	11	8.9	8.8
15	131	118	290	190	78	111	415	105	79	11	8.7	8.6
16	139	108	391	180	76	132	344	378	65	14	8.5	9.2
17	538	110	287	170	74	110	296	425	58	14	8.0	9.0
18	742	139	213	160	72	95	269	332	50	15	6.9	8.6
19	427	126	178	150	70	88	250	269	49	15	6.3	8.5
20	297	107	156	140	68	85	434	204	74	13	6.2	8.5
21	234	95	152	130	66	88	447	170	66	11	6.0	8.4
22	193	94	282	120	64	135	340	156	58	11	5.5	8.2
23	157	89	248	110	62	197	280	129	53	9.8	5.4	7.8
24	134	111	191	100	60	230	240	111	45	9.5	6.2	7.6
25	118	137	184	100	58	246	200	100	38	8.9	8.5	7.4
26	113	157	282	332	56	168	180	93	33	8.5	8.9	7.3
27	103	295	180	724	56	213	170	86	29	8.0	8.2	7.3
28	94	199	137	713	54	501	150	79	26	8.9	8.0	7.3
29	86	159	121	496	---	548	140	73	23	8.7	9.5	7.3
30	80	140	110	356	---	496	130	65	26	8.9	9.5	7.3
31	73	---	105	267	---	422	---	60	---	8.7	9.3	---
TOTAL	6017	4056	6118	7806	2611	4543	10145	4212	2266	410.9	292.4	259.6
MEAN	194	135	197	252	93.3	147	338	136	75.5	13.3	9.43	8.65
MAX	742	313	459	926	211	548	525	425	234	24	18	11
MIN	44	64	105	80	54	42	130	60	23	8.0	5.4	7.3
CFSM	2.53	1.76	2.57	3.28	1.22	1.91	4.40	1.77	.98	.17	.12	.11
IN.	2.91	1.96	2.96	3.78	1.26	2.20	4.91	2.04	1.10	.20	.14	.13

CAL YR 1977 TOTAL 48557.4 MEAN 133 MAX 2720 MIN 5.4 CFSM 1.73 IN 23.52
WTR YR 1978 TOTAL 48736.9 MEAN 134 MAX 926 MIN 5.4 CFSM 1.75 IN 23.61

01090100 MERRIMACK RIVER AT HOOKSETT, NH

LOCATION.--Lat 43°05'45", long 71°27'49", Merrimack County, Hydrologic Unit 01070002, on upstream side of railroad bridge at Hooksett and 2.3 mi (3.7 km) downstream from Suncook River.

DRAINAGE AREA.--2,810 mi² (7,278 km²), approximately.

PERIOD OF RECORD.--Water years 1974 to October 1978 (Discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)
OCT , 1977											
17...	1100	73	6.4	9.0	12.0	25	2	10.2	25	8200	K1200
31...	1100	63	6.7	7.0	11.0	8	1	10.9	15	10000	770
NOV											
17...	1230	54	6.6	13.5	8.0	27	1	8.8	20	K20000	1400
29...	1115	53	7.1	.0	2.0	24	1	12.2	22	10000	800
DEC											
13...	1100	60	7.1	-5.0	.5	12	1	12.8	20	11000	1100
28...	1100	60	8.4	-15.0	1.0	11	2	14.1	22	3400	490
JAN , 1978											
17...	1150	50	7.8	-1.0	.0	28	3	12.2	15	K870	K110
31...	1300	52	7.6	-1.0	.0	26	4	10.7	13	860	80
FEB											
16...	1130	62	7.2	1.0	2.0	25	2	13.9	12	K2000	300
28...	1100	70	7.2	-8.0	1.0	10	2	13.4	13	4100	370
MAR											
08...	1100	68	7.3	6.0	.0	20	1	11.8	12	4400	1400
27...	1100	70	7.0	4.0	2.0	20	2	7.8	15	3700	530
APR											
06...	1000	66	7.1	4.0	3.0	20	3	11.9	10	K970	K50
19...	1100	45	7.2	5.0	7.5	10	2	9.8	15	K2000	170
MAY											
04...	1130	46	8.0	15.0	10.0	20	2	7.8	10	1500	140
23...	1130	45	7.7	24.0	15.5	30	2	5.4	20	2300	88
JUN											
13...	1100	48	7.8	23.0	20.5	20	3	9.4	25	5700	440
27...	1100	62	7.7	21.0	21.5	10	1	8.1	20	16000	530
JUL											
06...	1200	72	5.4	26.0	23.0	10	1	5.8	31	13000	540
19...	1140	80	5.3	30.0	24.0	4	0	5.4	29	6900	400
AUG											
08...	1000	72	6.6	24.0	23.5	15	1	7.6	18	7600	320
22...	1000	84	6.7	25.0	21.8	20	1	8.4	8	2500	210
SEP											
12...	0940	83	6.8	19.0	19.0	30	1	7.7	15	1900	630
25...	1030	93	7.4	18.0	18.0	5	1	--	13	3000	200
OCT											
11...	1030	85	7.6	19.0	16.0	20	1	9.4	7	1200	K20
31...	1100	75	7.1	13.0	11.5	25	1	10.4	15	2200	210

K, NON-IDEAL COLONY COUNT.

01090100 MERRIMACK RIVER AT HOOKSETT, NH--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
OCT , 1977											
17...	--	--	--	--	--	--	--	--	10	49	--
31...	--	--	--	--	--	--	--	--	5	47	--
NOV											
17...	--	--	--	--	--	--	--	--	8	48	--
29...	--	--	--	--	--	--	--	--	0	44	--
DEC											
13...	--	--	--	--	--	--	--	--	6	44	--
28...	11	.7	11	0	9	.1	7.3	8.2	6	26	--
JAN , 1978											
17...	--	--	--	--	--	--	--	--	8	50	--
31...	--	--	--	--	--	--	--	--	10	39	--
FEB											
16...	--	--	--	--	--	--	--	--	9	48	--
28...	--	--	--	--	--	--	--	--	--	--	.17
MAR											
08...	4.0	.8	7	0	6	.6	5.9	8.0	3	60	--
27...	--	--	--	--	--	--	--	--	5	50	--
APR											
06...	--	--	--	--	--	--	--	--	4	77	--
19...	--	--	--	--	--	--	--	--	11	58	--
MAY											
04...	--	--	--	--	--	--	--	--	11	44	--
23...	--	--	--	--	--	--	--	--	2	40	--
JUN											
13...	2.7	.5	17	0	14	.4	5.4	5.5	11	40	--
27...	--	--	--	--	--	--	--	--	10	54	--
JUL											
06...	--	--	--	--	--	--	--	--	3	54	--
19...	--	--	--	--	--	--	--	--	3	52	--
AUG											
08...	--	--	--	--	--	--	--	--	0	57	--
22...	--	--	--	--	--	--	--	--	4	73	--
SEP											
12...	--	--	--	--	--	--	--	--	35	56	--
25...	4.4	1.0	14	0	11	.9	8.3	15	4	66	--
OCT											
11...	--	--	--	--	--	--	--	--	7	60	--
31...	--	--	--	--	--	--	--	--	5	52	--

01090100 MERRIMACK RIVER AT HOOKSETT, NH--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	CHLORO-PHYLL A PHYTO-PLANK-TON, UNCORR. (UG/L)	CHLORO-PHYLL B PHYTO-PLANK-TON, UNCORR. (UG/L)	CHROMIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT , 1977											
17...	.06	.02	.12	.14	.20	.04	--	0	1.16	.000	<10
31...	.10	.03	.38	.41	.51	.02	--	0	2.68	3.60	20
NOV											
17...	.09	.05	.39	.44	.53	.03	--	1	4.69	2.90	<10
29...	.09	.02	.36	.38	.47	.02	--	0	.000	.000	<10
DEC											
13...	.13	.06	.18	.24	.37	.02	--	2	1.03	.937	<10
28...	.09	.03	.15	.18	.27	.02	--	0	.043	.000	10
JAN , 1978											
17...	.16	.03	.25	.28	.44	.02	--	0	.845	.524	<10
31...	.12	.03	--	--	--	.02	--	0	1.23	1.06	<10
FEB											
16...	.15	.08	.14	.22	.37	.02	--	0	.573	.875	10
28...	--	--	.27	--	.54	--	--	--	.680	.500	--
MAR											
08...	.19	.11	.20	.31	.50	.02	--	0	1.61	1.59	<10
27...	.19	.05	.48	.53	.72	.02	--	1	.082	.000	20
APR											
06...	.16	.17	.14	.31	.47	.00	--	0	--	--	30
19...	.09	.06	.31	.37	.46	.02	--	1	.616	.456	10
MAY											
04...	.18	.11	.19	.30	.48	.02	--	1	.000	.000	10
23...	.10	.05	.30	.35	.45	.02	--	0	.000	.000	<10
JUN											
13...	.10	.11	.44	.55	.65	.03	0	0	.000	.000	10
27...	.17	.18	.31	.49	.66	.02	--	1	.000	.000	10
JUL											
06...	.14	.09	.65	.74	.88	.02	--	0	6.12	.000	10
19...	.24	.26	.52	.78	1.0	.02	--	0	2.59	.785	10
AUG											
08...	.21	.01	.26	.27	.48	.02	--	1	3.33	.202	190
22...	.08	.11	.86	.97	1.1	.02	--	0	3.13	.000	30
SEP											
12...	.10	.06	.18	.24	.34	.03	--	1	5.20	.000	10
25...	.17	.09	.62	.71	.88	.04	0	0	.000	.000	10
OCT											
11...	.11	.12	.47	.59	.70	.03	--	1	.000	.000	<10
31...	.11	.05	.24	.29	.40	.02	--	0	.000	.000	0

01090100 MERRIMACK RIVER AT HOOKSETT, NH--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
OCT 31...	0	4	4	230	48	20	.0	0	10

DATE	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
DEC 28...	.0	.00	.00	.0	.00	.00	.00	.00
MAR 27...	.0	.00	.00	.0	.00	.00	.00	.00
JUN 13...	.1	.00	.00	.0	.00	.00	.00	.00
SEP 25...	.0	.00	.00	.0	.00	.00	.00	.00

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)
DEC 28...	.00	.00	.00	.00	.00	--	--	0
MAR 27...	.00	.00	.00	.00	.00	--	--	0
JUN 13...	.00	.00	.00	.00	.00	--	--	0
SEP 25...	.00	.00	.00	.00	.00	.00	.00	0

01090800 PISCATAQUOG RIVER BELOW EVERETT DAM, NEAR EAST WEARE, NH

LOCATION.--Lat 43°05'29", long 71°39'36", Hillsborough County, Hydrologic Unit 01070002, on right bank 500 ft (150 m) downstream from Everett Dam and 1.4 mi (2.3 km) southeast of East Weare.

DRAINAGE AREA.--63.1 mi² (163.4 km²).

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 320 ft (98 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record Oct. 1-5, which are fair. Flow regulated by Everett Lake (Reservoirs in Merrimack River basin). Diversion from Hopkinton Lake on Contoocook River to Everett Lake during periods of high flow in the spring of 1968, 1969, and 1977. Occasional regulation by small reservoirs upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--15 years, 93.9 ft³/s (2.659 m³/s), 20.21 in/yr (513 mm/yr), adjusted for storage and diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,530 ft³/s (43.3 m³/s) May 1, 1969, gage height, 8.73 ft (2.661 m); no flow for part of Aug. 27, Nov. 18, 1964, Oct. 22, 1968, caused by unusual regulation; minimum daily discharge, 0.39 ft³/s (0.011 m³/s) Sept. 6, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 733 ft³/s (20.8 m³/s) Oct. 19, gage height, 7.37 ft (2.246 m); minimum daily, 2.4 ft³/s (.068 m³/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN.	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	89	243	70	453	56	336	125	66	14	6.3	6.9
2	160	86	350	72	336	56	383	112	61	13	6.3	6.9
3	120	91	305	88	147	53	357	104	54	12	8.9	6.3
4	100	104	210	95	143	52	264	97	57	11	8.5	5.8
5	75	102	147	95	140	51	237	88	56	13	11	5.0
6	56	97	159	81	88	47	295	81	54	10	12	4.8
7	47	93	157	76	100	28	329	78	52	8.4	11	4.4
8	40	93	143	76	122	40	322	72	52	9.6	12	3.6
9	81	210	131	88	120	47	315	70	51	11	12	3.6
10	243	230	143	195	93	22	286	63	50	11	13	2.9
11	190	302	166	366	83	14	299	57	48	9.2	11	3.3
12	120	273	75	443	83	62	383	38	48	7.7	9.3	4.2
13	201	193	98	416	83	58	426	56	48	7.1	8.9	4.4
14	127	118	93	304	54	61	430	147	53	6.9	8.5	4.4
15	171	122	147	285	81	93	430	34	49	8.8	7.5	4.0
16	174	114	198	144	79	127	410	171	40	12	6.9	4.0
17	104	104	187	50	70	114	329	478	38	12	6.6	4.2
18	343	110	174	93	70	100	215	495	33	12	5.8	4.2
19	516	100	164	116	70	89	215	252	36	11	5.3	4.0
20	547	84	131	116	69	88	145	145	92	10	5.3	4.4
21	652	75	129	116	65	88	398	110	84	11	4.6	4.7
22	486	70	166	116	53	138	486	95	65	10	4.6	3.9
23	185	67	179	84	38	190	466	88	48	9.6	4.4	4.6
24	182	78	174	67	47	224	445	79	36	9.0	4.2	4.0
25	161	86	166	63	52	210	295	70	28	7.4	5.8	3.6
26	169	108	166	39	52	182	215	63	24	6.5	6.6	3.1
27	159	171	131	131	43	195	195	58	22	6.1	6.6	2.9
28	136	154	114	221	54	329	169	52	21	7.2	6.3	2.7
29	120	129	114	252	---	426	154	59	19	7.4	7.2	2.5
30	108	114	112	339	---	422	138	59	17	7.0	7.2	2.4
31	97	---	89	449	---	398	---	59	---	6.4	6.9	---
TOTAL	6070	3767	4961	5146	2888	4060	9367	3555	1402	297.3	240.5	125.7
MEAN	196	126	160	166	103	131	312	115	46.7	9.59	7.76	4.19
MAX	652	302	350	449	453	426	486	495	92	14	13	6.9
MIN	40	67	75	39	38	14	138	34	17	6.1	4.2	2.4
MEAN†	196	126	157	186	82.3	134	310	113	46.1	9.14	7.76	3.77
CFSM†	3.11	2.00	2.49	2.95	1.30	2.12	4.91	1.79	.731	.145	.123	.06
IN.†	3.59	2.23	2.87	3.40	1.36	2.45	5.49	2.07	.81	.17	.14	.07

CAL YR 1977 TOTAL 40539.98 MEAN 111 MAX 1430 MIN .50 MEAN† 111 CFSM† 1.76 IN† 23.96
WTR YR 1978 TOTAL 41879.50 MEAN 115 MAX 652 MIN 2.4 MEAN† 115 CFSM† 1.82 IN† 24.64

† Adjusted for change in contents in Everett Lake.

01091000 SOUTH BRANCH PISCATAQUOG RIVER NEAR GOFFSTOWN, NH

LOCATION.--Lat 43°00'49", long 71°38'31", Hillsborough County, Hydrologic Unit 01070002, on right bank 20 ft (6 m) upstream from highway bridge, 1.4 mi (2.3 km) upstream from mouth, and 2.2 mi (3.5 km) west of Goffstown.

DRAINAGE AREA.--104 mi² (269 km²).

PERIOD OF RECORD.--Discharge: July 1940 to September 1978 (discontinued).
Water-quality records: Water year 1957.

GAGE.--Water-stage recorder. Altitude of gage is 310 ft (94 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Prior to 1954, some regulation at low flow by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--38 years, 165 ft³/s (4.673 m³/s), 21.55 in/yr (547 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft³/s (116 m³/s) June 25, 1944, gage height, 9.47 ft (2.886 m); maximum gage height, 14.33 ft (4.368 m) Feb. 11, 1970 (ice jam); minimum discharge, 2.4 ft³/s (0.068 m³/s) Aug. 20-22, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1730	1630	46.2	6.98	2.128	Apr. 20	1800	1040	29.5	6.13	1.868
Jan. 10	0030	*1730	49.0	7.11	2.167	May 17	0600	1430	40.5	6.71	2.045
Jan. 27	1300	1600	45.0	a*9.85	3.002						

a Ice jam.

Minimum discharge not determined; minimum daily, 6.4 ft³/s (0.18 m³/s) Sept. 29, 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	94	490	210	450	95	597	164	78	33	17	12
2	206	91	757	200	400	94	818	155	77	29	16	12
3	202	102	504	195	350	93	653	149	75	27	15	11
4	163	95	370	190	300	92	530	140	88	27	20	10
5	125	93	292	185	260	90	543	129	86	28	40	9.2
6	87	99	280	180	240	89	669	120	84	26	38	8.8
7	61	99	250	170	220	88	645	104	72	24	35	8.2
8	51	124	230	165	210	87	544	85	90	23	30	7.8
9	180	649	210	250	190	88	536	108	130	24	25	7.5
10	443	492	200	1220	180	90	518	131	180	26	21	7.0
11	254	371	190	748	170	95	625	124	150	47	16	10
12	168	294	180	608	160	110	777	112	120	35	17	10
13	126	233	160	542	150	120	807	104	90	27	17	11
14	104	201	190	485	140	150	806	101	76	22	15	9.0
15	132	189	270	400	135	190	660	200	73	22	13	9.2
16	154	184	420	350	130	230	533	604	66	33	12	9.4
17	1040	182	350	290	125	210	467	1180	54	32	11	9.5
18	1160	208	290	250	122	190	413	656	47	30	11	8.6
19	581	188	246	230	120	180	384	454	54	26	10	8.5
20	397	162	221	215	118	170	893	313	400	23	9.6	8.3
21	287	147	265	205	116	190	876	207	182	20	9.2	7.8
22	229	147	469	210	114	230	620	171	131	18	8.6	7.6
23	193	145	413	190	111	300	452	143	102	16	8.3	7.4
24	166	153	315	190	109	370	365	135	78	14	9.2	7.2
25	147	157	290	185	106	350	302	126	63	13	11	6.8
26	140	256	434	350	103	320	259	118	54	12	11	6.6
27	130	384	350	1200	110	310	259	110	49	12	11	6.5
28	123	272	280	900	97	400	242	102	46	14	11	6.5
29	111	220	250	760	---	820	217	97	42	16	12	6.4
30	101	195	230	620	---	778	187	92	38	18	12	6.4
31	95	---	220	520	---	635	---	84	---	17	12	---
TOTAL	7409	6226	9616	12413	5036	7254	16197	6518	2875	734	503.9	256.2
MEAN	239	208	310	400	180	234	540	210	95.8	23.7	16.3	8.54
MAX	1160	649	757	1220	450	820	893	1180	400	47	40	12
MIN	51	91	160	165	97	87	187	84	38	12	8.3	6.4
CFSM	2.30	2.00	2.98	3.85	1.73	2.25	5.19	2.02	.92	.23	.16	.08
IN.	2.65	2.23	3.44	4.44	1.80	2.59	5.79	2.33	1.03	.26	.18	.09

CAL YR 1977 TOTAL 66336.4 MEAN 182 MAX 3090 MIN 5.0 CFSM 1.75 IN 23.73
WTR YR 1978 TOTAL 75038.1 MEAN 206 MAX 1220 MIN 6.4 CFSM 1.98 IN 26.84

01091500 PISCATAQUOG RIVER NEAR GOFFSTOWN, NH

LOCATION.--Lat 43°00'58", long 71°33'03", Hillsborough County, Hydrologic Unit 01070002, on left bank 300 ft (90 m) upstream from highway bridge, 0.2 mi (0.3 km) upstream from Harry Brook, 0.4 mi (0.6 km) southwest of Grasmere, 0.9 mi (1.4 km) downstream from Glen Lake, and 2.5 mi (4.0 km) east of Goffstown.

DRAINAGE AREA.--202 mi^2 (523 km^2).

PERIOD OF RECORD.--Discharge: October 1939 to September 1978 (discontinued).
Water-quality records: Water years 1955, 1957.

GAGE.--Water-stage recorder. Altitude of gage is 185 ft (56 m), from topographic map. Prior to Dec. 22, 1939, staff gage at same site and datum.

REMARKS.--Records excellent except those for winter period, which are fair. Flow regulated by Everett Lake 10 mi (16 km) upstream since 1962 (Reservoirs in Merrimack River basin) and occasionally by Glen Lake since 1966. Prior to October 1966, flow regulated by powerplant at outlet of Glen Lake. Diversion from Hopkinton Lake on Contoocook River to Everett Lake during spring period of high flow in 1968, 1969, and 1977. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--39 years, 307 ft^3/s (8.694 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,840 ft^3/s (194 m^3/s) Apr. 5, 1960, gage height, 10.85 ft (3.307 m); minimum daily, 2.2 ft^3/s (0.062 m^3/s) Sept. 7, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1733, 21,900 ft^3/s (620 m^3/s) Sept. 21, 1938, gage height, 17.52 ft (5.340 m), from floodmarks, by computation of flow over dam. Flood of Mar. 19, 1936, reached a discharge of 19,900 ft^3/s (564 m^3/s), by computation of flow over dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,910 ft^3/s (54.1 m^3/s) Oct. 17, gage height, 7.05 ft (2.149 m); minimum, 18 ft^3/s (0.51 m^3/s) Sept. 27-30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	265	806	290	700	175	1150	310	164	74	29	19
2	342	260	1260	280	600	170	1370	290	163	84	29	19
3	415	252	979	270	530	165	1220	270	158	90	27	19
4	309	244	756	260	460	162	1020	260	189	76	24	19
5	230	242	578	250	420	160	928	240	184	68	24	19
6	165	242	520	240	390	156	1110	220	172	58	24	19
7	128	242	460	230	370	153	1140	200	154	48	24	19
8	106	240	430	220	350	152	1030	160	219	47	23	19
9	290	699	400	560	330	151	1000	200	367	45	21	19
10	753	844	370	1440	320	153	954	260	392	54	21	19
11	558	723	340	1200	310	165	1050	248	292	50	21	19
12	447	683	320	980	290	180	1250	224	216	45	23	19
13	419	519	302	939	280	200	1340	198	172	41	28	19
14	414	412	377	717	270	250	1350	185	155	39	24	19
15	328	362	589	590	260	330	1210	299	154	38	22	19
16	220	361	825	500	255	400	1080	876	127	39	24	19
17	1250	360	707	450	250	350	942	1420	109	42	30	19
18	1470	399	602	400	240	330	778	920	99	43	22	19
19	1240	372	534	380	230	310	716	1010	116	46	20	19
20	918	327	478	370	225	300	1200	994	559	41	20	19
21	1010	299	493	360	220	340	1350	725	348	37	20	19
22	903	286	791	340	215	400	1230	518	253	36	19	19
23	534	280	740	330	210	520	1040	409	194	36	19	19
24	473	295	628	320	205	620	792	327	149	30	19	19
25	519	314	607	310	200	600	600	305	120	30	19	19
26	393	453	687	841	190	550	540	289	101	30	19	19
27	271	672	539	1410	185	540	470	265	91	30	19	18
28	272	556	435	1350	180	800	450	239	86	30	20	18
29	272	461	392	1080	---	1450	400	208	80	30	20	18
30	272	408	325	951	---	1410	350	185	78	29	19	18
31	269	---	310	800	---	1250	---	166	---	29	19	---
TOTAL	15305	12072	17580	18658	8685	12892	29060	12420	5661	1415	692	566
MEAN	494	402	567	602	310	416	969	401	189	45.6	22.3	18.9
MAX	1470	844	1260	1440	700	1450	1370	1420	559	90	30	19
MIN	106	240	302	220	180	151	350	160	78	29	19	18

CAL YR 1977 TOTAL 125569 MEAN 344 MAX 4040 MIN 19
WTR YR 1978 TOTAL 135006 MEAN 370 MAX 1470 MIN 18

01092000 MERRIMACK RIVER NEAR GOFFS FALLS, BELOW MANCHESTER, NH

LOCATION.--Lat 42°56'54", long 71°27'52", Hillsborough County, Hydrologic Unit 01070002, on right bank 600 ft (200 m) upstream from bridge on Interstate Highway 193, 0.8 mi (1.3 km) downstream from Bowman Brook, 1.3 mi (2.1 km) north of Goffs Falls, and 2.3 mi (3.7 km) downstream from Piscataquog River.
DRAINAGE AREA.--3,092 mi² (8,008 km²).
PERIOD OF RECORD.--Discharge: October 1936 to current year. October 1936 monthly discharge only, published in WSP 1301.
Water-quality records: Water years 1952-53, 1957, 1971.
REVISED RECORDS.--WSP 1231: 1937. WSP 1271: 1937(M, m).
GAGE.--Water-stage recorder. Datum of gage is 109.27 ft (33.305 m) National Geodetic Vertical Datum of 1929.
REMARKS.--Records good except those for periods computed from graph of telemeter readings Dec. 6 to Jan. 31, Feb. 4 to Mar. 29, and those for period of no gage-height record, Sept. 16-30, which are fair. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Newfound, Winnipesaukee, Winnisquam, and other lakes and reservoirs upstream (Reservoirs in Merrimack River basin).
AVERAGE DISCHARGE.--42 years, 5,274 ft³/s (149.4 m³/s).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 102,500 ft³/s (2,900 m³/s) Sept. 23, 1938, gage height, 25.87 ft (7.885 m), from rating curve extended above 48,000 ft³/s (1,400 m³/s) on basis of computations of flow over dam at gage heights 25.87 ft (7.885 m) and 35.19 ft (10.726 m); minimum daily, 98 ft³/s (2.78 m³/s) Oct. 11, 1964.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1722, 150,000 ft³/s (4,250 m³/s) Mar. 20, 1936, gage height, 35.19 ft (10.726 m), from floodmarks, from rating curve extended above 48,000 ft³/s (1,400 m³/s) by method explained above.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 22,000 ft³/s (620 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 19	0915	*26000	736	9.86	3.005	Jan. 28	-	23000	650	b9.1	2.77
Jan. 10 or 11	-	25700	728	a9.79	2.984						

a From peak-stage indicator.
b From telemeter data.

Minimum daily discharge, 450 ft³/s (12.7 m³/s) Sept. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4390	5440	7770	6320	12000	3920	12200	12200	5100	1840	1130	944
2	6010	5000	11400	6000	11000	3290	12800	9830	5460	1890	1050	1210
3	13300	4160	11800	5800	8790	3410	12900	7560	5570	1710	1020	1020
4	10900	3980	11100	5600	8500	3410	12000	6430	6120	655	1510	911
5	7390	3640	9730	5070	8300	2840	11500	6070	7530	1220	1080	1060
6	5800	4200	8650	5600	8190	2740	12700	5800	6470	1350	1140	772
7	4700	3860	8460	5070	7700	2950	13200	6010	5680	1490	1270	1000
8	4150	4030	7150	5220	7300	2720	13100	6120	5750	1180	939	846
9	4320	5580	6710	9060	7000	2660	12500	7140	10400	1590	1340	992
10	11100	7890	6020	19500	6700	2720	11700	10400	12400	1290	1250	1340
11	18900	8100	6000	23900	6400	2550	11700	13300	11900	1270	1170	1430
12	14900	8370	6000	19300	6200	2620	13600	10900	9420	1070	1470	1190
13	10600	8380	5990	15200	5860	2700	17400	8920	6830	1210	1110	1400
14	8550	7010	5990	12500	5530	3260	18200	8270	5880	1260	620	750
15	8290	5920	6740	11100	5790	3620	19300	8520	5670	1260	1400	873
16	8090	4900	8980	10700	5760	4780	18600	13800	5330	1080	1010	860
17	11600	5320	10000	9640	5860	4630	16400	20300	4530	1270	1060	805
18	22300	5350	9470	8620	5600	4480	14500	21400	3800	1220	781	805
19	25100	5750	8460	7260	5440	3970	13900	19600	3970	1410	1040	1000
20	20600	4570	8070	8380	5070	4190	16700	17100	4140	1310	1120	1050
21	16400	5150	7590	7440	5320	4190	20600	14600	3960	1360	1070	860
22	13900	5170	8580	7810	5100	4780	20900	13000	4470	1250	974	560
23	11900	4680	9430	7620	5690	5130	19600	11700	4440	1140	548	450
24	9770	4590	8770	7290	5070	6710	18300	10300	4000	1500	680	660
25	8580	4990	8420	7290	4720	7100	17000	8910	4110	1270	941	1270
26	8110	6420	8580	10500	4340	6930	15800	7850	3630	1280	1030	600
27	7330	8040	8690	17100	3920	7150	14700	7130	2220	1240	1010	800
28	6600	8610	8500	21300	3530	10500	14000	6410	2480	1480	958	1300
29	6380	7780	7730	19500	---	12700	13500	6010	2530	773	1140	850
30	6070	6930	7070	16300	---	13200	13000	5460	2470	947	1080	1000
31	5840	---	6710	14200	---	12800	---	4320	---	2030	1080	---
TOTAL	321870	173810	254560	336190	180680	158650	452300	315360	166260	40845	33021	28608
MEAN	10380	5794	8212	10840	6453	5118	15080	10170	5542	1318	1065	954
MAX	25100	8610	11800	23900	12000	13200	20900	21400	12400	2030	1510	1430
MIN	4150	3640	5990	5070	3530	2550	11500	4320	2220	655	548	450

CAL YR 1977 TOTAL 2093155 MEAN 5735 MAX 40200 MIN 736
WTR YR 1978 TOTAL 2462154 MEAN 6746 MAX 25100 MIN 450

01093800 STONY BROOK TRIBUTARY NEAR TEMPLE, NH

LOCATION.--Lat 42°51'36", long 71°50'00", Hillsborough County, Hydrologic Unit 01070002, on left bank 150 ft (45 m) downstream from highway bridge, 2.9 mi (4.7 km) north of Temple, and 5.5 mi (8.8 km) upstream from mouth.

DRAINAGE AREA.--3.60 mi² (9.32 km²).

PERIOD OF RECORD.--May 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 920 ft (280 m), from topographic map.

REMARKS.--Records fair except those for winter period and period of no gage-height record, Oct. 7 to Dec. 18, which are poor. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--15 years, 6.83 ft³/s (0.193 m³/s), 25.76 in/yr (654 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 336 ft³/s (9.52 m³/s) Mar. 13, 1977, gage height, 7.13 ft (2.173 m), from rating curve extended above 90 ft³/s (2.6 m³/s); maximum gage height, 7.81 ft (2.380 m) Feb. 3, 1970, Dec. 21, 1973, backwater from ice; no flow for part of Sept. 26, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 110 ft³/s (3.1 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 26	1100	a*244	6.910	6.65	2.027						

a From rating curve extended above 90 ft³/s (2.6 m³/s).

Minimum discharge not determined; minimum daily, 0.17 ft³/s (0.005 m³/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	4.3	50	6.5	8.3	2.4	19	8.8	2.7	.75	.32	.42
2	14	4.0	40	12	7.2	2.4	29	7.7	2.6	.66	.30	.35
3	5.5	3.8	30	9.1	6.5	2.4	19	6.7	2.7	.58	.33	.29
4	3.4	3.6	25	7.2	5.8	2.3	16	6.0	3.6	.53	.30	.26
5	2.4	3.5	20	5.3	5.4	2.3	19	5.4	2.6	.49	.30	.24
6	1.9	3.4	17	4.9	4.9	2.3	22	5.2	2.5	.45	.30	.23
7	1.5	3.3	15	4.5	4.7	2.3	20	5.0	2.0	.42	.30	.21
8	2.5	3.2	13	4.4	4.5	2.2	18	4.8	3.8	.40	.27	.19
9	7.0	50	12	71	4.3	2.2	19	5.7	4.9	.38	.27	.18
10	20	35	11	30	4.2	2.2	21	5.9	4.2	.70	.30	.18
11	10	17	10	20	4.0	2.2	32	5.1	3.2	.40	.30	.30
12	7.0	13	9.5	15	3.9	2.5	36	4.7	2.7	.33	.33	.30
13	6.0	10	9.0	12	3.7	2.9	42	4.4	2.4	.27	.30	.30
14	5.0	8.0	8.5	10	3.6	3.5	41	4.1	2.4	.43	.30	.27
15	6.0	7.0	8.8	8.5	3.5	12	32	13	1.9	.51	.30	.25
16	25	6.0	15	7.8	3.4	5.8	29	33	1.5	.51	.30	.27
17	60	7.0	13	6.6	3.3	4.8	27	32	1.3	.47	.24	.27
18	70	6.7	11	6.0	3.2	4.3	26	15	1.3	.36	.24	.27
19	40	6.5	9.4	5.5	3.1	3.9	32	10	5.6	.33	.24	.33
20	22	6.2	8.8	5.2	3.0	3.9	60	7.6	8.6	.30	.22	.30
21	17	6.1	11	5.0	3.0	5.2	44	8.2	3.7	.27	.20	.29
22	14	6.0	17	4.8	2.9	16	36	6.5	3.7	.24	.18	.27
23	12	6.0	12	4.6	2.8	14	30	5.3	2.4	.22	.18	.25
24	10	10	10	4.5	2.7	13	25	4.5	1.9	.18	.20	.23
25	9.0	8.0	13	5.0	2.7	10	22	5.1	1.5	.18	.40	.22
26	8.0	20	11	140	2.6	8.6	18	4.5	1.3	.30	.33	.21
27	7.0	17	10	41	2.6	20	16	3.8	1.2	.56	.35	.20
28	6.0	15	9.0	17	2.5	26	14	3.3	1.1	.47	.40	.19
29	5.5	14	8.0	14	---	25	12	3.3	1.0	.42	.36	.18
30	5.0	13	7.5	12	---	21	10	3.1	.88	.38	.34	.17
31	4.6	---	7.0	9.5	---	18	---	2.3	---	.34	.39	---
TOTAL	410.5	316.6	451.5	508.9	112.3	245.6	786	240.0	81.18	12.83	9.09	7.62
MEAN	13.2	10.6	14.6	16.4	4.01	7.92	26.2	7.74	2.71	.41	.29	.25
MAX	70	50	50	140	8.3	26	60	33	8.6	.75	.40	.42
MIN	1.5	3.2	7.0	4.4	2.5	2.2	10	2.3	.88	.18	.18	.17
CFSM	3.67	2.94	4.06	4.56	1.11	2.20	7.28	2.15	.75	.11	.08	.07
IN.	4.24	3.27	4.66	5.26	1.16	2.54	8.12	2.48	.84	.13	.09	.08

CAL YR 1977 TOTAL 2950.48 MEAN 8.08 MAX 96 MIN .13 CFSM 2.24 IN 30.48
WTR YR 1978 TOTAL 3182.12 MEAN 8.72 MAX 140 MIN .17 CFSM 2.42 IN 32.87

01096508 MERRIMACK RIVER AT NASHUA, NH

LOCATION.--Lat 42°45'48", long 71°26'36", Hillsborough County, Hydrologic Unit 01070002, on upstream side of Taylor Falls Bridge at east limits of Nashua, 50 ft (15 m) from left bank, and 0.3 mi (0.8 km) downstream from Nashua River.

DRAINAGE AREA.--3,480 mi² (9,013 km²), approximately.

PERIOD OF RECORD.--Water years 1974 to current year.

REMARKS.--When sampling, an attempt is made to exclude Nashua River water.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)
OCT											
17...	0900	61	6.2	9.0	11.5	30	3	10.4	25	88000	8800
31...	0900	60	6.5	5.0	10.5	15	1	10.2	15	--	--
NOV											
17...	1015	67	6.8	14.0	8.0	18	0	10.0	35	35000	44000
29...	1045	69	7.2	1.0	2.0	24	1	8.0	23	39000	2800
DEC											
28...	0930	68	8.0	-18.0	1.0	17	1	12.6	15	16000	1600
JAN											
17...	1000	54	8.4	-3.0	.0	29	2	12.6	15	K60000	K13000
31...	1000	54	7.5	-8.0	.0	30	2	12.2	13	6000	K100
FEB											
16...	1000	68	7.4	.0	1.0	25	2	13.6	13	K12000	1200
28...	0900	82	7.2	-7.0	1.0	20	4	12.0	15	15000	2600
MAR											
08...	1200	92	6.8	5.0	.0	20	2	12.8	19	7000	4000
27...	1000	82	6.6	6.0	2.0	40	2	12.1	10	18000	2500
APR											
06...	0830	68	6.9	3.0	3.0	20	3	13.1	30	7700	1000
19...	0900	48	6.6	7.0	7.0	20	2	9.4	20	K13000	1400
MAY											
04...	1010	58	7.9	20.0	10.0	20	2	6.7	20	21000	1200
23...	0945	48	7.7	24.5	16.0	30	2	5.8	20	13000	840
JUN											
13...	0900	50	7.8	24.0	20.5	30	2	8.8	30	63000	1700
27...	0900	70	7.4	21.0	21.5	25	1	7.1	20	92000	4300
JUL											
06...	1100	87	5.3	24.0	21.5	10	1	5.2	23	--	1900
19...	0945	97	6.8	27.0	19.0	4	0	5.3	26	31000	1100
AUG											
08...	0900	88	7.2	24.5	23.0	15	1	6.4	20	21000	1000
22...	0900	88	7.4	21.0	19.5	20	1	7.6	7	9400	460
SEP											
12...	0830	95	6.6	22.0	19.0	25	1	5.5	26	6100	2700
25...	0830	148	7.6	16.0	17.0	10	2	--	15	12000	K310

K, NON-IDEAL COLONY COUNT.

01096508 MERRIMACK RIVER AT NASHUA, NH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT											
17...	--	--	--	--	--	--	--	--	9	52	.09
31...	--	--	--	--	--	--	--	--	9	59	.15
NOV											
17...	--	--	--	--	--	--	--	--	4	37	.14
29...	--	--	--	--	--	--	--	--	6	48	.14
DEC											
28...	3.5	.8	10	0	8	.2	8.1	10	4	27	.16
JAN											
17...	--	--	--	--	--	--	--	--	0	54	.19
31...	--	--	--	--	--	--	--	--	9	51	.13
FEB											
16...	--	--	--	--	--	--	--	--	5	44	.20
28...	--	--	--	--	--	--	--	--	5	61	.22
MAR											
08...	5.1	.9	12	0	10	3.0	7.7	14	2	70	.26
27...	--	--	--	--	--	--	--	--	6	55	.17
APR											
06...	--	--	--	--	--	--	--	--	4	82	.17
19...	--	--	--	--	--	--	--	--	16	45	.11
MAY											
04...	--	--	--	--	--	--	--	--	21	52	.18
23...	--	--	--	--	--	--	--	--	3	44	.13
JUN											
13...	2.7	.5	7	0	6	.2	5.5	6.9	11	42	.13
27...	--	--	--	--	--	--	--	--	9	60	.21
JUL											
06...	--	--	--	--	--	--	--	--	3	60	.26
19...	--	--	--	--	--	--	--	--	3	62	.33
AUG											
08...	--	--	--	--	--	--	--	--	0	70	.35
22...	--	--	--	--	--	--	--	--	4	72	.24
SEP											
12...	--	--	--	--	--	--	--	--	44	65	.17
25...	5.0	1.2	16	0	13	.6	12	21	6	88	.51

01096508 MERRIMACK RIVER AT NASHUA, NH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	CHLOROPHYLL A PHYTOPLANKTON, UNCORR. (UG/L)	CHLOROPHYLL B PHYTOPLANKTON, UNCORR. (UG/L)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
OCT										
17...	.04	.28	.32	.41	.07	--	0	3.86	1.35	<10
31...	.07	.59	.66	.81	.09	--	1	.000	.000	<10
NOV										
17...	.08	.05	.13	.27	.05	--	0	--	--	<10
29...	.05	.36	.41	.55	.04	--	1	.000	.000	<10
DEC										
28...	.04	.34	.38	.54	.04	15	0	.000	.000	40
JAN										
17...	.07	.26	.33	.52	.03	--	0	1.23	1.06	<10
31...	.04	.16	.20	.33	.03	--	3	1.70	.754	10
FEB										
16...	.25	.37	.62	.82	.03	--	0	.342	.881	30
28...	.11	.38	.49	.71	.11	--	3	1.72	1.44	20
MAR										
08...	.20	.55	.75	1.0	.07	--	1	.000	.000	10
27...	.05	.28	.33	.50	.02	--	0	--	--	<10
APR										
06...	.14	.53	.67	.84	.02	--	1	--	--	20
19...	.08	.19	.27	.38	.03	--	1	.661	.000	<10
MAY										
04...	.28	.38	.66	.84	.03	--	2	.000	.000	10
23...	.12	.27	.39	.52	.03	--	0	.000	.000	<10
JUN										
13...	.22	.55	.77	.90	.04	0	0	.000	.000	10
27...	.29	.34	.63	.84	.07	--	1	3.42	.000	10
JUL										
06...	.14	.74	.88	1.1	.05	--	0	3.64	.000	10
19...	.29	.37	.66	.99	.10	--	0	5.87	1.55	10
AUG										
08...	.19	.47	.66	1.0	.08	--	1	6.07	.000	70
22...	.19	.68	.87	1.1	.09	--	0	7.88	1.39	20
SEP										
12...	.16	.27	.43	.60	.09	--	0	1.77	.135	10
25...	.46	.84	1.3	1.8	.50	0	0	7.12	.248	<10

DATE	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
DEC								
28...	.0	.00	.00	.0	.00	.00	.00	.00
MAR								
08...	.0	.00	.00	.0	.00	.00	.00	.00
SEP								
25...	.0	.00	.00	.0	.00	.00	.00	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)
DEC								
28...	.00	.00	.00	.00	.00	--	--	0
MAR								
08...	.00	.00	.00	.00	.00	--	--	0
SEP								
25...	.00	.00	.00	.00	.00	.00	.00	0

Reservoirs in Merrimack River basin

01077500 NEWFOUND LAKE on Newfound River, 1.7 mi (2.7 km) north of Bristol, NH, used for recreation and for storage of water for power, has usable capacity of 1,690,000,000 ft³ (47,900,000 m³). Records furnished by New Hampshire Water Resources Board.

01078500 FRANKLIN FALLS RESERVOIR on Pemigewasset River, 2 mi (3 km) north of Franklin, NH, completed in 1942, used for flood control, has usable capacity of 6,700,000,000 ft³ (190,000,000 m³). Records furnished by Corps of Engineers.

01080000 LAKE WINNIPESAUKEE on Winnipesaukee River (see p. 32).

01082500 EDWARD MACDOWELL RESERVOIR on Nubanusit Brook, at West Peterborough, NH, 2 mi (3 km) northwest of Peterborough, completed in 1950, used for flood control, has usable capacity of 558,000,000 ft³ (15,800,000 m³). Records furnished by Corps of Engineers.

01085400 HOPKINTON LAKE on Contoocook River, at West Hopkinton, NH, completed in 1962, used for flood control and recreation, has usable capacity of 3,084,000,000 ft³ (87,340,000 m³). Records furnished by Corps of Engineers.

01086500 BLACKWATER RESERVOIR on Blackwater River, at Swett's Mills, 1 mi (2 km) south of Webster, NH, completed in 1941, used for flood control, has usable capacity of 2,004,000,000 ft³ (56,750,000 m³). Records furnished by Corps of Engineers.

01090700 EVERETT LAKE on Piscataquog River, 1.3 mi (2.1 km) southeast of East Weare, NH, completed in 1962, used for flood control and recreation, has usable capacity of 3,768,000,000 ft³ (106,700,000 m³). Records furnished by Corps of Engineers.

Hopkinton and Everett Lakes, connected by a canal, are operated as a unit above elevation 400.00 ft (121.920 m). Diversion from Hopkinton Lake to Everett Lake in March 1968, April 1969, and March 1977.

MONTHEND USABLE CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

	Newfound Lake	Franklin Falls Reservoir	Edward MacDowell Reservoir
Sept. 30, 1977	1212	141.6	7.3
Oct. 31	971	122.0	7.9
Nov. 30	1044	128.5	11.5
Dec. 31	1026	108.9	13.0
Jan. 31, 1978	1173	154.6	129.8
Feb. 28	914	108.9	14.4
Mar. 31	1091	143.7	13.0
Apr. 30	1316	324.1	7.9
May 31	1511	126.3	7.9
June 30	1420	115.4	5.5
July 31	1259	115.4	10.8
Aug. 31	1189	115.4	10.1
Sept. 30	1098	82.8	4.9

	Hopkinton Lake	Blackwater Reservoir	Everett Lake
Sept. 30, 1977	20.6	1.0	49.8
Oct. 31	28.3	1.4	50.9
Nov. 30	33.4	2.9	52.6
Dec. 31	41.7	2.0	44.1
Jan. 31, 1978	69.5	9.0	98.5
Feb. 28	47.7	1.0	48.1
Mar. 31	72.1	11.8	56.0
Apr. 30	71.7	5.9	52.6
May 31	46.1	1.0	48.7
June 30	27.1	.8	47.0
July 31	27.0	.4	45.8
Aug. 31	11.5	.3	45.8
Sept. 30	8.8	.2	44.7

01127880 BIG BROOK NEAR PITTSBURG, NH

LOCATION.--Lat 45°08'06", long 71°12'23", Coos County, Hydrologic Unit 01080101, on left bank 10 ft (3 m) downstream from culvert on U.S. Highway 3, 0.3 mi (0.5 km) upstream from mouth, and 11 mi (18 km) northeast of Pittsburg.

DRAINAGE AREA.--6.36 mi² (16.47 km²).

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,680 ft (512 m), from topographic map.

REMARKS.--Records good except those for winter period and periods of no gage-height record Nov. 15 to Jan. 4, Mar. 2 to Apr. 3, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--14 years (water years 1965-78), 16.1 ft³/s (0.456 m³/s), 34.38 in/yr (873 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441 ft³/s (12.5 m³/s) May 3, 1967, gage height, 3.61 ft (1.100 m), from rating curve extended above 110 ft³/s (3.1 m³/s); maximum gage height, 5.02 ft (1.530 m) Dec. 27, 1969, ice jam; minimum discharge, about 0.90 ft³/s (0.025 m³/s) about Aug. 20, 21, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft³/s (5.1 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0030	241	6.83	3.63	1.106	May 9	2000	*298	8.44	3.93	1.198
Jan. 11	0130	ice jam		*4.53	1.381						

Minimum discharge, 1.3 ft³/s (0.037 m³/s) Aug. 22-24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	9.7	10	3.6	15	2.9	4.8	48	14	9.5	2.2	1.9
2	142	9.0	13	3.3	13	2.8	6.0	34	19	7.2	2.2	1.7
3	52	8.3	11	3.0	12	2.7	7.8	27	42	6.1	2.2	1.6
4	44	19	8.0	2.8	11	2.6	5.5	26	23	5.4	6.4	1.7
5	35	23	6.8	2.7	10	2.5	8.0	40	18	4.6	3.9	1.6
6	27	16	6.4	2.6	9.0	2.4	15	62	25	4.2	2.8	1.9
7	22	15	6.2	2.6	8.0	2.4	10	116	18	3.7	2.3	17
8	19	13	5.8	2.5	7.4	2.4	8.8	170	99	3.4	2.2	7.4
9	24	16	5.6	20	6.8	2.4	8.0	238	79	4.1	4.2	4.8
10	30	14	5.5	86	6.4	2.4	7.6	166	52	7.0	3.0	3.2
11	22	22	5.4	56	6.0	2.3	10	141	30	5.2	2.1	4.2
12	19	21	5.3	40	5.4	2.4	14	121	21	3.8	1.7	18
13	18	17	5.2	30	5.1	2.4	17	111	19	2.8	1.7	10
14	16	16	5.1	25	4.8	2.4	27	112	37	2.6	1.7	5.9
15	29	14	6.0	20	4.5	2.4	19	94	36	2.6	1.6	4.6
16	26	17	7.2	17	4.2	2.5	16	68	23	4.9	1.5	4.9
17	70	22	6.8	14	4.1	2.8	16	62	17	5.1	1.5	4.6
18	81	30	6.2	12	3.9	2.7	21	46	15	3.3	1.7	3.6
19	45	27	5.6	11	3.8	2.6	31	35	17	2.6	1.5	3.0
20	42	24	5.2	10	3.7	2.6	38	30	22	2.6	1.6	2.6
21	34	20	4.9	9.0	3.7	2.7	70	56	26	2.6	1.6	3.9
22	30	27	4.7	8.4	3.6	3.0	47	38	21	6.4	1.4	6.6
23	28	19	4.8	7.8	3.5	3.7	47	24	19	12	1.3	4.5
24	22	16	5.2	7.4	3.4	4.0	46	20	18	14	2.1	3.8
25	20	13	8.0	7.0	3.3	5.6	51	18	15	6.5	2.2	3.3
26	18	12	13	20	3.2	5.2	73	15	12	4.2	1.7	3.0
27	16	11	9.0	56	3.1	4.8	103	13	9.6	4.4	1.9	2.6
28	14	9.4	7.0	40	3.0	4.9	124	11	10	5.7	2.6	2.6
29	13	8.6	6.6	30	---	5.1	118	9.2	11	3.7	7.1	3.1
30	11	7.8	4.7	22	---	5.2	83	8.8	14	3.3	3.7	2.8
31	11	---	4.0	18	---	4.9	---	9.2	---	2.3	2.5	---
TOTAL	1062	496.8	208.2	589.7	170.9	99.7	1052.5	1969.2	781.6	155.8	76.1	140.4
MEAN	34.3	16.6	6.72	19.0	6.10	3.22	35.1	63.5	26.1	5.03	2.45	4.68
MAX	142	30	13	86	15	5.6	124	238	99	14	7.1	18
MIN	11	7.8	4.0	2.5	3.0	2.3	4.8	8.8	9.6	2.3	1.3	1.6
CFSM	5.39	2.61	1.06	2.99	.96	.51	5.52	9.98	4.10	.79	.39	.74
IN.	6.21	2.91	1.22	3.45	1.00	.58	6.16	11.52	4.57	.91	.45	.82

CAL YR 1977 TOTAL 6696.2 MEAN 18.3 MAX 164 MIN 1.6 CFSM 2.88 IN 39.16
WTR YR 1978 TOTAL 6802.9 MEAN 18.6 MAX 238 MIN 1.3 CFSM 2.93 IN 39.78

01128500 CONNECTICUT RIVER AT FIRST CONNECTICUT LAKE, NEAR PITTSBURG, NH

LOCATION.--Lat 45°05'14", long 71°17'34", Coos County, Hydrologic Unit 01080101, on right bank 0.2 mi (0.3 km) downstream from dam at First Connecticut Lake, 6 mi (10 km) northeast of Pittsburg, and at mile 392.0 (630.7 km).

DRAINAGE AREA.--83.0 mi² (215.0 km²).

PERIOD OF RECORD.--April 1917 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1001: 1931-39. WSP 1231: 1921-23(M), 1925-26.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (475 m), from topographic map. Prior to Jan. 1, 1918, discharge computed from flow through gates at dam 0.2 mi (0.3 km) upstream. Jan. 1 to July 28, 1918, non-recording gage at present site and datum.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Flow completely regulated by First Connecticut and Second Connecticut Lakes (Reservoirs in Connecticut River basin). An observation of water temperature and specific conductance was made during the year.

AVERAGE DISCHARGE.--61 years, 198 ft³/s (5.607 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft³/s (204 m³/s) June 16, 1943, gage height, 6.25 ft (1.905 m), from rating curve extended above 1,900 ft³/s (54 m³/s) on basis of computation of flow over dam at gage height 6.12 ft (1.865 m); maximum gage height, 6.35 ft (1.935 m) May 5, 1925, backwater from logging operations; minimum daily discharge, 3.1 ft³/s (0.088 m³/s) Mar. 17, 18, 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,590 ft³/s (45.0 m³/s) Dec. 5, gage height, 4.21 ft (1.283 m); minimum daily, 4.3 ft³/s (0.12 m³/s) Apr. 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	304	695	1170	109	231	141	4.4	6.7	12	101	101	154
2	108	686	1150	106	230	140	4.4	6.7	13	101	101	154
3	108	677	1150	71	227	136	4.4	6.7	17	101	99	154
4	110	722	1130	71	222	139	4.3	6.7	16	109	99	154
5	111	450	1330	70	216	144	4.4	7.0	16	109	99	153
6	113	189	1460	70	170	136	4.4	7.3	251	109	99	153
7	371	189	1390	70	155	135	4.4	7.6	514	109	99	153
8	540	189	1390	70	154	128	4.4	7.9	514	109	99	152
9	537	189	1450	73	164	106	4.5	8.6	610	109	99	152
10	535	189	1250	162	154	63	4.6	8.7	610	109	99	151
11	532	189	1160	218	155	63	4.8	9.2	594	109	99	151
12	530	189	863	78	154	58	4.9	9.7	594	109	99	151
13	528	189	590	184	154	4.9	4.9	10	586	104	99	151
14	526	189	434	256	155	4.5	4.9	10	578	104	99	151
15	527	416	328	254	154	4.4	4.9	11	309	104	97	151
16	507	586	264	251	154	4.4	4.9	12	309	104	96	151
17	507	702	181	182	153	4.4	4.9	12	309	104	97	151
18	507	699	167	154	152	4.4	5.1	12	309	101	98	151
19	507	699	166	154	153	4.4	5.2	12	309	101	97	151
20	507	698	123	155	154	4.4	5.5	12	309	101	96	151
21	507	741	106	154	154	4.4	5.5	13	309	101	132	151
22	507	882	106	155	136	4.4	5.7	13	309	101	156	245
23	507	968	106	154	132	4.4	5.7	16	309	101	156	354
24	749	960	106	152	131	4.4	5.7	16	309	101	155	353
25	1020	1040	106	150	138	4.4	5.8	15	309	101	154	352
26	1020	1080	106	150	134	4.4	6.3	14	254	101	154	349
27	1010	1060	106	191	131	4.4	6.3	14	254	101	154	349
28	1010	1040	107	230	141	4.4	6.8	14	109	101	154	345
29	1010	1010	106	232	---	4.4	6.9	15	109	101	154	345
30	960	1070	106	233	---	4.4	6.8	14	104	101	154	345
31	704	---	106	232	---	4.4	---	12	---	101	154	---
TOTAL	17019	18582	18313	4791	4558	1473.2	155.7	339.8	9154	3218	3648	6228
MEAN	549	619	591	155	163	47.5	5.19	11.0	305	104	118	208
MAX	1020	1080	1460	256	231	144	6.9	16	610	109	156	354
MIN	108	189	106	70	131	4.4	4.3	6.7	12	101	96	151

CAL YR 1977 TOTAL 104142.9 MEAN 285 MAX 1460 MIN 7.3
WTR YR 1978 TOTAL 87479.7 MEAN 240 MAX 1460 MIN 4.3

NOTE.--No gage-height record Oct. 16 to Nov. 13, July 5 to Aug. 15.

01129200 CONNECTICUT RIVER BELOW INDIAN STREAM, NEAR PITTSBURG, NH

LOCATION.--Lat 45°02'25", long 71°26'37", Coos County, Hydrologic Unit 01080101, on right bank 1,200 ft (350 m) downstream from Indian Stream, 2.5 mi (4.0 km) west of Pittsburg, and at mile 376.5 (605.8 km).

DRAINAGE AREA.--254 mi² (658 km²).

PERIOD OF RECORD.--Discharge: October 1956 to current year.

REVISED RECORDS.--WDR MA-NH-RI-VT-73-1: 1958, 1960(M), 1969(M).

GAGE.--Water-stage recorder. Altitude of gage is 1,150 ft (351 m), from topographic map.

REMARKS.--Records good. Flow regulated by First Connecticut and Second Connecticut Lakes and Lake Francis 3.7 mi (6.0 km) upstream (Reservoirs in Connecticut River basin). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--22 years, 579 ft³/s (16.40 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,080 ft³/s (116 m³/s) Nov. 29, 1959, gage height, 7.07 ft (2.155 m), from rating curve extended above 2,600 ft³/s (73.6 m³/s); minimum daily, 30 ft³/s (0.850 m³/s) Aug. 6, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,620 ft³/s (74.2 m³/s) May 10, gage height, 5.70 ft (1.737 m); minimum daily, 99 ft³/s (2.80 m³/s) Mar. 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1100	835	1370	394	1190	795	108	680	270	606	282	321
2	1410	949	1380	376	1210	774	155	477	250	589	280	318
3	744	1020	1380	376	1140	620	465	380	700	439	278	315
4	803	984	1350	450	1140	535	220	338	400	322	287	315
5	1210	619	1320	560	1120	585	151	406	269	315	291	315
6	1340	511	1540	561	1110	708	191	659	394	308	286	313
7	1270	635	1630	581	1110	565	205	859	516	305	282	326
8	1230	688	1630	602	1140	630	179	1210	870	300	281	265
9	1130	696	1610	518	1090	630	151	1840	1050	302	282	228
10	992	695	1410	549	953	630	193	2190	815	311	282	216
11	1040	764	1340	646	826	617	158	1200	779	302	281	211
12	1070	717	1350	659	823	624	290	1100	851	293	278	255
13	1290	555	860	684	842	630	373	1010	990	290	278	287
14	1420	495	658	661	891	624	488	888	1050	287	278	238
15	1380	723	408	657	809	280	453	861	1110	286	301	223
16	1300	979	372	629	803	148	369	650	1130	286	323	216
17	1450	1160	455	762	795	182	342	536	1030	305	327	218
18	1700	1860	564	856	808	202	376	440	986	297	327	215
19	1530	1380	660	850	855	216	501	335	1070	287	324	210
20	1600	1300	760	924	811	220	690	279	827	286	323	209
21	1640	1310	830	1000	797	223	910	332	991	286	323	208
22	1570	1480	830	1040	797	105	715	472	1090	300	321	209
23	1580	1510	830	1070	816	126	677	310	1070	312	319	221
24	1630	1480	823	1000	816	175	634	230	1030	348	326	214
25	1760	1450	816	964	802	362	635	199	998	314	325	209
26	1730	1430	844	635	788	261	802	165	1060	293	323	207
27	1500	1390	865	666	788	113	1040	145	1130	286	321	206
28	1370	1370	760	935	802	99	1230	131	644	286	321	206
29	1360	1360	604	1040	---	113	1290	118	408	286	327	206
30	1360	1350	475	1100	---	121	1140	101	627	286	327	206
31	1100	---	390	1200	---	111	---	118	---	283	323	---
TOTAL	41609	31695	30114	22945	25872	12024	15131	18659	24405	9996	9427	7306
MEAN	1342	1057	971	740	924	388	504	602	814	322	304	244
MAX	1760	1860	1630	1200	1210	795	1290	2190	1130	606	327	326
MIN	744	495	372	376	788	99	108	101	250	283	278	206

CAL YR 1977 TOTAL 252119 MEAN 691 MAX 1860 MIN 47
WTR YR 1978 TOTAL 249183 MEAN 683 MAX 2190 MIN 99

01129300 HALLS STREAM NEAR EAST HEREFORD, QUEBEC
(International gaging station)

LOCATION.--Lat 45°02'41", long 71°29'54", Compton County, on right bank opposite Alain's farm, 2.5 mi (4.0 km) downstream from East Hereford, and 3.7 mi (6.0 km) upstream from mouth.

DRAINAGE AREA.--85 mi² (220 km²).

PERIOD OF RECORD.--Discharge: October 1962 to current year in reports of Geological Survey. October 1948 to September 1962 available from Water Survey of Canada, Department of the Environment.

GAGE.--Water-stage recorder. Altitude of gage is 1,090 ft (332 m), from topographic map. Prior to Dec. 13, 1962, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period, which are fair. Several observations of water temperature were made during the year.

COOPERATION.--This station is maintained by Canada under agreement with the United States.

AVERAGE DISCHARGE.--30 years, 171 ft³/s (4.843 m³/s), 27.32 in/yr (694 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft³/s (127 m³/s) June 30, 1973, gage height, 13.07 ft (3.984 m); minimum daily, 4 ft³/s (0.11 m³/s) Sept. 10, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1943 reached a discharge of 21,000 ft³/s (590 m³/s) by slope-area method at site 0.5 mi (0.8 km) downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,070 ft³/s (58.6 m³/s) Oct. 2, gage height, 9.13 ft (2.783 m); minimum daily, 7.8 ft³/s (0.22 m³/s) Aug. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	651	76	121	92	165	40	64	545	98	68	19	12
2	1410	73	167	79	156	38	75	373	88	44	17	9.3
3	584	72	141	72	140	36	105	303	314	41	16	9.8
4	554	203	112	66	130	35	115	305	120	36	17	8.5
5	373	338	83	62	120	34	169	516	99	31	20	8.5
6	269	193	81	62	110	32	242	745	250	29	16	8.0
7	212	211	81	60	105	30	232	848	125	25	14	40
8	171	156	75	57	100	28	181	966	800	24	14	32
9	329	162	71	398	94	29	146	1400	533	23	14	19
10	494	148	71	957	88	29	137	1270	393	23	14	15
11	273	796	73	608	86	28	168	722	213	24	14	13
12	239	470	76	400	80	29	509	532	142	21	13	60
13	242	288	76	300	75	29	611	433	130	19	12	54
14	187	232	72	250	70	28	800	329	530	17	11	29
15	518	194	82	220	66	28	549	255	441	22	11	22
16	354	217	95	180	63	29	387	204	212	21	11	18
17	871	515	94	170	52	33	385	197	140	18	11	18
18	709	1020	90	150	50	32	527	166	120	17	10	18
19	446	484	76	140	47	31	786	136	265	15	10	16
20	381	297	70	130	45	31	1030	120	548	16	9.5	13
21	323	250	67	120	45	32	1150	313	400	15	8.9	12
22	292	345	62	110	44	35	902	237	283	28	8.4	17
23	302	231	64	105	42	42	894	145	225	29	7.8	21
24	215	206	65	100	40	47	856	117	186	55	9.4	18
25	179	191	82	98	41	69	893	101	142	30	13	16
26	155	170	175	133	42	66	1130	83	104	23	13	15
27	137	146	166	695	40	64	1290	71	80	21	12	13
28	118	122	161	525	38	65	1420	59	86	22	11	13
29	105	119	152	363	---	67	1320	53	93	22	16	12
30	93	95	112	249	---	68	1040	47	90	22	16	13
31	81	---	90	194	---	65	---	42	---	21	13	---
TOTAL	11267	8020	3003	7145	2174	1249	18113	11633	7250	822	402.0	573.1
MEAN	363	267	96.9	230	77.6	40.3	604	375	242	26.5	13.0	19.1
MAX	1410	1020	175	957	165	69	1420	1400	800	68	20	60
MIN	81	72	62	57	38	28	64	42	80	15	7.8	8.0
CFSM	4.27	3.14	1.14	2.71	.91	.47	7.11	4.41	2.85	.31	.15	.23
IN.	4.93	3.51	1.31	3.13	.95	.55	7.93	5.09	3.17	.36	.18	.25

CAL YR 1977 TOTAL 67646.0 MEAN 185 MAX 2350 MIN 18 CFSM 2.18 IN 29.60
WTR YR 1978 TOTAL 71651.1 MEAN 196 MAX 1420 MIN 7.8 CFSM 2.31 IN 31.36

01129500 CONNECTICUT RIVER AT NORTH STRATFORD, NH

LOCATION.--Lat 44°44'56", long 71°37'50", Coos County, Hydrologic Unit 01080101, on left bank at North Stratford, 400 ft (100 m) downstream from Nulhegan River, and at mile 344.5 (554.3 km).

DRAINAGE AREA.--799 mi² (2,069 km²).

PERIOD OF RECORD.--Discharge: August 1930 to current year.
Water-quality records: Water year 1957.

REVISED RECORDS.--WSP 781: 1934(M). WSP 891: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 880.17 ft (268.276 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes and Lake Francis (Reservoirs in Connecticut River basin) 36 mi (58 km) upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--48 years, 1,589 ft³/s (45.00 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,700 ft³/s (813 m³/s) June 16, 1943, gage height, 14.67 ft (4.471 m) from rating curve extended above 15,000 ft³/s (420 m³/s); maximum gage height, 16.66 ft (5.078 m) Mar. 13, 1936 (ice jam); minimum daily discharge, 108 ft³/s (3.06 m³/s) Sept. 29, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,400 ft³/s (323 m³/s) May 10, gage height, 9.30 ft (2.835 m); maximum gage height, 12.69 ft (3.594 m) Apr. 14 (ice jam); minimum daily discharge, 326 ft³/s (9.23 m³/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3720	1550	2310	1050	2300	1100	780	5010	1080	1470	468	447
2	7770	1510	2570	890	2200	1100	880	3280	1060	1280	457	434
3	5730	1630	2490	940	2000	890	1290	2540	2290	1160	429	425
4	3660	2010	2320	1100	1950	870	960	2270	1900	893	482	431
5	3380	2890	2130	1100	1850	920	1020	2840	1220	769	492	417
6	3020	1990	2340	1050	1750	1000	1350	4250	1540	677	443	400
7	2640	2210	2370	1100	1750	780	1450	5110	1440	676	425	759
8	2330	1980	2310	1100	1800	940	1300	6540	2810	612	417	698
9	2820	2030	2250	1150	1700	920	1200	8870	6480	606	611	524
10	4670	1930	2030	2550	1500	920	1050	10800	5170	653	558	417
11	3240	4560	1910	3150	1400	900	1100	7860	2990	612	454	369
12	2590	4880	1950	2700	1400	920	1650	5640	2240	567	413	619
13	2740	2930	1450	2300	1400	920	2600	4860	1990	534	405	731
14	2640	2260	1400	2050	1400	910	3250	4170	3550	511	397	564
15	3680	1930	1200	1950	1250	620	3300	3670	3740	483	384	445
16	3600	2250	1500	1750	1250	630	2950	2950	2760	505	416	435
17	4880	3060	1600	1750	1250	740	2610	3420	2190	553	436	410
18	5940	5990	1500	1700	1250	620	2760	2770	1970	547	441	378
19	4500	4940	1500	1600	1300	570	3660	2130	3200	494	427	332
20	3690	3620	1500	1700	1200	580	4870	1810	5000	478	421	338
21	3560	3040	1550	1700	1200	550	6190	2610	4310	474	421	347
22	3190	3430	1550	1750	1200	500	5540	2940	3520	580	414	476
23	3220	3230	1550	1700	1200	740	5450	1960	3070	588	407	412
24	2860	2980	1500	2650	1200	980	5320	1530	2500	684	476	389
25	2880	2920	1500	1600	1200	1050	5140	1300	2190	602	594	364
26	2770	2740	1850	1400	1200	830	5860	1070	1920	521	496	366
27	2590	2670	2000	2400	1200	660	7260	958	1900	476	467	335
28	2240	2320	1650	3050	1150	690	8300	833	3630	558	450	337
29	2150	2360	1350	2900	---	830	8620	737	1710	500	631	336
30	2080	2190	1150	2650	---	860	7790	729	1670	492	577	326
31	2020	---	1050	2450	---	820	---	817	---	476	504	---
TOTAL	106800	84030	55330	56930	41450	25360	105500	106274	81040	20031	14413	13261
MEAN	3445	2801	1785	1836	1480	818	3517	3428	2701	646	465	442
MAX	7770	5990	2570	3150	2300	1100	8620	10800	6480	1470	631	759
MIN	2020	1510	1050	890	1150	500	780	729	1060	474	384	326

CAL YR 1977 TOTAL 690792 MEAN 1893 MAX 11100 MIN 203
WTR YR 1978 TOTAL 710419 MEAN 1946 MAX 10800 MIN 326

01130000 UPPER AMMONOOSUC RIVER NEAR GROVETON, NH

LOCATION.--Lat 44°37'30", long 71°28'10", Coos County, Hydrologic Unit 01080101, on left bank 75 ft (23 m) upstream from highway bridge, 0.2 mi (0.3 km) downstream from Nash Stream, and 2.8 mi (4.5 km) northeast of Groveton.
DRAINAGE AREA.--232 mi^2 (601 km^2).
PERIOD OF RECORD.--Discharge: August 1940 to current year.
Water-quality records: Water year 1955.
GAGE.--Water-stage recorder. Altitude of gage is 920 ft (280 m), from topographic map.
REMARKS.--Records fair except those for winter period, period of no gage-height record, Nov. 14 to Jan. 3 and period of shifting control May 11 to Sept. 30, which are poor. Prior to May 21, 1969, some regulation by pond 9 mi (14 km) upstream on Nash Stream. Small diversion upstream for municipal supply of Berlin. Several observations of water temperature and specific conductance were made during the year.
AVERAGE DISCHARGE.--38 years, 478 ft^3/s (13.54 m^3/s), 27.98 in/yr (711 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,100 ft^3/s (683 m^3/s) May 20, 1969, gage height, 12.01 ft (3.661 m) in gage well, 12.85 ft (3.917 m), from floodmarks, from rating curve extended above 5,600 ft^3/s (160 m^3/s) on basis of contracted-opening measurement of peak flow, caused by failure of dam on Nash Stream; minimum, 32 ft^3/s (0.91 m^3/s) Sept. 14, 1948.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of about 10.6 ft (3.23 m), from information by local residents.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,900 ft^3/s (82 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 10	--	5500	160	ice jam		May 10	0430	*6510	184	7.56	2.304
Jan. 26	--	4800	140	ice jam		May 18	0230	3940	112	6.40	1.951
Jan. 27	0930	ice jam		*8.22	2.505	May 21	1400	2910	82.4	5.82	1.774

Minimum discharge, 58 ft^3/s (1.64 m^3/s) Aug. 23, 24.

CORRECTIONS.--Corrected monthly diversions, in cubic feet per second, for municipal supply of Berlin for water year 1977 are given below. These figures supersede those published in report for 1977.

Month	Diversion	Month	Diversion	Month	Diversion
October 1976	2.97	February 1977	3.50	June 1977	2.86
November 1976	3.67	March 1977	3.16	July 1977	2.83
December 1976	3.05	April 1977	3.23	August 1977	3.39
January 1977	3.87	May 1977	3.42	September 1977	2.52

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	752	481	550	240	520	210	340	1670	990	429	135	89
2	1710	475	720	230	470	210	380	1030	729	385	126	76
3	1360	463	500	210	440	205	450	778	773	352	114	72
4	853	512	450	200	410	205	410	715	738	314	281	72
5	724	659	370	195	390	200	460	977	639	287	365	64
6	650	583	330	190	370	200	512	1330	630	265	224	64
7	607	633	300	185	360	195	495	1620	578	238	175	256
8	570	563	270	180	350	195	450	2460	828	220	184	276
9	782	752	250	1000	340	190	434	4210	1460	251	320	159
10	1420	714	240	3500	330	190	429	5710	1230	238	251	114
11	1060	659	230	1500	320	190	433	4490	792	220	179	100
12	762	650	220	1000	310	190	805	3440	656	202	126	270
13	692	590	210	800	300	190	950	3060	578	175	120	392
14	642	540	200	700	295	190	1200	2740	674	163	126	220
15	705	520	250	600	290	250	957	2650	711	242	114	159
16	714	600	700	560	285	230	793	2340	587	260	100	163
17	1630	800	500	520	280	210	710	3270	519	265	91	139
18	2560	1000	400	480	270	200	757	3420	485	256	91	114
19	1390	700	320	460	260	190	886	2170	613	206	86	100
20	938	600	290	440	250	210	1190	1790	1340	167	76	86
21	832	560	260	420	245	250	1410	2430	1150	155	70	78
22	743	900	350	400	240	380	1330	2180	939	309	66	81
23	705	700	300	190	235	350	1440	1390	846	251	60	83
24	659	600	270	180	230	330	1430	1050	674	309	97	83
25	624	560	260	1000	230	310	1390	920	578	233	224	76
26	590	600	640	3300	225	290	1470	837	502	167	155	81
27	570	640	450	1500	220	280	1920	792	460	139	108	76
28	550	500	370	1000	215	350	2450	729	639	197	91	74
29	531	450	330	800	---	410	2800	674	562	175	167	70
30	512	420	270	640	---	370	2710	692	493	179	171	68
31	499	---	260	580	---	360	---	828	---	159	111	---
TOTAL	27336	18424	11060	23200	8680	7730	31391	62392	22393	7408	4604	3755
MEAN	882	614	357	748	310	249	1046	2013	746	239	149	125
MAX	2560	1000	720	3500	520	410	2800	5710	1460	429	365	392
MIN	499	420	200	180	215	190	340	674	460	139	60	64
CFSM	3.80	2.65	1.54	3.22	1.34	1.07	4.51	8.68	3.22	1.03	.64	.54
IN.	4.38	2.95	1.77	3.72	1.39	1.24	5.03	10.00	3.59	1.19	.74	.60
(†)	3.00	2.58	2.70	3.55	3.25	3.08	3.16	3.65	2.84	3.42	2.87	2.93

CAL YR 1977 TOTAL 196882 MEAN 539 MAX 3960 MIN 60 CFSM 2.32 IN 31.57
WTR YR 1978 TOTAL 228373 MEAN 626 MAX 5710 MIN 60 CFSM 2.70 IN 36.62

† Diversion, in cubic feet per second, for municipal supply of Berlin; records furnished by city of Berlin.

01131500 CONNECTICUT RIVER NEAR DALTON, NH

LOCATION.--Lat 44°24'36", long 71°43'16", Coos County, Hydrologic Unit 01080101, on left bank 250 ft (76 m) upstream from highway bridge, 1,200 ft (350 m) downstream from dam of Gilman Paper Co., 1.2 mi (1.9 km) downstream from Dalton, and at mile 300.1 (482.9 km).

DRAINAGE AREA.--1,514 mi² (3,921 km²).

PERIOD OF RECORD.--Discharge: March 1927 to current year. Published as "at Waterford, Vt." 1927-35. Records published for both sites January to September 1935.
Water-quality records: Water years 1953, 1971.

REVISED RECORDS.--WSP 891: Drainage area. WSP 1231: 1935. WSP 1301: 1928-35(M).

GAGE.--Water-stage recorder. Datum of gage is 799.89 ft (243.806 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1935, nonrecording gage at bridge 10.5 mi (16.9 km) downstream at mean sea level. Jan. 1, 1935, to June 29, 1937, nonrecording gage at bridge 250 ft (76 m) downstream at present datum. Since June 2, 1961, auxiliary water-stage recorder 10.8 mi (17.4 km) downstream from base gage. July 11, 1956, to June 1, 1961, auxiliary nonrecording gage read hourly at same site.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis (Reservoirs in Connecticut River basin), and other reservoirs. These reservoirs have a combined usable capacity of about 8,300,000,000 ft³ (240,000,000 m³). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--51 years, 2,922 ft³/s (82.75 m³/s), adjusted to drainage area at present site.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,300 ft³/s (1,370 m³/s) Mar. 20, 1936, gage height, 25.6 ft (7.80 m); minimum daily, 115 ft³/s (3.26 m³/s) Oct. 3, 1937.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,800 ft³/s (532 m³/s) May 11, gage height, 17.35 ft (5.288 m); minimum daily, 339 ft³/s (9.60 m³/s) Sept. 5.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7510	2950	3500	1900	3760	1500	1690	13900	2640	3000	1050	931
2	10900	2670	4130	1590	3480	1500	1780	9930	2740	2560	833	826
3	10400	2530	4310	1690	3230	1400	2080	6770	2810	2190	833	819
4	7150	2630	3920	1860	2980	1400	2190	5480	4260	2030	868	420
5	5830	3860	3530	1760	2800	1300	2230	5410	3140	1690	1320	339
6	5250	4100	3240	1750	2660	1300	2860	6820	2710	1550	1210	744
7	4620	3720	3230	1740	2640	1200	3100	8120	2750	1350	896	770
8	4080	3800	3200	1710	2630	1300	2860	9040	3180	1310	826	875
9	4620	3720	2980	2090	2500	1300	2600	12000	6280	1180	1180	1080
10	8440	4130	2960	5220	2400	1300	2120	16300	9360	1100	1400	1080
11	7790	4080	2620	6370	2300	1300	2430	18400	7330	1320	966	840
12	6230	6910	2730	5380	2200	1300	3370	16100	4940	1200	833	670
13	5110	6330	2670	4460	2100	1300	5450	12600	3820	1180	826	770
14	4790	4500	2640	3870	2000	1300	6760	10500	4490	854	826	1280
15	4890	3650	2510	3610	1900	1400	7100	9240	6100	819	826	1360
16	6050	3280	2970	3320	1900	1400	6420	8300	5510	840	826	780
17	7180	3700	3030	2980	1900	1450	5720	8240	4120	903	798	770
18	10900	5840	2630	2680	1800	1140	5610	9120	3250	1020	751	770
19	10300	7700	2440	2650	1800	1020	6540	7420	3730	1180	679	699
20	7960	6580	2420	2630	1800	1040	8460	5910	9220	917	679	516
21	6550	5270	2450	2550	1700	980	11200	5770	9780	826	679	510
22	5890	5410	2490	2610	1700	1130	11600	7370	8280	896	672	504
23	5410	5590	2500	2540	1700	1520	11000	6230	7600	1270	686	725
24	5080	5010	2390	2530	1700	2000	10700	4640	6180	1180	686	705
25	4660	4820	2390	2500	1700	1880	10400	3760	4900	1260	692	634
26	4460	4620	3160	2740	1800	1680	10100	3230	4030	1160	770	542
27	4280	4640	3500	4640	1700	1520	11400	2860	3410	819	826	581
28	3910	4040	2940	5590	1600	1490	12900	2540	3840	938	826	569
29	3540	3720	2440	5270	---	1760	14300	2160	5170	980	812	530
30	3220	3500	2180	4600	---	1830	15000	1890	3520	966	819	530
31	2990	---	2030	4030	---	1770	---	2140	---	960	1130	---
TOTAL	189990	133300	90130	98860	62380	43710	199970	242190	149090	39448	27024	22169
MEAN	6129	4443	2907	3189	2228	1410	6666	7813	4970	1273	872	739
MAX	10900	7700	4310	6370	3760	2000	15000	18400	9780	3000	1400	1360
MIN	2990	2530	2030	1590	1600	980	1690	1890	2640	819	672	339

CAL YR 1977 TOTAL 1239414 MEAN 3396 MAX 17900 MIN 478
WTR YR 1978 TOTAL 1298261 MEAN 3557 MAX 18400 MIN 339

01133000 EAST BRANCH PASSUMPSIC RIVER NEAR EAST HAVEN, VT

LOCATION.--Lat 44°38'02", long 71°53'53", Caledonia County, Hydrologic Unit 01080102, on right bank in Burke, 0.5 mi (0.8 km) upstream from Flower Brook, 2.1 mi (3.4 km) south of East Haven, and 8.4 mi (13.5 km) upstream from mouth.

DRAINAGE AREA.--53.8 mi² (139.3 km²).

PERIOD OF RECORD.--Discharge: July 1939 to October 1945, October 1948 to current year. Prior to October 1951, published as Passumpsic River near East Haven.
Water-quality records: Water year 1957.

REVISED RECORDS.--WSP 1141: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 943.88 ft (287.695 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1973, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records fair except those for winter period, which are poor. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--36 years, 106 ft³/s (3.002 m³/s), 26.76 in/yr (680 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,450 ft³/s (126 m³/s) June 30, 1973, gage height, 11.45 ft (3.490 m), present datum, from floodmarks in gage well, from rating curve extended above 1,600 ft³/s (45 m³/s) on basis of slope-area measurement of peak flow; minimum, 13 ft³/s (0.37 m³/s) Sept. 1-5, 1953, Aug. 21, 22, 1975.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in November 1927 reached a stage of about 14.6 ft (4.45 m), present datum, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (23 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 13	2200	ice jam		*8.36	2.548	May 10	0100	*855	24.2	5.73	1.747

Minimum discharge, 17 ft³/s (0.48 m³/s) Aug. 23, 24, Sept. 5, 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	306	82	115	82	170	58	65	294	145	90	40	26
2	528	78	148	77	155	55	110	225	106	79	38	23
3	251	110	131	74	150	52	80	193	99	72	33	20
4	202	160	117	70	140	51	55	193	88	66	53	20
5	164	180	106	67	135	49	160	281	88	61	41	19
6	142	145	90	65	130	48	115	354	105	57	34	18
7	129	125	80	64	120	47	85	388	81	50	34	50
8	113	110	75	62	115	47	70	467	200	49	50	38
9	240	100	70	450	100	46	61	692	455	52	81	29
10	337	150	69	325	90	45	63	621	255	57	51	26
11	190	400	68	230	82	44	87	412	148	49	37	24
12	167	360	67	190	78	45	208	337	117	43	31	79
13	161	200	70	165	76	43	176	297	100	39	32	50
14	136	160	90	150	73	46	209	261	240	38	30	33
15	233	128	150	140	70	62	142	231	195	39	27	30
16	174	133	290	130	68	50	122	200	132	49	24	37
17	412	211	225	120	66	47	132	215	105	67	26	31
18	315	375	150	105	65	60	159	181	113	47	25	26
19	209	238	130	100	66	54	217	164	190	40	23	24
20	172	174	115	95	67	46	315	147	315	38	20	21
21	148	161	105	90	68	40	402	276	294	36	20	22
22	142	211	96	87	69	110	308	206	213	49	19	26
23	140	158	93	84	68	70	313	154	166	78	17	24
24	124	156	87	82	65	56	322	137	138	101	47	21
25	115	153	90	80	63	80	349	124	118	54	60	21
26	110	148	300	100	61	50	412	113	100	41	30	22
27	105	130	200	350	60	52	509	102	93	39	27	22
28	98	120	150	310	59	64	593	94	213	77	28	22
29	94	110	120	250	---	56	577	86	135	51	56	24
30	90	100	100	215	---	48	491	81	115	60	36	22
31	85	---	90	190	---	45	---	106	---	46	29	---
TOTAL	5832	5066	3787	4599	2529	1666	6907	7632	4862	1714	1099	850
MEAN	188	169	122	148	90.3	53.7	230	246	162	55.3	35.5	28.3
MAX	528	400	300	450	170	110	593	692	455	101	81	79
MIN	85	78	67	62	59	40	55	81	81	36	17	18
CFSM	3.49	3.14	2.27	2.75	1.68	1.00	4.28	4.57	3.01	1.03	.66	.53
IN.	4.03	3.50	2.62	3.18	1.75	1.15	4.78	5.28	3.36	1.19	.76	.59

CAL YR 1977 TOTAL 44685 MEAN 122 MAX 940 MIN 19 CFSM 2.27 IN 30.90
WTR YR 1978 TOTAL 46543 MEAN 128 MAX 692 MIN 17 CFSM 2.38 IN 32.18

01134500 MOOSE RIVER AT VICTORY, VT

LOCATION.--Lat 44°30'42", long 71°50'13", Essex County, Hydrologic Unit 01080102, on right bank at Victory, 2.7 mi (4.3 km) upstream from highway bridge.

DRAINAGE AREA.--75.2 mi² (121.0 km²).

PERIOD OF RECORD.--January 1947 to current year.
Water-quality records: Water year 1957.

REVISED RECORDS.--WSP 1381: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,103.99 ft (336.496 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records good except those for winter period, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--31 years, 142 ft³/s (4.021 m³/s), 25.64 in/yr (651 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,340 ft³/s (123 m³/s) July 1, 1973, gage height, 12.04 ft (3.670 m); minimum, 2.6 ft³/s (0.10 m³/s) Aug. 21, 22, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	1900	1080	30.6	7.69	2.344	Apr. 29	0800	1260	35.7	8.06	2.457
Nov. 12	0300	1010	28.6	7.55	2.301	May 10	1000	*1460	41.3	8.48	2.585

Minimum discharge, 7.7 ft³/s (0.22 m³/s) Aug. 23, 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	327	81	144	96	150	54	70	698	146	68	26	16
2	801	79	203	90	130	53	100	442	99	52	24	13
3	746	76	186	87	115	52	220	308	111	43	21	13
4	400	114	130	84	110	50	160	262	107	37	34	30
5	263	273	115	80	105	49	140	352	80	33	42	23
6	205	178	105	78	105	47	220	538	100	29	25	16
7	186	200	98	77	98	46	190	590	75	26	22	22
8	152	164	97	76	94	46	140	751	188	23	19	33
9	221	175	88	120	89	45	115	1090	395	28	94	24
10	710	175	82	280	85	45	100	1330	418	38	54	18
11	561	435	75	250	81	45	110	882	174	30	32	15
12	294	825	90	230	78	45	244	696	103	23	22	51
13	265	413	110	200	76	45	392	578	80	20	21	82
14	209	249	145	180	74	47	501	503	221	18	19	40
15	294	191	180	160	73	52	534	449	234	42	16	30
16	292	171	160	140	79	52	421	343	130	35	13	37
17	366	207	140	130	85	47	311	380	87	109	14	37
18	568	497	130	120	79	44	295	321	69	67	17	27
19	390	539	120	110	75	42	353	238	96	36	14	21
20	258	321	110	105	71	41	462	204	292	27	12	16
21	214	234	110	105	68	43	597	300	372	23	10	14
22	185	313	100	105	70	60	737	360	350	89	9.2	15
23	160	287	96	100	70	120	728	207	223	58	8.0	15
24	140	236	94	98	67	150	733	161	146	66	18	13
25	125	248	94	100	63	90	741	134	106	37	70	12
26	114	218	160	120	60	70	746	115	80	24	36	13
27	105	190	150	240	58	60	946	100	67	20	23	12
28	96	170	135	230	55	70	1130	86	146	56	18	12
29	88	145	120	210	---	100	1170	75	104	44	35	12
30	82	135	110	180	---	88	1060	67	92	40	32	13
31	79	---	100	165	---	75	---	97	---	35	21	---
TOTAL	8896	7539	3777	4346	2363	1873	13666	12657	4891	1276	821.2	695
MEAN	287	251	122	140	84.4	60.4	456	408	163	41.2	26.5	23.2
MAX	801	825	203	280	150	150	1170	1330	418	109	94	82
MIN	79	76	75	76	55	41	70	67	67	18	8.0	12
CFSM	3.82	3.34	1.62	1.86	1.12	.80	6.06	5.43	2.17	.55	.35	.31
IN.	4.40	3.73	1.87	2.15	1.17	.93	6.76	6.26	2.42	.63	.41	.34

CAL YR 1977 TOTAL 60212.6 MEAN 165 MAX 1590 MIN 9.1 CFSM 2.19 IN 29.79
WTR YR 1978 TOTAL 62800.2 MEAN 172 MAX 1330 MIN 8.0 CFSM 2.29 IN 31.07

01135000 MOOSE RIVER AT ST. JOHNSBURY, VT

LOCATION.--Lat 44°25'22", long 72°00'02", Caledonia County, Hydrologic Unit 01080102, on left bank at St. Johnsbury 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--128 mi² (332 km²).

PERIOD OF RECORD.--Discharge: August 1928 to current year.
Water-quality records: Water year 1955.

REVISED RECORDS.--WSP 1231: 1929-30, 1931-34(M). WSP 1381: Drainage area. WSP 1701: 1959.

GAGE.--Water-stage recorder. Altitude of gage is 585 ft (178 m), from topographic map. Prior to Nov. 16, 1934, nonrecording gage at site 0.2 mi (0.3 km) upstream at different datum.

REMARKS.--Records good except those for winter period and period of no gage-height record, Feb. 6 to Mar. 13, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--50 years, 221 ft³/s (6.259 m³/s), 23.45 in/yr (596 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,820 ft³/s (165 m³/s) May 5, 1972, gage height, 4.23 ft (1.289 m); maximum gage height, 8.3 ft (2.53 m) Apr. 30, 1929, from graph based on gage readings, site and datum then in use; minimum discharge, 6.2 ft³/s (0.18 m³/s) Sept. 17, 18, 1948, Aug. 27, 28, 1949.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,180 ft³/s (33.4 m³/s) Apr. 28, May 11, gage height, 3.74 ft (1.140 m), no peak above base of 1,700 ft³/s (48 m³/s); maximum gage height, 5.76 ft (1.756 m) Feb. 5 (ice jam); minimum discharge, 15 ft³/s (0.42 m³/s) Aug. 23, 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	356	123	272	145	230	90	140	924	274	90	36	26
2	828	118	339	140	210	87	180	764	167	66	32	22
3	812	116	312	135	180	86	200	564	172	54	31	20
4	550	128	210	130	170	84	205	480	172	48	60	24
5	403	306	175	130	165	82	280	522	128	42	59	31
6	306	306	170	130	160	78	500	636	137	37	42	25
7	266	298	165	125	170	77	510	732	112	34	32	27
8	220	290	150	170	148	75	215	796	232	30	31	35
9	362	259	138	240	140	74	195	812	592	38	83	34
10	796	259	112	270	135	74	190	892	780	45	81	27
11	716	876	105	320	130	74	225	1010	290	42	48	24
12	447	962	100	350	130	75	636	951	158	32	34	42
13	354	764	120	310	125	75	764	876	132	28	30	110
14	290	480	180	260	120	76	780	812	306	42	28	60
15	340	330	250	235	115	100	684	716	346	74	26	43
16	390	266	250	215	120	94	606	522	195	57	22	44
17	440	314	205	200	130	83	550	564	128	106	24	47
18	490	844	205	188	130	76	550	508	99	128	25	38
19	410	796	200	180	120	68	636	354	137	59	24	31
20	350	536	185	175	115	67	716	282	436	41	20	27
21	300	403	175	170	110	70	780	392	564	34	18	27
22	270	480	170	170	110	85	764	620	676	58	17	32
23	240	425	160	165	105	120	796	322	362	83	15	27
24	210	392	150	165	105	145	764	220	213	63	27	25
25	190	392	165	170	100	160	684	185	161	53	75	22
26	170	270	200	185	98	120	924	158	121	34	57	21
27	160	250	220	215	94	110	962	137	97	28	35	21
28	150	230	210	300	91	120	1050	116	142	49	29	21
29	140	210	200	290	---	160	951	97	164	62	33	21
30	130	200	200	280	---	150	984	87	112	49	44	21
31	123	---	160	250	---	130	---	114	---	46	32	---
TOTAL	11209	11623	5853	6408	3756	2965	17421	16165	7605	1652	1150	975
MEAN	362	387	189	207	134	95.6	581	521	254	53.3	37.1	32.5
MAX	828	962	339	350	230	160	1050	1010	780	128	83	110
MIN	123	116	100	125	91	67	140	87	97	28	15	20
CFSM	2.83	3.02	1.48	1.62	1.05	.75	4.54	4.07	1.98	.42	.29	.25
IN.	3.26	3.38	1.70	1.86	1.09	.86	5.06	4.70	2.21	.48	.33	.28

CAL YR 1977 TOTAL 81474 MEAN 223 MAX 1710 MIN 18 CFSM 1.74 IN 23.68
WTR YR 1978 TOTAL 86782 MEAN 238 MAX 1050 MIN 15 CFSM 1.86 IN 25.22

01135500 PASSUMPSIC RIVER AT PASSUMPSIC, VT

LOCATION.--Lat 44°21'56", long 72°02'23", Caledonia County, Hydrologic Unit 01080102, on right bank 0.7 mi (1.1 km) upstream from Water Andric, 1 mi (2 km) downstream from dam and village of Passumpsic, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--436 mi² (1.129 km²).

PERIOD OF RECORD.--Discharge: October 1928 to current year. Monthly discharge only October 1928, published in WSP 1301.
Water-quality records: Water years 1953, 1967-74 (partial-record station).

REVISED RECORDS.--WSP 781: 1933(M). WSP 871: Drainage area. WSP 1231: 1929, 1930-31(M).

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (149 m), from topographic map.

REMARKS.--Records excellent except those for winter period, which are fair. Low flow regulated by powerplants upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--50 years, 737 ft³/s (20.87 m³/s), 22.96 in/yr (583 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,200 ft³/s (515 m³/s) July 1, 1973, gage height, 23.49 ft (7.160 m), from rating curve extended above 14,000 ft³/s (400 m³/s) on basis of computation of flow over dam at gage height 21.23 ft (6.471 m); minimum daily, 13 ft³/s (0.37 m³/s) Sept. 12, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1780, about 31.5 ft (9.60 m) in November 1927, from information by local residents (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,980 ft³/s (141 m³/s) May 10, gage height, 9.21 ft (2.807 m), no peak above base of 5,000 ft³/s (140 m³/s); maximum gage height, 10.74 ft (3.274 m) Jan. 9 (ice jam); minimum daily discharge, 74 ft³/s (2.10 m³/s) Sept. 1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1680	590	990	620	1150	320	680	2700	956	490	223	74
2	4340	557	1240	580	1000	315	1100	1990	706	396	197	116
3	2770	557	1090	550	900	320	850	1630	652	327	155	102
4	1810	613	956	510	840	325	800	1450	624	322	255	98
5	1320	1190	786	480	760	335	1200	1740	521	300	213	153
6	1120	956	640	460	800	340	1600	2230	601	255	236	140
7	1030	1000	580	440	760	330	1400	2350	521	220	200	128
8	866	866	550	430	720	325	1110	2700	792	230	130	140
9	1450	798	520	2000	680	325	859	3720	1890	240	375	127
10	3130	816	500	4000	660	330	774	4570	1820	327	360	150
11	2010	3110	490	2500	640	320	1070	3090	936	304	236	136
12	1420	2790	480	2100	610	330	3050	2350	668	226	148	188
13	1290	1620	470	1700	580	350	2430	1980	574	197	197	370
14	1150	1190	460	1400	560	400	2570	1710	1350	158	155	263
15	1660	983	1100	1200	540	500	1870	1500	1140	336	144	150
16	1520	923	1800	1100	520	700	1610	1360	774	271	142	177
17	2210	1170	1500	1000	500	550	1630	1400	568	531	95	160
18	2810	3010	1150	900	470	500	1850	1300	495	476	121	174
19	1840	2210	950	840	460	460	2380	1130	700	287	117	148
20	1350	1490	840	780	440	440	3170	956	2080	191	107	109
21	1180	1230	720	760	420	520	3660	1240	1870	203	119	146
22	1050	1530	660	750	400	600	3190	1470	1460	177	123	134
23	1050	1290	610	730	390	800	3240	1010	1100	263	121	107
24	917	1300	570	720	380	670	3260	834	810	375	123	98
25	847	1290	540	700	360	630	3440	740	673	327	336	160
26	810	1280	1700	1500	350	600	3340	678	579	255	279	123
27	763	1340	1200	3500	340	570	3890	590	500	177	112	109
28	717	900	920	2100	330	800	4390	563	700	220	204	106
29	668	820	830	1800	---	960	4420	486	711	322	174	128
30	636	780	750	1450	---	800	3970	490	574	279	213	96
31	619	---	700	1300	---	700	---	495	---	251	230	---
TOTAL	46033	38199	26292	38900	16560	15465	68803	50452	27345	8933	5840	4310
MEAN	1485	1273	848	1255	591	499	2293	1627	912	288	188	144
MAX	4340	3110	1800	4000	1150	960	4420	4570	2080	531	375	370
MIN	619	557	460	430	330	315	680	486	495	158	95	74
CFSM	3.41	2.92	1.95	2.88	1.36	1.14	5.26	3.73	2.09	.66	.43	.33
IN.	3.93	3.26	2.24	3.32	1.41	1.32	5.87	4.30	2.33	.76	.50	.37

CAL YR 1977 TOTAL 330081 MEAN 904 MAX 6550 MIN 58 CFSM 2.07 IN 28.16
WTR YR 1978 TOTAL 347132 MEAN 951 MAX 4570 MIN 74 CFSM 2.18 IN 29.62

01137500 AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, NH

LOCATION.--Lat 44°16'08", long 71°37'52", Grafton County, Hydrologic Unit 01080101, on left bank 0.2 mi (0.3 km) upstream from Pierce Bridge and Bethlehem Junction, 0.8 mi (1.3 km) upstream from unnamed tributary entering from left, 3 mi (5 km) east of Bethlehem, 3.4 mi (5.5 km) downstream from Little River, and at mile 35.0 (56.3 km).

DRAINAGE AREA.--87.6 mi^2 (226.9 km^2).

PERIOD OF RECORD.--Discharge: August 1939 to current year.
Water-quality records: Water years 1967-74.

REVISED RECORDS.--WSP 1701: 1951(M), 1953-54(M).

GAGE.--Water-stage recorder. Datum of gage is 1,180.74 ft (359.890 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records excellent except those for winter period, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--39 years, 209 ft^3/s (5.919 m^3/s), 32.40 in/yr (823 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,800 ft^3/s (306 m^3/s) Oct. 24, 1959, gage height, 12.09 ft (3.685 m), from rating curve extended above 4,100 ft^3/s (116 m^3/s) on basis of slope-area measurement of peak flow; minimum, 16 ft^3/s (0.45 m^3/s) Nov. 14, 1952 (caused by anchor ice upstream).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,690 ft^3/s (76.2 m^3/s); Oct. 9, gage height, 6.56 ft (1.999 m), no peak above base of 2,700 ft^3/s (76.5 m^3/s); minimum, 27 ft^3/s (0.76 m^3/s) Sept. 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	509	133	196	88	180	76	133	424	406	153	47	33
2	1030	127	261	82	160	74	208	327	288	129	46	31
3	470	123	202	76	150	74	171	278	507	117	44	29
4	377	129	167	74	145	72	139	261	479	107	156	28
5	302	178	135	70	140	70	241	359	304	99	106	29
6	245	156	120	67	135	70	225	498	272	92	64	29
7	207	173	110	66	130	68	176	603	225	86	56	38
8	179	144	100	100	125	68	156	906	640	80	50	41
9	839	320	90	1500	120	68	139	1880	573	91	52	34
10	1240	239	85	1000	120	66	134	1630	470	103	46	32
11	481	475	80	480	115	66	163	1210	302	90	42	36
12	326	338	78	340	110	66	330	1110	242	77	41	107
13	261	245	76	270	110	66	283	1210	222	69	44	67
14	226	213	80	230	105	70	353	1310	576	64	41	47
15	302	187	150	210	100	120	252	1300	463	70	39	45
16	276	194	250	190	100	110	213	1610	294	77	36	52
17	1320	268	200	180	98	100	195	1850	234	74	37	44
18	886	384	130	170	96	80	218	1030	206	79	35	38
19	541	272	110	160	94	86	275	814	255	62	35	35
20	422	216	100	155	92	82	433	915	471	56	33	34
21	386	203	95	150	90	90	541	1100	409	53	33	33
22	319	336	120	145	86	200	448	718	450	69	32	34
23	278	243	110	140	84	165	451	563	457	70	30	34
24	243	214	90	135	84	130	429	514	286	69	42	33
25	222	200	150	130	82	115	406	478	231	54	62	32
26	206	221	250	1190	80	110	429	442	194	48	42	33
27	190	232	160	812	78	105	609	407	172	48	36	32
28	175	180	130	387	76	300	705	356	182	73	35	32
29	161	164	115	251	---	201	723	326	159	57	47	32
30	150	149	100	210	---	156	672	367	213	56	40	32
31	140	---	92	195	---	138	---	374	---	52	35	---
TOTAL	12909	6656	4132	9253	3085	3262	9850	25170	10182	2424	1484	1156
MEAN	416	222	133	298	110	105	328	812	339	78.2	47.9	38.5
MAX	1320	475	261	1500	180	300	723	1880	640	153	156	107
MIN	140	123	76	66	76	66	133	261	159	48	30	28
CFSM	4.75	2.53	1.52	3.40	1.26	1.20	3.74	9.27	3.87	.89	.55	.44
IN.	5.48	2.83	1.75	3.93	1.31	1.39	4.18	10.69	4.32	1.03	.63	.49

CAL YR 1977 TOTAL 83932 MEAN 230 MAX 2000 MIN 36 CFSM 2.63 IN 35.64
WTR YR 1978 TOTAL 89563 MEAN 245 MAX 1880 MIN 28 CFSM 2.80 IN 38.03

01138000 AMMONOOSUC RIVER NEAR BATH, NH

LOCATION.--Lat 44°09'14", long 71°59'10", Grafton County, Hydrologic Unit 01080101, on left bank 0.4 mi (0.6 km) downstream from Wild Ammonoosuc River, 1.4 mi (2.3 km) southwest of Bath, and 3.3 mi (5.3 km) upstream from mouth.

DRAINAGE AREA.--395 mi² (1,023 km²).

PERIOD OF RECORD.--Discharge: September 1935 to current year.
Water-quality records: Water year 1953.

REVISED RECORDS.--WSP 871: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 454.14 ft (138.422 m) National Geodetic Vertical Datum of 1929 (levels by Connecticut River Power Co.).

REMARKS.--Records fair except those for winter period and period of no gage-height record, Jan. 27 to Apr. 5, which are poor. Occasional diurnal fluctuation at low flow caused by small powerplants upstream, greater fluctuation prior to 1968.

AVERAGE DISCHARGE.--43 years, 659 ft³/s (18.66 m³/s), 22.66 in/yr (576 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,900 ft³/s (790 m³/s) Mar. 18, 1936, gage height, 15.40 ft (4.694 m), from rating curve extended above 13,000 ft³/s (370 m³/s) on basis of slope-area measurement at gage height 14.28 ft (4.353 m); maximum gage height, 17.55 ft (5.349 m) June 30, 1973; minimum daily discharge, 35 ft³/s (0.99 m³/s) Sept. 15, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,500 ft³/s (180 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
June 20	0015	*9710	275	10.47	3.191

Minimum daily discharge, 60 ft³/s (1.70 m³/s) Sept. 5, 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1270	411	1060	260	540	225	760	1540	900	424	163	79
2	3180	397	949	245	500	225	600	1220	693	330	147	74
3	1600	387	730	230	470	220	460	1050	1250	300	129	69
4	1120	387	593	215	450	220	700	938	1520	279	407	65
5	886	510	459	205	430	215	1300	970	819	264	497	60
6	693	495	380	195	420	210	1240	1190	727	233	294	60
7	566	517	350	185	400	205	1070	1280	587	211	209	65
8	485	476	315	1000	380	205	858	1670	1790	192	168	125
9	1400	541	285	4000	370	200	730	3250	1740	207	167	105
10	4160	648	265	1500	350	200	704	4030	1630	219	157	69
11	1580	1560	250	1050	340	195	962	2670	1590	219	128	76
12	1010	1290	235	920	330	195	2380	2210	664	184	120	153
13	786	822	225	800	320	190	2290	2290	566	157	121	210
14	656	687	220	720	310	190	2780	2310	1330	184	121	134
15	777	577	250	660	300	350	2090	2390	1270	348	113	104
16	839	560	700	600	295	320	1640	2780	793	280	106	102
17	3110	691	500	560	285	290	1550	2930	592	249	104	104
18	3790	1400	380	520	280	260	1740	2160	478	230	106	93
19	2100	1050	330	490	275	250	2240	1600	1400	192	106	82
20	1480	777	305	460	270	240	3620	1710	4380	147	93	75
21	1170	663	280	430	265	350	3840	2140	2660	129	90	71
22	975	811	330	410	260	1000	2870	1750	2230	157	108	69
23	839	691	300	385	255	700	2730	1180	2140	182	84	68
24	721	645	270	365	250	450	260	984	1260	233	110	71
25	650	591	450	360	245	350	2440	923	900	168	113	71
26	605	899	780	3500	240	340	2150	822	700	136	116	71
27	557	690	450	1500	235	500	2330	742	600	128	93	74
28	517	585	380	900	230	1200	2440	665	528	311	78	71
29	479	497	340	700	---	500	2320	591	486	249	93	71
30	448	562	310	640	---	420	2170	704	460	199	100	71
31	428	---	280	580	---	410	---	751	---	184	85	---
TOTAL	38877	20817	12951	24585	9295	10825	53264	51440	36683	6925	4526	2612
MEAN	1254	694	418	793	332	349	1775	1659	1223	223	146	87.1
MAX	4160	1560	1060	4000	540	1200	3840	4030	4380	424	497	210
MIN	428	387	220	185	230	190	260	591	460	128	78	60
CFSM	3.18	1.76	1.06	2.01	.84	.88	4.49	4.20	3.10	.57	.37	.22
IN.	3.66	1.96	1.22	2.32	.88	1.02	5.02	4.84	3.45	.65	.43	.25

CAL YR 1977 TOTAL 251177 MEAN 688 MAX 8500 MIN 67 CFSM 1.74 IN 23.66
WTR YR 1978 TOTAL 272800 MEAN 747 MAX 4380 MIN 60 CFSM 1.89 IN 25.69

01138500 CONNECTICUT RIVER AT WELLS RIVER, VT

LOCATION.--Lat 44°09'13", long 72°02'34", Orange County, Hydrologic Unit 01080101, on right bank at village of Wells River, 200 ft (61 m) downstream from bridge on U.S. Highway 302, 400 ft (100 m) upstream from Wells River, 1,200 ft (350 m) downstream from Ammonoosuc River, and at mile 266.0 (428.0 km).

DRAINAGE AREA.--2,644 mi² (6,848 km²).

PERIOD OF RECORD.--Discharge: October 1949 to current year. October and November 1949 monthly discharge only, published in WSP 1301.
Water-quality records: Water years 1952, 1957.

GAGE.--Water-stage recorder. Datum of gage is 399.75 ft (121.844 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants, by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs (Reservoirs in Connecticut River basin), and other reservoirs, combined usable capacity, about 14,800,000,000 ft³ (419,000,000 m³).

AVERAGE DISCHARGE.--29 years, 4,745 ft³/s (134.4 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,100 ft³/s (1,620 m³/s) July 1, 1973, gage height, 17.35 ft (5.288 m), from peak-stage indicator; minimum daily, 152 ft³/s (4.30 m³/s) Aug. 28, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,500 ft³/s (666 m³/s) Jan. 9, gage height, 8.35 ft (2.545 m); minimum daily, 255 ft³/s (7.22 m³/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9320	5630	6980	2310	6300	4000	3390	18000	5480	4390	1580	710
2	16900	5690	7540	3450	6400	3900	3410	11600	5080	2140	1220	442
3	17400	4610	7190	4370	5400	4100	4700	7680	5660	3280	2280	690
4	13900	5160	5260	4780	4000	2600	5050	7150	5720	974	2790	502
5	9470	5630	5720	4070	3000	2000	5780	7750	5940	3200	2360	1040
6	6850	5910	6980	4510	4500	3200	7360	5570	5660	2810	1200	729
7	6060	5210	6980	4070	4200	4800	6780	6710	6030	2480	2530	1210
8	6580	6480	6060	3430	4300	4900	5030	11500	7540	769	2010	597
9	9190	5570	5210	10200	4700	5100	3390	18300	8380	615	2230	345
10	16400	5720	3490	14500	5100	5000	4370	21800	10600	3320	2230	325
11	13600	10300	3020	11900	3600	4460	5600	19100	9110	3530	2220	1690
12	11000	11900	4200	9510	2500	2840	10000	17800	9800	2150	1310	700
13	9000	8270	5160	7830	3200	4340	12600	17300	7540	1950	570	1080
14	7940	7750	5480	5390	5300	4020	13300	15400	6710	1520	1580	1490
15	9430	6580	5690	3620	4900	5180	13800	14300	7680	1010	2380	874
16	10800	6220	5750	4950	5000	4660	10900	14000	7220	527	1910	680
17	13800	6550	4490	5200	5200	3300	10100	12700	6610	3080	2450	597
18	18900	10500	3080	5100	3600	1450	10800	14100	2880	2670	1470	680
19	15200	13500	4700	5200	3000	1320	12700	12300	6000	2790	406	579
20	11400	10900	4320	5400	3300	2430	16400	7790	17400	2280	300	2220
21	9190	9800	4250	3500	3900	3800	19500	6000	16000	2220	1500	3160
22	8960	10700	5050	2400	4200	3340	18800	6950	14300	1590	1300	907
23	8530	9800	4320	4800	3800	3620	18900	7940	13000	1240	1410	352
24	8230	8340	3950	5100	3000	4110	18000	7830	12000	2860	951	338
25	7500	6510	3660	6000	2300	3930	19000	7260	8120	2530	1160	1130
26	6510	7080	5630	8500	1600	3260	18000	6780	7080	1140	1050	780
27	5940	7570	5970	12000	2700	4340	19200	2880	5110	1470	386	780
28	5310	7020	5690	9000	3500	4980	19800	1700	6060	1290	710	853
29	3010	6580	4980	7800	---	4730	20300	2080	6710	472	1340	759
30	2690	6750	3950	6700	---	4370	19800	3660	6650	985	1370	255
31	4830	---	2880	6600	---	3930	---	4340	---	2360	1980	---
TOTAL	303840	228230	157630	192190	112500	118010	356760	318270	242070	63642	48183	26494
MEAN	9801	7608	5085	6200	4018	3807	11890	10270	8069	2053	1554	883
MAX	18900	13500	7540	14500	6400	5180	20300	21800	17400	4390	2790	3160
MIN	2690	4610	2880	2310	1600	1320	3390	1700	2880	472	300	255

CAL YR 1977 TOTAL 2068133 MEAN 5666 MAX 25200 MIN 408
WTR YR 1978 TOTAL 2167819 MEAN 5939 MAX 21800 MIN 255

01139000 WELLS RIVER AT WELLS RIVER, VT

LOCATION.--Lat 44°09'03", long 72°03'55", Orange County, Hydrologic Unit 01080103, on right bank 800 ft (250 m) upstream from railroad bridge, 0.8 mi (1.3 km) west of village of Wells River, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--98.4 mi² (254.9 km²).

PERIOD OF RECORD.--Discharge: August 1940 to current year.
Water-quality records: Water years 1957-58.

REVISED RECORDS.--WSP 1171: Drainage area. WSP 1201: 1942(P), 1944-45(M), 1946-47(P), 1948(M), 1950.

GAGE.--Water-stage recorder. Datum of gage is 505.53 ft (154.086 m) National Geodetic Vertical Datum of 1929 (levels by Connecticut River Power Co.).

REMARKS.--Records good except those for winter period, which are poor. Some diurnal fluctuation at low flow prior to 1958 caused by small powerplant upstream. Flow partly regulated by Groton and Ricker Ponds. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--38 years, 142 ft³/s (4.021 m³/s), 19.60 in/yr (498 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,970 ft³/s (169 m³/s) June 30, 1973, gage height, 9.82 ft (2.993 m), from rating curve extended above 1,400 ft³/s (40 m³/s) on basis of computation of peak flow over dam; minimum, 5.1 ft³/s (0.14 m³/s) Oct. 6, 1948; minimum daily, 8.3 ft³/s (0.24 m³/s) Sept. 5, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 980 ft³/s (28 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	2200	1070	30.3	4.58	1.396	Jan. 9	1630	*1300	36.8	a*5.86	1.786

a Ice jam.

Minimum discharge, 19 ft³/s (0.54 m³/s) Sept. 6, 10, 11.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	93	211	125	240	69	170	476	172	61	40	25
2	612	91	298	120	220	68	210	406	114	55	38	24
3	313	90	232	115	200	67	165	369	284	51	35	22
4	221	93	188	110	190	66	155	346	213	48	80	21
5	153	121	154	105	180	65	270	349	137	47	62	20
6	121	107	140	100	170	64	250	355	127	45	45	19
7	101	105	135	98	160	63	220	342	102	44	41	22
8	88	111	130	96	150	62	195	342	262	43	38	25
9	268	119	125	700	145	61	185	458	248	41	43	21
10	491	111	120	425	135	60	190	549	190	43	36	20
11	284	473	135	350	125	59	280	413	127	42	31	20
12	202	300	180	280	120	58	527	342	98	40	30	62
13	165	211	280	250	115	57	569	300	98	36	41	45
14	136	173	230	230	110	80	705	271	193	34	34	30
15	205	138	190	215	105	150	503	254	132	43	30	28
16	182	129	160	200	99	130	413	310	94	57	28	33
17	594	143	135	190	95	115	410	329	77	80	30	30
18	730	393	120	180	92	98	441	300	70	86	32	26
19	410	295	115	175	89	88	537	274	145	60	27	25
20	300	247	110	165	86	82	705	234	563	50	25	23
21	236	193	105	160	84	90	725	277	437	45	24	22
22	193	177	110	155	82	150	650	265	355	77	22	21
23	171	155	105	150	80	130	674	206	259	58	21	21
24	148	176	100	145	79	120	655	178	193	50	26	21
25	138	174	140	140	77	110	720	158	140	43	55	20
26	129	199	250	300	75	105	670	142	110	37	34	22
27	123	234	220	600	72	150	725	108	93	33	29	21
28	115	174	190	400	71	265	747	88	83	125	27	21
29	107	156	170	340	---	230	736	80	74	65	37	21
30	101	138	150	300	---	180	655	77	71	55	31	21
31	96	---	135	270	---	160	---	85	---	47	26	---
TOTAL	7338	5319	5063	7189	3446	3252	14057	8683	5261	1641	1098	752
MEAN	237	177	163	232	123	105	469	280	175	52.9	35.4	25.1
MAX	730	473	298	700	240	265	747	549	563	125	80	62
MIN	88	90	100	96	71	57	155	77	70	33	21	19
CFSM	2.41	1.80	1.66	2.36	1.25	1.07	4.77	2.85	1.78	.54	.36	.26
IN.	2.77	2.01	1.91	2.72	1.30	1.23	5.31	3.28	1.99	.62	.42	.28

CAL YR 1977 TOTAL 55296 MEAN 151 MAX 1320 MIN 16 CFSM 1.54 IN 20.90
WTR YR 1978 TOTAL 63099 MEAN 173 MAX 747 MIN 19 CFSM 1.76 IN 23.85

01139800 EAST ORANGE BRANCH AT EAST ORANGE, VT

LOCATION.--Lat 44°05'34", long 72°20'10", Orange County, Hydrologic Unit 01080103, on left bank 0.3 mi (0.5 km) east of East Orange, 1.6 mi (2.6 km) upstream from mouth, and 5 mi (8 km) southwest of Orange.

DRAINAGE AREA.--8.95 mi² (23.18 km²).

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

REVISED RECORDS.--WDR MA-NH-RI-VT-72-1: 1960-64(P), 1969-71(P).

GAGE.--Water-stage recorder. Altitude of gage is 1,180 ft (360 m), from topographic map.

REMARKS.--Records good except those for winter period and periods of no gage-height record, Oct. 1-13, Jan. 10 to Feb. 16, which are poor. Occasional diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--20 years, 15.8 ft³/s (0.447 m³/s), 23.97 in/yr (609 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 672 ft³/s (19.0 m³/s) June 30, 1973, gage height, 5.55 ft (1.692 m), from rating curve extended above 130 ft³/s (3.7 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 6.35 ft (1.935 m) Jan. 22, 1959, ice jam; minimum discharge, 0.1 ft³/s (0.003 m³/s) Sept. 9, 19, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 140 ft³/s (4.0 m³/s) and maximum(*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	0545	a*209	5.92	3.72	1.134	Apr. 28	1715	142	4.02	3.78	1.152
Jan. 9	1100	150	4.2	b*4.93	1.503						

a From rating curve extended above 20 ft³/s (0.57 m³/s) on basis of slope-area measurement at gage height 5.55 ft (1.692 m).
b Ice jam.

Minimum discharge, 1.2 ft³/s (0.034 m³/s) Sept. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	16	31	14	28	7.8	19	85	22	7.1	4.5	3.6
2	75	15	26	12	26	7.7	18	79	25	6.5	4.3	3.2
3	37	14	20	11	25	7.4	17	74	39	6.0	3.6	2.9
4	27	16	17	10	23	7.2	15	68	24	5.7	7.1	3.1
5	20	15	16	9.0	22	7.0	22	63	27	5.4	3.8	2.7
6	17	15	15	8.0	21	6.8	20	63	25	4.9	3.2	2.7
7	14	13	14	7.8	20	6.7	19	60	21	4.5	3.1	4.3
8	12	18	13	7.5	19	6.6	18	63	47	4.3	2.7	2.9
9	60	16	12	60	18	6.4	16	86	29	9.3	2.4	2.6
10	45	14	12	52	17	6.4	18	76	24	5.4	2.0	2.4
11	25	27	11	45	16	6.2	25	67	21	4.3	1.8	2.7
12	17	15	10	40	15	6.2	30	63	19	3.6	3.2	4.9
13	15	14	10	35	15	6.6	37	59	25	2.9	3.1	2.9
14	13	13	13	32	14	7.4	34	54	23	2.9	2.0	2.3
15	21	12	16	28	13	11	32	59	18	13	1.7	2.6
16	13	14	15	26	13	9.8	40	53	16	15	1.4	2.6
17	79	26	13	24	12	9.2	47	55	14	34	3.8	1.8
18	32	31	13	22	12	8.6	58	50	15	13	5.7	1.6
19	25	18	12	21	11	8.0	62	44	15	7.4	5.2	1.4
20	26	15	12	20	11	7.4	84	42	16	6.0	4.9	1.3
21	25	15	12	19	10	7.6	72	43	18	11	4.7	1.2
22	25	14	11	18	9.8	15	80	34	25	16	4.3	1.3
23	23	13	11	17	9.6	13	76	31	16	7.7	3.8	1.4
24	23	22	11	16	9.4	12	83	29	13	6.5	8.9	1.4
25	22	17	11	15	9.0	11	86	26	11	4.7	8.3	1.7
26	22	21	14	52	8.8	10	97	24	10	4.0	6.0	1.8
27	20	19	20	60	8.4	20	101	22	9.9	8.9	5.4	1.8
28	19	20	24	43	8.2	23	109	20	9.3	14	5.7	2.1
29	18	15	18	36	---	18	110	20	8.3	6.0	6.2	2.1
30	17	19	16	33	---	15	96	26	8.9	6.2	4.5	2.0
31	16	---	15	30	---	15	---	23	---	4.5	4.0	---
TOTAL	833	512	464	823.3	424.2	310.0	1541	1561	594.4	250.7	131.3	71.3
MEAN	26.9	17.1	15.0	26.6	15.2	10.0	51.4	50.4	19.8	8.09	4.24	2.38
MAX	79	31	31	60	28	23	110	86	47	34	8.9	4.9
MIN	12	12	10	7.5	8.2	6.2	15	20	8.3	2.9	1.4	1.2
CFSM	3.01	1.91	1.68	2.97	1.70	1.12	5.74	5.63	2.21	.90	.47	.27
IN.	3.46	2.13	1.93	3.42	1.76	1.29	6.40	6.49	2.47	1.04	.55	.30

CAL YR 1977 TOTAL 6709.7 MEAN 18.4 MAX 170 MIN 1.4 CFSM 2.06 IN 27.89
WTR YR 1978 TOTAL 7516.2 MEAN 20.6 MAX 110 MIN 1.2 CFSM 2.30 IN 31.24

01141500 OMPOMPANOOSUC RIVER AT UNION VILLAGE, VT

LOCATION.--Lat 43°47'23", long 72°15'19", Orange County, Hydrologic Unit 01080103, on right bank 100 ft (30 m) upstream from covered bridge at Union Village, 0.2 mi (0.3 km) downstream from Avery Brook, 0.3 mi (0.5 km) downstream from Union Village Reservoir, and 3.8 mi (6.1 km) upstream from mouth.

DRAINAGE AREA.--130 mi² (337 km²).

PERIOD OF RECORD.--Discharge: September 1940 to current year.
Water-quality records: Water years 1955, 1957-58.

GAGE.--Water-stage recorder. Altitude of gage is 435 ft (133 m), from topographic map.

REMARKS.--Records good except those for winter period and period of shifting-control, which are fair. Flow regulated by Union Village Reservoir (Reservoirs in Connecticut River basin) since October 1949. Some regulation by Lake Fairlee. Several observations of water temperatures and specific conductance were made during the year.

AVERAGE DISCHARGE.--38 years, 195 ft³/s (5.522 m³/s), 20.37 in/yr (517 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s (136 m³/s) June 3, 1947, gage height, 9.65 ft (2.941 m), from rating curve extended above 2,400 ft³/s (68 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.7 ft³/s (0.048 m³/s) Oct. 14, 1949; minimum daily, 2.0 ft³/s (0.057 m³/s) Oct. 20, 1949. Maximum discharge since construction of Union Village Reservoir in 1949, 2,350 ft³/s (66.6 m³/s) Apr. 20, 1950, gage height, 7.62 ft (2.323 m); maximum gage height, 7.68 ft (2.341 m) Apr. 7, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1869, about 14.5 ft (4.42 m) in November 1927, from information by local resident (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,430 ft³/s (40.5 m³/s) Apr. 14, gage height, 6.85 ft (2.088 m); minimum, 15 ft³/s (0.42 m³/s) Sept. 21, 22; minimum daily, 15 ft³/s (0.42 m³/s) Sept. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	308	126	366	150	290	120	288	564	160	52	30	26
2	527	122	398	145	260	120	358	494	149	48	29	24
3	269	118	341	165	240	120	333	456	436	45	51	22
4	198	118	255	180	230	115	292	425	315	42	140	21
5	159	130	220	160	220	115	443	404	233	40	67	21
6	128	120	200	140	210	110	472	379	228	38	48	20
7	110	118	210	135	200	110	447	357	196	36	42	22
8	92	130	175	125	195	105	399	338	454	34	40	23
9	469	159	160	220	190	105	350	476	371	55	39	21
10	481	140	150	310	185	100	364	527	306	43	35	21
11	278	667	145	410	180	100	524	402	238	36	31	21
12	213	357	140	310	170	98	956	348	199	33	39	56
13	181	284	170	250	165	96	1190	317	202	30	43	43
14	165	242	210	240	160	94	1280	291	318	29	36	24
15	198	205	230	225	155	160	1010	312	211	35	31	22
16	173	179	200	215	150	165	746	415	172	46	29	21
17	902	187	190	210	150	135	733	430	150	58	29	20
18	708	355	170	200	150	125	858	375	139	59	29	18
19	436	376	165	195	150	110	953	346	139	42	26	18
20	346	258	155	190	145	110	1210	300	159	36	25	17
21	290	221	155	185	145	110	1230	290	133	33	24	15
22	255	205	160	180	140	135	1040	264	180	31	23	16
23	226	193	160	175	135	155	1030	231	135	31	22	18
24	203	205	140	170	130	160	950	211	113	30	42	17
25	191	239	170	170	125	165	973	193	97	27	70	17
26	183	296	270	210	125	150	950	178	86	25	34	16
27	173	319	220	310	120	155	940	163	73	25	28	16
28	163	236	200	350	120	280	895	147	66	51	27	17
29	150	213	180	420	---	349	828	132	60	40	42	17
30	140	198	165	370	---	303	706	154	58	38	33	17
31	130	---	155	320	---	282	---	162	---	33	28	---
TOTAL	8445	6716	6225	7035	4835	4557	22748	10081	5776	1201	1212	647
MEAN	272	224	201	227	173	147	758	325	193	38.7	39.1	21.6
MAX	902	667	398	420	290	349	1280	564	454	59	140	56
MIN	92	118	140	125	120	94	288	132	58	25	22	15
MEAN†	273	229	202	246	150	150	754	323	192	38.7	39.1	21.8
CFSM†	2.10	1.76	1.55	1.89	1.15	1.15	5.80	2.48	1.48	.30	.30	.17
IN.†	2.42	1.96	1.79	2.18	1.20	1.33	6.47	2.86	1.65	.35	.34	.19

CAL YR 1977 TOTAL 67148 MEAN 184 MAX 1820 MIN 15 MEAN† 184 CFSM† 1.42 IN† 19.22
WTR YR 1978 TOTAL 79478 MEAN 218 MAX 1280 MIN 15 MEAN† 218 CFSM† 1.68 IN† 22.74

† Adjusted for change in contents in Union Village Reservoir.
NOTE.--Shifting-control method was used Aug. 25 to Sept. 30.

01141800 MINK BROOK NEAR ETNA, NH

LOCATION.--Lat 43°42'08", long 72°11'15", Grafton County, Hydrologic Unit 01080104, on left bank 2 mi (3 km) northeast of Etna and 5 mi (8 km) east of Hanover.

DRAINAGE AREA.--4.60 mi² (11.91 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,000 ft (300 m), from topographic map.

REMARKS.--Records fair except those for winter period and periods of no gage-height record Oct. 1 to Nov. 25, Dec. 2 to Mar. 10, which are poor. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--16 years, 7.64 ft³/s (0.216 m³/s), 22.55 in/yr (573 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 560 ft³/s (15.9 m³/s) Aug. 15, 1976, gage height, 3.80 ft (1.158 m), from rating curve extended above 130 ft³/s (3.7 m³/s) on basis of slope-area measurements at gage heights 3.50 ft (1.067 m) and 3.75 ft (1.143 m); maximum gage height, 4.28 ft (1.305 m) Jan. 9, 1978, backwater from ice; minimum discharge, 0.01 ft³/s (<0.001 m³/s) Aug. 11, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 55 ft³/s (160 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	--	*220	6.2	unknown		Apr. 13	2315	102	2.89	2.53	0.771
Jan. 9	1415	ice jam		*4.28	1.305	Apr. 21	0415	84	2.38	2.44	.744
Jan. 10	--	100	2.8	ice jam		June 7	2315	74	2.10	2.39	.728
Jan. 27	--	80	2.3	ice jam							

Minimum discharge, 0.08 ft³/s (0.002 m³/s) Sept. 6 and 7.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	5.4	17	6.0	13	2.7	20	28	8.4	.73	.30	.22
2	21	5.0	15	5.8	11	2.6	29	26	8.4	.61	.30	.20
3	10	4.8	13	5.5	10	2.5	10	25	24	.56	.26	.15
4	5.4	4.7	11	5.3	9.0	2.5	13	23	18	.50	2.9	.12
5	4.2	4.8	9.5	5.3	8.2	2.4	18	22	9.6	.42	1.6	.11
6	3.6	5.0	8.5	5.6	7.7	2.4	15	20	9.0	.38	.87	.09
7	3.0	6.0	7.8	7.0	7.0	2.3	14	20	13	.34	.61	.10
8	2.6	7.0	7.0	15	6.5	2.3	12	22	41	.30	.50	.10
9	9.0	11	6.6	25	6.1	2.3	12	33	41	.26	.50	.10
10	30	10	6.2	60	5.8	2.2	20	25	26	.23	.45	.09
11	13	9.8	5.8	35	5.3	2.2	34	20	17	.21	.37	.20
12	9.0	9.2	5.7	21	4.9	2.1	56	18	13	.18	.61	2.9
13	7.2	8.8	6.2	16	4.7	2.3	62	15	15	.16	1.4	1.1
14	6.2	7.8	8.5	14	4.5	3.4	78	14	24	.13	1.0	.61
15	15	7.0	14	13	4.3	3.2	51	27	10	.45	.67	.41
16	45	6.4	12	11	4.1	3.0	43	25	4.7	.50	.41	.41
17	100	6.8	11	9.8	4.0	2.8	40	25	3.7	.95	.33	.35
18	60	7.4	10	8.8	3.8	2.7	48	22	3.1	.73	.28	.27
19	32	7.8	9.0	8.0	3.7	2.6	64	20	3.1	.50	.26	.23
20	23	7.2	8.2	7.8	3.5	2.7	67	18	2.9	.33	.22	.19
21	19	6.7	7.6	7.2	3.4	3.0	82	17	2.6	.26	.18	.17
22	14	7.0	7.2	6.8	3.3	3.2	65	15	2.4	.24	.13	.13
23	11	8.0	6.8	6.2	3.2	3.7	65	13	2.4	.37	.20	.15
24	10	10	7.0	6.0	3.1	4.5	61	13	1.9	.61	.30	.15
25	9.0	12	7.8	6.0	3.0	6.4	57	12	1.7	.28	.58	.15
26	8.0	16	9.0	15	2.9	6.0	54	10	1.4	.22	.37	.15
27	7.4	13	8.5	43	2.8	5.6	47	9.0	1.3	.15	.28	.15
28	6.8	9.0	7.8	35	2.7	15	43	7.8	1.1	.80	.26	.15
29	6.4	7.4	7.2	30	---	10	39	7.3	.95	.41	.30	.15
30	6.0	7.2	6.8	27	---	8.0	33	6.3	.87	.30	.26	.15
31	5.6	---	6.2	17	---	15	---	5.9	---	.30	.22	---
TOTAL	505.4	238.2	273.9	484.1	151.5	131.6	1252	564.3	311.52	12.41	16.92	9.45
MEAN	16.3	7.94	8.84	15.6	5.41	4.25	41.7	18.2	10.4	.40	.55	.32
MAX	100	16	17	60	13	15	82	33	41	.95	2.9	2.9
MIN	2.6	4.7	5.7	5.3	2.7	2.1	10	5.9	.87	.13	.13	.09
CFSM	3.54	1.73	1.92	3.39	1.18	.92	9.07	3.96	2.26	.09	.12	.07
IN.	4.09	1.93	2.21	3.91	1.22	1.06	10.12	4.56	2.52	.10	.14	.08

CAL YR 1977 TOTAL 4463.55 MEAN 12.2 MAX 244 MIN .11 CFSM 2.65 IN 36.09
WTR YR 1978 TOTAL 3951.30 MEAN 10.8 MAX 100 MIN .09 CFSM 2.35 IN 31.95

01142500 AYERS BROOK AT RANDOLPH, VT

LOCATION.--Lat 43°56'04", long 72°39'30", Orange County, Hydrologic Unit 01080105, on right bank 135 ft (41 m) upstream from bridge on State Highway 12, just north of village limits of Randolph, 0.4 mi (0.6 km) upstream from Adams Brook, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--30.5 mi² (79.0 km²).

PERIOD OF RECORD.--July 1939 to September 1975, June 1976 to current year.

REVISED RECORDS.--WDR MA-NH-RI-VT-72-1: 1949(M), 1952(M), 1953(P), 1958(P), 1960(M), 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 630.50 ft (192.176 m) Vermont State Department of Highways datum. Prior to Oct. 1, 1964, at site 140 ft (43 m) downstream at datum 2.25 ft (0.686 m) higher and Oct. 1, 1964, to Sept. 30, 1975, at site 140 ft (43 m) downstream at datum 1.25 ft (0.381 m) higher.

REMARKS.--Records good except those for winter period and period of no gage-height record, Oct. 1-14, which are poor. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--38 years (water years 1940-75, 1977-78), 46.2 ft³/s (1.308 m³/s), 20.57 in/yr (522 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft³/s (73.6 m³/s) June 30, 1973, gage height, 10.37 ft (3.161 m), present datum, from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of contracted opening measurement of peak flow; minimum, 0.6 ft³/s (0.017 m³/s) July 27, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1830, about 18 ft (5.5 m), present datum, in November 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 350 ft³/s (9.9 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1430	*587	16.6	6.15	1.875	Apr. 13	2030	432	12.2	5.44	1.658
Jan. 9	1730	551	15.6	5.93	1.807						

Minimum discharge, 4.3 ft³/s (0.12 m³/s) Aug. 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	43	79	41	86	27	113	157	39	16	20	8.2
2	250	39	92	38	80	26	131	135	36	14	20	7.3
3	120	38	76	37	77	26	111	123	45	13	18	6.6
4	88	40	68	36	73	25	104	116	42	13	23	6.2
5	64	42	60	35	69	25	141	111	33	12	19	5.8
6	54	39	56	33	65	24	128	108	35	11	16	5.6
7	45	38	50	32	62	24	125	105	32	9.9	15	8.0
8	40	43	47	32	59	24	113	101	81	8.7	14	8.0
9	200	50	44	260	57	24	106	111	51	18	12	6.8
10	170	42	41	160	54	24	116	118	42	12	11	6.2
11	90	56	38	120	50	24	169	98	35	11	9.9	6.2
12	70	45	37	100	48	24	270	86	31	9.7	19	16
13	55	40	36	94	45	25	285	83	33	8.7	22	14
14	45	38	49	84	43	30	291	74	44	8.2	15	9.6
15	95	38	62	80	41	37	228	94	34	33	12	8.2
16	65	42	55	74	38	33	215	104	29	49	9.3	8.5
17	328	51	47	68	36	32	218	103	26	83	9.3	8.2
18	204	111	38	64	35	30	240	106	24	38	9.0	7.5
19	146	72	47	62	33	29	233	101	24	27	7.5	7.5
20	113	59	42	60	32	30	263	86	43	23	6.4	7.3
21	100	56	40	57	32	45	239	86	31	20	5.6	7.3
22	88	59	40	54	31	82	228	79	41	47	5.2	7.3
23	92	52	38	52	30	70	233	69	31	28	4.9	7.7
24	83	63	38	51	29	67	237	63	26	25	15	7.7
25	80	61	70	50	29	63	239	58	23	23	24	7.7
26	92	68	80	180	28	56	233	55	22	19	14	8.0
27	76	67	72	190	28	85	235	50	21	19	12	8.2
28	62	55	62	120	27	118	239	45	19	35	9.0	7.7
29	51	52	55	105	---	115	222	42	18	26	10	8.0
30	47	50	50	98	---	96	192	41	18	26	9.9	7.7
31	47	---	45	90	---	101	---	44	---	20	8.7	---
TOTAL	3160	1549	1654	2557	1317	1441	5897	2752	1009	706.2	405.7	239.0
MEAN	102	51.6	53.4	82.5	47.0	46.5	197	88.8	33.6	22.8	13.1	7.97
MAX	328	111	92	260	86	118	291	157	81	83	24	16
MIN	40	38	36	32	27	24	104	41	18	8.2	4.9	5.6
CFSM	3.34	1.69	1.75	2.71	1.54	1.53	6.46	2.91	1.10	.75	.43	.26
IN.	3.85	1.89	2.02	3.12	1.61	1.76	7.19	3.36	1.23	.86	.49	.29

CAL YR 1977 TOTAL 18281.0 MEAN 50.1 MAX 532 MIN 1.7 CFSM 1.64 IN 22.30
WTR YR 1978 TOTAL 22686.9 MEAN 62.2 MAX 328 MIN 4.9 CFSM 2.04 IN 27.67

01144000 WHITE RIVER AT WEST HARTFORD, VT

LOCATION.--Lat 43°42'51", long 72°25'07", Windsor County, Hydrologic Unit 01080105, on left bank 700 ft (200 m) upstream from highway bridge at West Hartford and 7.4 mi (11.9 km) upstream from mouth.

DRAINAGE AREA.--690 mi² (1,790 km²).

PERIOD OF RECORD.--Discharge: June 1915 to current year. October 1927 to September 1928 monthly discharge only, published in WSP 1301.
Water-quality records: Water years 1953, 1967-74.

REVISED RECORDS.--WSP 756: Drainage area. WSP 781: 1928(M). WSP 1031: 1916(m), 1923. WSP 1301: 1916-26(M), 1929(M).

GAGE.--Water-stage recorder. Datum of gage is 374.53 ft (114.157 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 30, 1927, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation at low flow during period 1934-50 caused by powerplant upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--63 years, 1,186 ft³/s (33.59 m³/s), 23.34 in/yr (593 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 120,000 ft³/s (3,400 m³/s) Nov. 4, 1927, gage height, 29.3 ft, (8.93 m), from floodmarks, from rating curve extended above 29,000 ft³/s (820 m³/s) on basis of slope-area measurement of peak flow; minimum observed, about 35 ft³/s (0.99 m³/s) Aug. 4, 1918; minimum daily, 54 ft³/s (1.53 m³/s) Sept. 27, 28, 1963.
Stage and discharge of the flood of Nov. 4, 1927, are the greatest since at least 1761.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 11,600 ft³/s (329 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1700	*17800	504	12.90	3.932	Jan. 9	1400	16000	450	a*15,30	4.663

a Ice jam.

Minimum discharge, 147 ft³/s (4.16 m³/s) Sept. 6, 7.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	854	1840	880	1550	640	2050	3940	985	365	268	197
2	5390	833	2710	850	1450	630	2650	3300	840	318	298	191
3	2400	805	2090	810	1370	610	2210	2950	1300	257	264	170
4	1680	764	1760	790	1340	600	2090	2820	1320	279	486	164
5	1310	1040	1500	770	1300	590	2780	2900	985	264	527	153
6	1050	970	1100	750	1300	560	3300	2950	985	257	339	147
7	896	985	1080	740	1300	570	3120	2890	840	240	275	153
8	764	1000	1000	720	1280	580	2650	3030	1590	226	264	226
9	2560	1400	960	6300	1250	580	2380	3900	1520	311	255	191
10	5270	1350	880	4800	1200	590	2390	4500	1290	352	247	164
11	2330	1560	700	2700	1160	600	3440	3050	1000	272	229	167
12	1700	1420	690	2200	1120	600	6430	2650	840	233	236	672
13	1500	1240	1060	1900	1050	610	7250	2320	770	207	615	657
14	1240	1150	1220	1800	1030	640	8130	2180	1320	194	387	410
15	2610	1030	1570	1700	1020	980	5540	2190	1160	242	298	302
16	2190	993	1790	1600	1010	1050	4400	3090	868	538	250	268
17	9490	1140	1390	1400	1000	860	4220	3340	705	651	229	261
18	6970	2960	1210	1300	1000	700	4670	2890	657	593	226	233
19	3560	2190	1220	1200	980	780	5540	2770	657	365	203	207
20	2710	1670	1140	1150	960	750	6870	2260	764	302	197	197
21	2200	1440	1080	1150	920	780	6340	2200	725	275	173	191
22	1870	1410	1190	1100	890	1550	5560	2180	827	279	167	182
23	1700	1290	1050	1040	840	1850	5920	1750	854	314	156	191
24	1510	1390	1010	1000	810	1700	5830	1550	651	310	188	179
25	1370	1490	1450	1000	770	1400	6150	1420	560	257	538	167
26	1280	1600	2450	2000	730	1280	5770	1250	486	216	387	167
27	1220	1670	1410	4850	690	1400	6470	1120	457	197	283	167
28	1120	1320	1100	2650	660	3000	6690	1010	428	347	247	167
29	1050	1250	1000	2000	---	2700	6470	910	392	471	264	164
30	978	1160	960	1800	---	2380	5680	1000	374	352	247	161
31	918	---	910	1650	---	2100	---	1060	---	314	219	---
TOTAL	72056	39374	40520	54600	29980	33660	142990	75370	26150	9798	8962	6866
MEAN	2324	1312	1307	1761	1071	1086	4766	2431	872	316	289	229
MAX	9490	2960	2710	6300	1550	3000	8130	4500	1590	651	615	672
MIN	764	764	690	720	660	560	2050	910	374	194	156	147
CFSM	3.37	1.90	1.89	2.55	1.55	1.57	6.91	3.52	1.26	.46	.42	.33
IN.	3.88	2.12	2.18	2.94	1.62	1.81	7.71	4.06	1.41	.53	.48	.37

CAL YR 1977 TOTAL 461481 MEAN 1264 MAX 20900 MIN 93 CFSM 1.83 IN 24.88
WTR YR 1978 TOTAL 540326 MEAN 1480 MAX 9490 MIN 147 CFSM 2.15 IN 29.13

01145000 MASCOMA RIVER AT WEST CANAAN, NH

LOCATION.--Lat 43°39'00", long 72°04'50", Grafton County, Hydrologic Unit 01080104, on right bank 45 ft (14 m) downstream from Boston and Maine Railroad bridge, 0.9 mi (1.4 km) east of West Canaan, 1.2 mi (1.9 km) downstream from Indian River, 3.5 mi (5.6 km) west of Canaan, and at mile 19.3 (31.1 km).

DRAINAGE AREA.--80.5 mi² (208.5 km²).

PERIOD OF RECORD.--July 1939 to September 1978 (discontinued).

REVISED RECORDS.--WSP 1901: 1960.

GAGE.--Water-stage recorder. Altitude of gage is 835 ft (254.5 m), from topographic map.

REMARKS.--Records good except those for winter period and period of no gage-height record Jan. 27 to Mar. 1, which are fair. Several observations of specific conductance were made during the year.

AVERAGE DISCHARGE.--39 years, 118 ft³/s (3.342 m³/s), 19.91 in/yr (506 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,780 ft³/s (107 m³/s) Mar. 27, 1953, gage height, 8.94 ft (2.725 m), from rating curve extended above 1,900 ft³/s (54 m³/s) on basis of slope-area measurement at gage height 9.6 ft (2.93 m); minimum, 2.9 ft³/s (0.082 m³/s) Aug. 8, 17, 18, 19, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1938 reached a stage of 9.6 ft (2.93 m), from floodmarks, discharge, 4,310 ft (122 m³/s), from rating curve extended above 1,900 ft³/s (54 m³/s) as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 950 ft³/s (27 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	2230	*1550	43.9	5.90	1.798	Apr. 21	1100	982	27.8	4.75	1.448
Jan. 27	--	Unknown		*Unknown							

Minimum discharge, 5.3 ft³/s (0.15 m³/s) Aug. 24, Sept. 11.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	67	214	78	160	52	197	361	313	26	12	10
2	398	64	293	74	146	51	519	279	179	23	11	9.1
3	188	63	210	72	136	50	326	246	432	20	11	7.7
4	112	62	160	70	128	48	153	226	549	19	16	7.2
5	81	64	121	70	120	46	266	219	294	18	22	6.9
6	66	66	111	70	110	44	327	204	218	16	15	6.0
7	56	73	98	110	100	43	277	194	161	14	13	6.4
8	47	100	92	220	96	42	219	189	461	13	13	6.8
9	184	150	86	400	92	42	199	312	672	12	14	6.5
10	589	144	84	700	87	42	203	465	756	11	13	5.6
11	300	140	82	380	84	45	297	308	359	10	12	5.8
12	169	130	80	270	80	47	529	223	214	9.2	12	62
13	128	120	85	200	77	52	631	182	167	8.5	20	35
14	108	105	110	180	75	62	732	151	276	13	16	20
15	165	92	150	155	73	100	534	213	204	31	13	15
16	165	85	190	140	71	92	388	616	140	29	11	15
17	795	88	150	130	69	85	384	495	110	41	9.4	13
18	1120	100	130	120	68	80	423	333	91	29	8.0	12
19	525	106	114	110	66	73	537	267	84	21	7.5	10
20	330	92	108	104	64	65	843	206	77	17	7.1	9.0
21	234	91	104	98	62	64	959	186	72	14	6.5	8.0
22	179	92	100	92	60	84	718	164	78	12	5.8	7.0
23	147	86	98	86	59	97	662	133	76	12	5.6	6.7
24	125	113	96	82	58	110	599	114	60	17	5.7	6.7
25	114	129	104	80	57	115	597	101	49	13	14	6.2
26	102	156	136	150	55	96	573	90	43	10	14	6.0
27	95	209	120	560	54	94	593	79	40	8.8	11	5.5
28	88	133	110	420	53	332	592	69	36	27	9.6	5.5
29	78	109	96	360	---	381	554	76	32	21	14	5.5
30	72	94	88	270	---	275	504	235	32	16	14	5.5
31	69	---	82	190	---	201	---	154	---	14	11	---
TOTAL	6896	3123	3802	6041	2360	3010	14335	7090	6275	545.5	367.2	331.6
MEAN	222	104	123	195	84.3	97.1	478	229	209	17.6	11.8	11.1
MAX	1120	209	293	700	160	381	959	616	756	41	22	62
MIN	47	62	80	70	53	42	153	69	32	8.5	5.6	5.5
CFSM	2.76	1.29	1.53	2.42	1.05	1.21	5.94	2.85	2.60	.22	.15	.14
IN.	3.19	1.44	1.76	2.79	1.09	1.39	6.62	3.28	2.90	.25	.17	.15

CAL YR 1977 TOTAL 44613.8 MEAN 122 MAX 1590 MIN 4.0 CFSM 1.52 IN 20.62
WTR YR 1978 TOTAL 54176.3 MEAN 148 MAX 1120 MIN 5.5 CFSM 1.84 IN 25.04

01150500 MASCOMA RIVER AT MASCOMA, NH

LOCATION.--Lat 43°39'01", long 72°11'05", Grafton County, Hydrologic Unit 01080104, on left bank at Mascoma, 250 ft (76 m) downstream from railroad bridge, 1,000 ft (300 m) downstream from outlet of Mascoma Lake, and 9.9 mi (15.9 km) upstream from mouth.

DRAINAGE AREA.--153 mi^2 (396 km^2).

PERIOD OF RECORD.--August 1923 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WSP 801: 1925(M).

GAGE.--Water-stage recorder. Altitude of gage is 740 ft (226 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record Mar. 23 to May 8, which are fair. Flow regulated by Mascoma and Crystal Lakes and Goose and Grafton Ponds (Reservoirs in Connecticut River basin). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--55 years, 217 ft^3/s (6.145 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,840 ft^3/s (165 m^3/s) Mar. 19, 1936, gage height, 7.50 ft (2.286 m), from rating curve extended above 2,500 ft^3/s (71 m^3/s) on basis of computations of flow over dams at gage heights 6.85 ft (2.088 m) and 7.50 ft (2.286 m); minimum daily, 2 ft^3/s (0.06 m^3/s) Feb. 3, 1939, Sept. 1, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,500 ft^3/s (42 m^3/s) Apr. 22, gage height, unknown; minimum daily, 22 ft^3/s (0.62 m^3/s) Sept. 11, 15.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	197	276	210	517	117	390	930	114	48	27	28
2	192	195	342	200	452	118	410	930	170	220	27	28
3	328	207	389	192	404	119	430	660	469	115	27	27
4	389	229	381	182	363	120	560	440	735	47	28	27
5	356	226	363	172	335	119	545	455	766	46	28	27
6	325	235	342	165	305	118	570	205	694	45	29	27
7	302	290	318	159	281	117	570	240	581	45	31	26
8	281	328	295	154	272	116	570	560	540	346	31	26
9	353	281	272	298	229	115	570	457	610	90	31	24
10	504	250	250	544	187	115	570	596	754	50	31	23
11	549	272	235	615	187	114	350	688	869	28	31	22
12	544	302	217	665	187	114	390	522	791	27	31	23
13	508	290	207	642	187	114	520	412	659	26	31	23
14	549	263	210	596	187	113	720	385	499	26	31	23
15	544	238	217	526	185	114	690	360	396	26	31	22
16	486	217	241	469	185	117	690	461	259	26	32	23
17	508	207	267	424	182	120	710	620	117	28	33	23
18	760	212	267	389	182	122	1000	642	134	28	32	25
19	1050	232	259	356	180	124	930	615	144	30	33	30
20	1010	238	247	339	177	125	1240	577	149	31	32	35
21	705	229	241	325	175	123	1330	540	149	32	32	42
22	522	217	238	318	151	120	1400	444	144	33	31	49
23	465	210	238	212	117	170	1340	342	185	33	30	61
24	416	210	235	117	118	180	1280	267	197	34	29	75
25	286	220	232	118	118	180	1240	170	165	35	28	86
26	195	235	247	238	120	220	1180	170	114	35	28	91
27	205	272	272	424	120	225	1130	167	58	36	28	94
28	207	298	263	517	120	235	1000	167	35	38	28	94
29	210	281	244	610	---	290	1000	122	40	48	28	97
30	205	259	229	637	---	315	980	67	48	276	28	97
31	202	---	217	586	---	345	---	79	---	37	28	---
TOTAL	13318	7340	8251	11399	6223	4754	24305	13290	10585	1965	925	1298
MEAN	430	245	266	368	222	153	810	429	353	63.4	29.8	43.3
MAX	1050	328	389	665	517	345	1400	930	869	346	33	97
MIN	162	195	207	117	117	113	350	67	35	26	27	22

CAL YR 1977 TOTAL 84118 MEAN 230 MAX 1940 MIN 30
WTR YR 1978 TOTAL 103653 MEAN 284 MAX 1400 MIN 22

01151500 OTTAUQUECHEE RIVER AT NORTH HARTLAND, VT

LOCATION.--Lat 43°36'09", long 72°21'17", Windsor County, Hydrologic Unit 01080106, on left bank 100 ft (30 m) upstream from highway bridge at North Hartland, 0.3 mi (0.5 km) downstream from North Hartland Dam, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--221 mi² (572 km²).

PERIOD OF RECORD.--Discharge: October 1930 to current year.
Water-quality records: Water years 1954-55.

GAGE.--Water-stage recorder. Datum of gage is 336.77 ft (102.647 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants upstream and by North Hartland Reservoir (Reservoir in Connecticut River basin) since March 1961; greater regulation by powerplants prior to 1958. Small seasonal storage in reservoir at Plymouth. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--48 years, 398 ft³/s (11.27 m³/s), 24.46 in/yr (621 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,400 ft³/s (691 m³/s) Sept. 21, 1938, gage height, 17.68 ft (5.389 m), from rating curve extended above 6,200 ft³/s (180 m³/s) on basis of computations of flow over dams at gage heights 15.58 ft (4.749 m), 17.68 ft (5.389 m), and 21.5 ft (6.55 m); minimum, 2.9 ft³/s (0.082 m³/s) July 31, 1933; minimum daily, 3.8 ft³/s (0.11 m³/s) July 3, 1933. Maximum discharge since construction of North Hartland Dam in March 1961, 6,170 ft³/s (175 m³/s) Mar. 17, 1977, gage height, 8.67 ft (2.643 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1760, 21.5 ft (6.55 m) in November 1927, from floodmarks, discharge 30,400 ft³/s (861 m³/s), by computation of peak flow over dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,080 ft³/s (116 m³/s) Oct. 18, gage height, 7.33 ft (2.234 m); minimum, 27 ft³/s (0.76 m³/s) Sept. 28, 29, 30; minimum daily, 27 ft³/s (0.76 m³/s) Sept. 29, 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270	323	610	300	450	210	716	1350	523	109	59	63
2	1120	312	850	280	440	205	1040	857	351	93	62	63
3	1160	300	1020	260	430	200	1030	843	447	70	65	63
4	660	242	700	250	420	195	916	859	557	69	184	56
5	470	185	420	240	410	190	995	869	481	75	225	37
6	280	194	400	230	410	190	1190	814	420	87	124	29
7	230	296	410	220	400	185	1190	767	500	73	85	29
8	230	297	440	220	400	180	1030	716	900	73	79	29
9	650	379	400	1210	390	170	970	910	1060	69	62	36
10	1890	435	420	1950	380	180	911	1750	731	69	46	40
11	835	400	350	2150	360	190	1320	1070	473	68	46	40
12	530	330	280	1550	335	180	2220	613	373	67	58	84
13	550	310	250	730	340	175	2680	695	352	57	105	165
14	500	300	340	630	330	260	2960	700	350	55	106	129
15	598	280	675	560	320	364	2750	697	338	55	106	112
16	648	270	688	500	300	438	1730	1240	290	54	85	84
17	1860	400	516	440	285	347	1480	1600	239	105	75	69
18	3300	600	418	410	280	314	1500	1280	239	153	69	63
19	2100	940	408	380	270	307	1830	1100	239	141	66	59
20	1560	720	411	360	265	263	2560	795	232	96	66	59
21	960	620	408	340	260	269	2690	730	191	80	53	59
22	661	520	410	330	250	373	2090	728	200	77	47	56
23	590	420	412	320	240	592	2180	591	225	77	42	52
24	519	430	400	310	235	616	2050	483	201	77	94	52
25	491	455	395	300	230	554	2040	434	161	65	172	52
26	464	490	534	340	225	443	2020	422	124	49	134	52
27	434	515	570	900	220	466	2060	355	135	44	64	52
28	405	500	500	1250	205	889	2090	324	135	86	72	35
29	376	420	370	1200	---	1070	2090	301	134	117	91	27
30	356	380	340	1110	---	1020	1930	351	125	68	63	27
31	338	---	310	700	---	723	---	404	---	50	63	---
TOTAL	25035	12263	14655	19970	9080	11758	52258	24648	10726	2428	2668	1773
MEAN	808	409	473	644	324	379	1742	795	358	78.3	86.1	59.1
MAX	3300	940	1020	2150	450	1070	2960	1750	1060	153	225	165
MIN	230	185	250	220	205	170	716	301	124	44	42	27
MEAN†	771	425	475	645	321	377	1752	814	353	78.3	86.8	58.7
CFSM†	3.49	1.92	2.15	2.92	1.45	1.71	7.93	3.68	1.60	.35	.39	.27
IN.†	4.02	2.15	2.48	3.36	1.51	1.97	8.85	4.25	1.78	.41	.45	.30

CAL YR 1977 TOTAL 165377 MEAN 453 MAX 5190 MIN 21 MEAN† 455 CFSM† 2.06 IN† 27.93
WTR YR 1978 TOTAL 187262 MEAN 513 MAX 3300 MIN 27 MEAN† 513 CFSM† 2.32 IN† 31.52

† Adjusted for change in contents in North Hartland Reservoir.

01152500 SUGAR RIVER AT WEST CLAREMONT, NH

LOCATION.--Lat 43°23'15", long 72°21'45", Sullivan County, Hydrologic Unit 01080104, on right bank 0.2 mi (0.3 km) downstream from Redwater Brook at West Claremont and 2.4 mi (3.9 km) upstream from mouth.

DRAINAGE AREA.--269 mi² (697 km²).

PERIOD OF RECORD.--Discharge: May 1928 to current year. Published as "at Claremont" prior to October 1928. Water-quality records: Water year 1954.

REVISED RECORDS.--WSP 711: 1930(M). WSP 756: Drainage area. WSP 1901: 1960 (adjusted figures only).

GAGE.--Water-stage recorder. Datum of gage is 358.78 ft (109.356 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1928, nonrecording gage at site 0.8 mi (1.3 km) upstream at different datum.

REMARKS.--Records excellent except those for winter period, which are fair. Regulation by Sunapee Lake 25 mi (40 km) upstream (Reservoirs in Connecticut River basin) and occasional diurnal fluctuation at low flow by mills upstream; greater regulation by mills prior to 1971. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--50 years, 405 ft³/s (11.47 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,000 ft³/s (396 m³/s) Mar. 19, 1936, gage height, 10.92 ft (3.328 m), from rating curve extended above 6,700 ft³/s (190 m³/s) on basis of computations of flow over dam at gage heights 10.49 ft (3.197 m) and 10.92 ft (3.328 m); maximum gage height, 11.80 ft (3.597 m) Mar. 12, 1936, ice jam; minimum daily discharge, 14 ft³/s (0.40 m³/s) Aug. 26, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0100	3150	89.2	5.31	1.618	Jan. 26	-	6200	180	ice jam	
Jan. 9	1700	*8920	253	8.71	2.655						

Minimum daily discharge, 54 ft³/s (1.53 m³/s) Sept. 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	322	747	350	700	195	900	1010	317	84	80	62
2	1200	309	1230	340	500	190	1200	793	264	80	76	56
3	950	300	1120	320	450	185	1000	660	429	78	74	56
4	600	288	998	310	430	185	800	583	786	74	86	56
5	450	300	887	290	400	180	900	522	618	72	110	56
6	380	313	760	280	390	180	1100	470	485	70	90	58
7	340	296	684	270	370	180	980	414	394	63	86	58
8	300	292	630	270	360	175	860	380	660	65	82	56
9	1000	470	578	3050	340	170	800	394	1310	66	80	56
10	1400	490	520	3010	330	170	900	660	1350	70	78	56
11	1000	935	480	1900	320	170	1400	624	1030	66	72	61
12	750	900	460	1350	310	170	2000	496	793	63	95	68
13	580	672	450	1010	300	165	1800	409	624	59	131	59
14	660	561	450	780	290	160	1600	366	566	59	104	54
15	1100	490	680	650	280	404	1300	344	434	76	88	68
16	980	434	730	560	280	419	1000	949	317	99	78	68
17	2400	399	630	520	270	353	900	1170	237	102	72	66
18	2580	404	580	480	260	317	1000	1060	201	175	69	65
19	1590	419	520	450	250	309	1300	956	191	133	67	65
20	1220	404	490	430	240	288	2400	793	198	107	66	61
21	963	380	490	410	230	300	2200	728	178	90	63	61
22	780	357	572	400	230	501	2000	666	165	82	61	61
23	684	335	555	390	220	583	1800	583	159	76	57	61
24	606	371	496	380	220	654	1700	517	142	84	63	61
25	544	485	539	380	210	561	1620	429	128	72	79	61
26	512	555	847	2000	210	490	1510	390	118	66	74	58
27	485	928	578	5000	200	528	1410	357	110	66	67	59
28	434	722	475	3200	200	840	1310	288	102	128	63	58
29	390	642	410	2300	---	963	1200	219	95	107	60	59
30	366	555	390	1600	---	935	1120	191	90	95	58	58
31	344	---	370	1100	---	847	---	194	---	84	61	---
TOTAL	25878	14328	19346	33780	8790	11767	40010	17615	12491	2611	2390	1802
MEAN	835	478	624	1090	314	380	1334	568	416	84.2	77.1	60.1
MAX	2580	935	1230	5000	700	963	2400	1170	1350	175	131	68
MIN	290	288	370	270	200	160	800	191	90	59	57	54

CAL YR 1977 TOTAL 174889 MEAN 479 MAX 5880 MIN 39
WTR YR 1978 TOTAL 190808 MEAN 523 MAX 5000 MIN 54

01152800 BLACK RIVER AT COVERED BRIDGE, AT WEATHERSFIELD, VT

LOCATION.--Lat 43°23'55", long 72°31'14", Windsor County, Hydrologic Unit 01080106, on left bank 540 ft (165 m) downstream from covered bridge, 0.3 mi (0.5 km) west of Downers, and 1.7 mi (2.7 km) north of Perkinsville (Weathersfield Town Hall).

DRAINAGE AREA.--114 mi² (295 km²).

PERIOD OF RECORD.--December 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 565.33 ft (172.313 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1977, at datum 2.00 ft (0.610 m) lower.

REMARKS.--Records good except those for winter period and periods of no gage-height record Oct. 7-17, Oct. 21 to Jan. 11, which are poor. Flow regulated by powerplant and mills upstream. High flow slightly affected by retarding reservoirs. Several observations of water temperature and specific conductance were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s (323 m³/s) Mar. 14, 1977, gage height, 8.75 ft (2.667 m), present datum, from rating curve extended above 4,100 ft³/s (120 m³/s); maximum gage height, 10.64 ft (3.243 m), present datum, Aug. 10, 1976; minimum daily discharge, 15 ft³/s (0.42 m³/s) Aug. 19, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 30, 1973, reached a discharge of 15,100 ft³/s (428 m³/s), by slope-area measurement 2.4 mi (3.9 km) upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (71 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	--	*4300	120	Unknown		Apr. 20	0130	2540	71.9	5.83	1.777
Jan. 11	--	3600	100	--	--	May 16	1930	2530	71.6	5.82	1.774
Apr. 13	1930	3000	85.0	6.00	1.853	June 7	1830	2900	82.1	6.03	1.838

Minimum daily discharge, 21 ft³/s (0.59 m³/s) July 9, 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	182	170	450	170	280	110	515	835	210	50	50	43
2	729	160	630	160	250	108	689	666	317	43	52	40
3	444	160	500	154	230	105	490	583	308	31	58	33
4	292	154	380	148	220	102	418	600	232	30	51	35
5	188	146	325	140	210	100	648	519	219	28	58	32
6	154	136	285	136	202	99	701	507	186	27	87	30
7	150	138	245	132	196	99	658	510	830	25	92	29
8	190	140	220	130	190	98	578	528	961	24	83	24
9	400	280	200	700	188	98	546	743	533	21	47	34
10	1100	270	190	1100	186	97	564	795	203	21	36	40
11	700	420	180	1500	182	96	951	600	178	43	44	48
12	450	340	178	616	180	96	1720	485	176	42	70	93
13	330	270	185	486	175	98	1870	421	170	37	125	105
14	300	230	250	415	170	100	1830	371	166	42	90	99
15	440	210	320	350	162	118	1160	530	162	25	80	84
16	630	195	350	320	158	230	860	891	158	29	65	57
17	2500	230	300	300	152	200	782	1100	158	39	55	55
18	1570	280	260	275	148	185	897	876	158	121	40	60
19	764	290	240	260	144	175	1080	663	159	53	43	57
20	504	250	230	250	140	170	1880	533	143	60	48	56
21	420	220	240	240	135	210	1450	474	121	42	43	50
22	370	200	260	230	130	280	1140	451	151	33	35	50
23	350	215	240	225	126	320	1210	391	121	31	30	48
24	320	250	230	218	124	275	1240	358	98	37	28	43
25	350	320	290	210	121	232	1200	319	70	30	47	43
26	290	400	370	400	118	242	1120	310	52	24	60	43
27	250	440	270	700	116	424	1330	252	52	33	42	38
28	230	330	210	930	114	702	1410	314	48	78	40	34
29	206	260	200	850	---	615	1330	270	47	66	56	26
30	186	220	190	700	---	509	1190	202	62	59	46	35
31	175	---	175	450	---	443	---	238	---	53	44	---
TOTAL	15164	7324	8593	12895	4747	6736	31457	16335	6449	1277	1745	1464
MEAN	489	244	277	416	170	217	1049	527	215	41.2	56.3	48.8
MAX	2500	440	630	1500	280	702	1880	1100	961	121	125	105
MIN	150	136	175	130	114	96	418	202	47	21	28	24
CFSM	4.29	2.14	2.43	3.65	1.49	1.90	9.20	4.62	1.89	.36	.49	.43
IN.	4.95	2.39	2.80	4.21	1.55	2.20	10.26	5.33	2.10	.42	.57	.48

CAL YR 1977 TOTAL 102590 MEAN 281 MAX 6730 MIN 15 CFSM 2.47 IN 33.48
WTR YR 1978 TOTAL 114186 MEAN 313 MAX 2500 MIN 21 CFSM 2.75 IN 37.26

01153000 BLACK RIVER AT NORTH SPRINGFIELD, VT

LOCATION.--Lat 43°20'00", long 72°30'55", Windsor County, Hydrologic Unit 01080106, on right bank at North Springfield, 800 ft (250 m) downstream from North Springfield Dam, 1,300 ft (400 m) upstream from Great Brook, and 8.1 mi (13.0 km) upstream from mouth.

DRAINAGE AREA.--158 mi² (409 km²).

PERIOD OF RECORD.--Discharge: October 1929 to current year. October 1929 monthly discharge only, published in WSP 1301.
Water-quality records: Water years 1954-55.

REVISED RECORDS.--WSP 756: Drainage area. WSP 781: 1931(M), 1934(M).

GAGE.--Water-stage recorder. Datum of gage is 445.79 ft (135.877 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplant and mills upstream and by North Springfield Reservoir (Reservoirs in Connecticut River basin) since November 1960. High flow slightly affected by retarding reservoirs since 1968. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--49 years, 290 ft³/s (8.213 m³/s), 24.93 in/yr (633 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft³/s (439 m³/s) Sept. 22, 1938, gage height, 17.68 ft (5.389 m), from rating curve extended above 3,200 ft³/s (91 m³/s) on basis of computations of flow over dams at gage heights 16.41 ft (5.00 m) and 17.68 ft (5.389 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Nov. 13, 1973. Maximum discharge since construction of North Spingfield Dam in 1960, 3,550 ft³/s (101 m³/s) Apr. 11, 1962, gage height, 6.43 ft (1.960 m); maximum gage height, 7.24 ft (2.207 m) Apr. 6, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,740 ft³/s (77.6 m³/s) Jan. 11, gage height, 6.43 ft (1.960 m); minimum daily, 34 ft³/s (0.96 m³/s) Sept. 9, 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	213	671	250	450	160	721	979	351	90	71	57
2	927	197	953	235	350	155	974	764	298	74	66	53
3	656	203	805	225	340	155	901	674	464	63	70	47
4	413	190	604	215	325	150	689	685	438	64	70	44
5	297	181	494	205	310	150	829	619	327	61	76	42
6	223	184	420	195	290	145	967	561	311	57	94	40
7	223	187	370	190	295	145	1070	561	277	56	126	38
8	193	190	330	190	275	145	896	575	730	54	107	35
9	550	427	290	934	265	140	837	737	1030	52	84	34
10	1050	418	280	1610	255	140	827	858	1270	48	60	37
11	915	630	270	2220	250	140	1110	699	694	52	51	48
12	512	517	250	2260	240	140	1620	561	491	66	74	84
13	366	422	270	1350	235	145	2080	486	421	54	180	127
14	362	341	322	671	230	150	2330	432	405	50	130	121
15	535	309	480	604	225	165	2060	428	364	56	105	122
16	512	293	531	507	220	340	1140	571	297	50	90	74
17	1390	293	459	467	215	290	1060	780	274	60	69	67
18	2310	422	378	436	210	270	1080	1030	251	146	52	70
19	1920	431	362	400	205	250	1320	1190	258	102	54	71
20	1100	378	338	360	200	240	2170	952	270	75	62	67
21	709	330	334	350	195	279	2060	573	223	66	60	61
22	459	305	387	335	190	399	1460	530	240	50	49	59
23	441	293	349	340	185	472	1470	476	226	45	38	57
24	383	370	322	350	180	471	1410	407	193	46	36	51
25	441	391	354	300	175	391	1430	373	129	45	66	50
26	358	604	554	338	175	397	1320	341	124	40	75	49
27	314	671	380	753	170	492	1410	312	102	39	53	47
28	293	459	320	1150	165	846	1450	263	92	84	51	42
29	273	383	290	1330	---	1120	1380	244	90	100	67	40
30	233	358	275	1240	---	986	1270	345	100	79	66	39
31	213	---	260	693	---	743	---	280	---	76	59	---
TOTAL	18761	10590	12702	20703	6820	10211	39341	18286	10740	2000	2311	1773
MEAN	605	353	410	668	244	329	1311	590	358	64.5	74.5	59.1
MAX	2310	671	953	2260	450	1120	2330	1190	1270	146	180	127
MIN	190	181	250	190	165	140	689	244	90	39	36	34
MEAN†	601	358	409	669	240	334	1312	589	355	65	75	58
CFSM†	3.80	2.27	2.59	4.23	1.52	2.11	8.30	3.73	2.25	0.41	0.47	0.37
IN.†	4.39	2.53	2.99	4.89	1.58	2.44	9.26	4.30	2.51	0.47	0.54	0.41

CAL YR 1977 TOTAL 137959 MEAN 378 MAX 3250 MIN 28 MEAN† 378 CFSM† 2.39 IN† 32.49
WTR YR 1978 TOTAL 154238 MEAN 423 MAX 2330 MIN 34 MEAN† 422 CFSM† 2.67 IN† 36.30

† Adjusted for change in contents in North Springfield Reservoir.

01153500 WILLIAMS RIVER AT BROCKWAYS MILLS, VT

LOCATION.--Lat 43°12'31", long 72°31'05", Windham County, Hydrologic Unit 01080107, on left bank 25 ft (7.6 m) upstream from highway bridge at Brockways Mills, 4 mi (6.4 km) downstream from Hall Brook, 4.6 mi (7.4 km) upstream from mouth, and 6 mi (9.7 km) northwest of Bellows Falls.
DRAINAGE AREA.--103 mi² (267 km²).
PERIOD OF RECORD.--Discharge: June 1940 to current year.
Water-quality records: Water years 1957, 1967-74.
REVISED RECORDS.--WSP 1031: 1943-44(P). WSP 1301: 1941-42(M).
GAGE.--Water-stage recorder. Datum of gage is 433.54 ft (132.143 m) National Geodetic Vertical Datum of 1929 (levels by private engineer).
REMARKS.--Records excellent except those for winter period and period of no gage-height record Oct. 23 to Nov. 29 which are fair. Several observations of water temperature and specific conductance were made during the year.
AVERAGE DISCHARGE.--38 years, 173 ft³/s (4.899 m³/s), 22.81 in/yr (579 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft³/s (334 m³/s) Aug. 10, 1976, gage height, 15.85 ft (4.831 m), from rating curve extended above 3,300 ft³/s (93 m³/s) on basis of slope-area measurement at gage height 13.31 ft (4.057 m); minimum not determined, occurred Dec. 11, 1941, during period of ice effect; minimum daily, 3.6 ft³/s (0.10 m³/s) Aug. 27, 1949.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1938 had greatest discharge since at least 1753, gage height, 22.7 ft (6.92 m), from floodmarks. Flood in November 1927 reached a stage possibly 2 ft (1 m) higher than that of September 1938 flood because of backwater from milldam, from information by local residents.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,600 ft³/s (74 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	-	4590	130	a9.29	2.832	Jan. 9	1430	*5050	143	9.75	2.972

a From peak-stage indicator.

Minimum discharge not determined; minimum daily, 15 ft³/s (0.42 m³/s) Sept. 29, 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	110	629	175	200	62	485	334	89	56	36	34
2	500	110	615	165	180	60	765	290	86	50	41	28
3	230	110	419	155	160	59	485	270	230	46	50	24
4	140	105	326	150	150	58	402	254	190	47	56	22
5	110	110	267	145	140	57	648	240	130	48	62	20
6	90	115	230	140	130	56	685	223	110	46	50	19
7	82	115	210	135	125	56	604	209	105	45	40	18
8	78	110	200	135	120	56	530	199	316	43	32	18
9	560	200	190	2300	115	55	520	297	463	40	30	18
10	450	180	180	948	110	55	534	289	293	39	25	17
11	270	350	170	450	105	56	1020	218	178	38	22	20
12	210	275	170	330	100	60	1430	191	145	35	65	54
13	170	220	190	270	96	100	1460	178	128	32	84	39
14	150	190	230	230	93	149	1340	168	132	31	41	26
15	400	170	500	200	90	314	826	253	112	35	31	24
16	350	160	430	180	86	183	606	388	100	53	27	24
17	2000	170	310	170	84	154	565	715	93	135	24	22
18	800	220	260	155	80	136	631	440	95	100	22	21
19	450	190	230	145	78	136	804	359	113	70	20	22
20	339	160	210	140	76	131	1580	250	130	45	18	22
21	270	140	220	135	74	140	1040	200	95	33	18	20
22	232	130	290	130	72	243	775	180	80	31	17	19
23	200	120	250	130	70	280	738	160	70	29	17	18
24	180	220	200	125	68	300	705	140	62	31	22	17
25	170	210	275	500	67	244	664	130	56	28	71	16
26	150	400	450	1250	66	223	596	120	55	27	38	16
27	140	450	300	890	65	465	606	110	54	43	28	16
28	130	280	250	451	64	743	565	100	54	86	26	16
29	120	230	220	326	---	620	500	96	57	66	38	15
30	115	200	200	284	---	519	427	90	80	52	30	15
31	110	---	180	230	---	441	---	90	---	45	29	---
TOTAL	9296	5750	8801	11169	2864	6211	22536	7181	3901	1505	1110	660
MEAN	300	192	284	360	102	200	751	232	130	48.5	35.8	22.0
MAX	2000	450	629	2300	200	743	1580	715	463	135	84	54
MIN	78	105	170	125	64	55	402	90	54	27	17	15
CFSM	2.91	1.86	2.76	3.50	.99	1.94	7.29	2.25	1.26	.47	.35	.21
IN.	3.36	2.08	3.18	4.03	1.03	2.24	8.14	2.59	1.41	.54	.40	.24

CAL YR 1977 TOTAL 76916 MEAN 211 MAX 4730 MIN 14 CFSM 2.05 IN 27.78
WTR YR 1978 TOTAL 80984 MEAN 222 MAX 2300 MIN 15 CFSM 2.16 IN 29.25

01154000 SAXTONS RIVER AT SAXTONS RIVER, VT

LOCATION.--Lat 43°08'14", long 72°29'17", Windham County, Hydrologic Unit 01080107, on right bank 130 ft (40 m) upstream from highway bridge, 0.8 mi (1.3 km) east of Saxtons River, 1.4 mi (2.3 km) upstream from Bundy Brook, and 3.9 mi (6.3 km) upstream from mouth.
DRAINAGE AREA.--72.2 mi² (187.0 km²).
PERIOD OF RECORD.--Discharge: June 1940 to current year.
Water-quality record: Water year 1957.
REVISED RECORDS.--WSP 1301: 1948-49(M).
GAGE.--Water-stage recorder. Datum of gage is 395.51 ft (120.551 m) National Geodetic Vertical Datum of 1929 (levels by private engineer).
REMARKS.--Records good except those for winter period and period of no gage-height record, Nov. 30 to Jan. 3, which are fair. Occasional diurnal fluctuation at low flow prior to 1962; fluctuation more frequent prior to 1946. Several observations of water temperature and specific conductance were made during the year.
AVERAGE DISCHARGE.--38 years, 121 ft³/s (3.427 m³/s), 22.76 in/yr (578 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,460 ft³/s (240 m³/s) Aug. 10, 1976, gage height, 14.06 ft (4.285 m), from rating curve extended above 2,000 ft³/s (57 m³/s) on basis of slope-area measurements at gage heights 10.51 ft (3.203 m), 11.37 ft (3.466 m), and 13.26 ft (4.042 m); minimum, 1.9 ft³/s (0.054 m³/s) July 25, 1949; minimum daily, 2.4 ft³/s (0.068 m³/s) Aug. 6, 1955.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1869, 17.9 ft (5.46 m) in September 1938, from floodmarks (discharge not determined).
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,750 ft³/s (50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	0930	2500	70.8	8.08	2.463	Jan. 9	1200	*3740	106	9.49	2.893

Minimum discharge, 9.4 ft³/s (0.27 m³/s) Sept. 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	86	640	105	180	60	369	226	60	19	16	21
2	332	83	500	94	165	59	555	198	52	17	16	16
3	141	81	375	86	153	58	379	186	114	17	15	14
4	97	81	290	82	144	56	320	174	115	17	19	13
5	75	87	240	79	135	55	467	164	74	17	20	12
6	65	83	200	77	125	54	543	151	64	16	19	11
7	58	80	170	76	120	53	478	141	58	15	21	11
8	53	138	150	74	115	52	410	132	147	14	23	10
9	382	396	130	1740	110	52	392	200	198	14	20	9.9
10	357	232	110	707	105	51	410	240	139	13	17	9.6
11	186	427	95	410	100	51	678	170	90	13	15	12
12	141	261	82	300	98	50	900	143	72	12	37	40
13	114	200	100	250	94	50	860	128	62	12	52	25
14	107	169	120	210	90	49	800	119	64	12	26	16
15	242	146	390	180	88	196	547	155	52	14	19	15
16	169	141	320	160	84	160	413	269	45	15	16	16
17	1370	141	250	150	80	133	386	494	40	60	15	14
18	590	192	220	140	78	110	410	333	40	43	13	13
19	326	149	200	135	74	100	543	281	57	22	13	15
20	256	128	185	130	72	95	1010	216	84	17	12	15
21	206	120	180	125	70	96	659	200	52	15	11	13
22	174	119	230	120	69	208	498	168	53	14	11	13
23	149	110	200	115	68	226	471	141	44	14	10	12
24	134	223	180	115	67	232	442	126	35	12	11	12
25	125	186	250	110	65	198	429	114	29	11	15	12
26	119	438	390	936	64	184	379	102	26	11	24	11
27	113	312	250	631	63	363	383	91	26	11	18	11
28	107	217	180	341	61	506	355	81	23	27	17	11
29	99	170	150	258	---	434	320	72	23	18	22	11
30	93	145	130	219	---	382	281	65	25	16	19	11
31	88	---	115	192	---	335	---	59	---	15	16	---
TOTAL	6549	5341	7022	8347	2737	4708	15087	5339	1963	543	578	425.5
MEAN	211	178	227	269	97.8	152	503	172	65.4	17.5	18.6	14.2
MAX	1370	438	640	1740	180	506	1010	494	198	60	52	40
MIN	53	80	82	74	61	49	281	59	23	11	10	9.6
CFSM	2.92	2.47	3.14	3.73	1.36	2.11	6.97	2.38	.91	.24	.26	.20
IN.	3.37	2.75	3.62	4.30	1.41	2.43	7.77	2.75	1.01	.28	.30	.22

CAL YR 1977 TOTAL 56583.9 MEAN 155 MAX 3200 MIN 8.7 CFSM 2.15 IN 29.15
WTR YR 1978 TOTAL 58639.5 MEAN 161 MAX 1740 MIN 9.6 CFSM 2.23 IN 30.21

01154500 CONNECTICUT RIVER AT NORTH WALPOLE, NH

LOCATION.--Lat 43°07'34", long 72°26'14", Cheshire County, Hydrologic Unit 01080104, on left bank at North Walpole, 100 ft (30 m) upstream from Saxtons River, 0.7 mi (1.1 km) downstream from Vilas Bridge between Bellows Falls, VT, and North Walpole, NH, and at mile 172.5 (277.6 km).

DRAINAGE AREA.--5,493 mi² (14,227 km²), includes that of Saxtons River.

PERIOD OF RECORD.--Discharge: March 1942 to current year.
Water-quality records: Water years 1954-55, 1971.

GAGE.--Water-stage recorder. Datum of gage is 218.63 ft (66.638 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter period, which are good. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs (Reservoirs in Connecticut River basin), and other reservoirs, combined usable capacity, about 24,800,000,000 ft³ (702,000,000 m³).

AVERAGE DISCHARGE.--36 years, 9,410 ft³/s (266.5 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 97,000 ft³/s (2,750 m³/s) Mar. 27, 1953, gage height, 30.37 ft (9.257 m); minimum daily, 115 ft³/s (3.26 m³/s) Aug. 31, 1952, Sept. 2, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1750, 43.8 ft (13.35 m) Mar. 19, 1936, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 50,300 ft³/s (1,420 m³/s) Oct. 18, gage height, 20.15 ft (6.142 m); minimum daily, 1,200 ft³/s (34.0 m³/s) Sept. 18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10100	8890	16900	7580	14000	6200	13600	33900	9240	7240	3230	1320
2	26000	8420	20000	6830	13000	6000	15600	28500	9470	2820	2490	2210
3	27500	7930	15200	6750	12500	6400	15200	20200	9860	5080	3170	1320
4	22700	7860	14100	8540	12000	6800	15500	17900	12200	3170	4430	1300
5	16200	7820	13000	7450	10500	4300	16700	15600	12700	3690	3860	1300
6	12200	9420	12400	7510	9500	6000	21200	15500	11200	2640	3120	1350
7	10500	9020	12900	7490	10500	7000	22800	14500	11000	2830	3200	1900
8	9510	9530	11900	7140	9800	6600	19100	15700	13600	2390	4010	1300
9	15300	10700	10700	21800	10500	7400	15800	24000	19600	2440	3870	1300
10	27200	11300	8950	41700	10500	5600	14400	32800	19200	4610	2540	1300
11	27000	16300	6860	27000	9200	11000	18700	33400	16400	5010	2590	3000
12	18000	20100	7190	25000	9000	6750	29400	28600	15500	3340	1340	3300
13	16400	19000	7350	20000	8700	7990	36700	26700	14900	2300	1470	2800
14	15800	14000	8840	16000	8600	8810	41400	25200	12400	2330	5700	2000
15	16400	12000	11000	13000	7000	9590	37400	22600	13500	1300	3260	1300
16	17800	11000	14500	12500	8000	10200	30300	24500	12400	1310	3660	1300
17	31700	8500	13200	12500	9000	8680	26500	24900	10200	4540	2980	1300
18	46900	13000	10900	12000	10000	6260	26900	24800	5570	4410	1330	1200
19	37400	19500	7110	11000	7000	5290	30700	24900	7730	4160	1320	3600
20	25600	18500	8910	12000	6800	6340	40300	19900	13000	4470	1320	1300
21	20000	16000	9740	11000	7500	6890	43900	14400	21700	3820	1310	1300
22	17900	14500	11000	9500	8200	6900	42400	14900	19700	2520	1330	1270
23	16600	13000	10400	8400	6600	9940	40800	15700	17200	1300	1310	1330
24	13600	15000	9700	8300	7800	11000	39500	11600	16000	4370	1310	1300
25	13600	11500	8430	11000	6000	11400	38300	11700	13600	3090	2430	1310
26	13500	14500	9930	16000	4400	9450	37700	10700	10600	1330	1760	1330
27	12000	15000	11500	28000	5800	10400	37700	9500	9150	2210	1300	1340
28	8160	11000	11000	27500	6400	13300	38800	6610	7530	2070	1710	2300
29	8730	11500	9980	22000	---	17400	39200	4880	8240	3290	2700	1390
30	5710	12300	8110	19000	---	16300	38300	5930	8110	1880	1320	1310
31	7240	---	7930	17000	---	15300	---	7110	---	3830	3230	---
TOTAL	567250	377090	339630	461490	248800	271490	884800	587130	381500	99790	78600	49880
MEAN	18300	12570	10960	14890	8886	8758	29490	18940	12720	3219	2535	1663
MAX	46900	20100	20000	41700	14000	17400	43900	33900	21700	7240	5700	3600
MIN	5710	7820	6860	6750	4400	4300	13600	4880	5570	1300	1300	1200

CAL YR 1977 TOTAL 3902990 MEAN 10690 MAX 71000 MIN 1310
WTR YR 1978 TOTAL 4347450 MEAN 11910 MAX 46900 MIN 1200

01155000 COLD RIVER AT DREWSVILLE, NH

LOCATION.--Lat 43°07'54", long 72°23'23", Cheshire County, Hydrologic Unit 01080104, on left bank 50 ft (15 m) upstream from bridge on State Highway 123 at Drewsville, 1.0 mi (1.6 km) upstream from Great Brook, 2.7 mi (4.3 km) east of Bellows Falls, VT, and 3.4 mi (5.5 km) upstream from mouth.

DRAINAGE AREA.--82.7 mi² (214.2 km²).

PERIOD OF RECORD.--Discharge: June 1940 to September 1978 (discontinued).
Water-quality records: Water year 1957.

REVISED RECORDS.--WSP 1431: 1952(P). WDR MA-NH-RI-VT-73-1: 1951(M), 1969(M).

GAGE.--Water-stage recorder. Altitude of gage is 375 ft (114 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Occasional diurnal fluctuation at low flow caused by sawmill upstream; fluctuation more frequent prior to 1945. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--38 years, 118 ft³/s (3.342 m³/s), 19.38 in/yr (492 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,710 ft³/s (190 m³/s) Dec. 21, 1973, gage height, 12.30 ft (3.749 m), from rating curve extended above 3,400 ft³/s (96 m³/s) on basis of computation of flow over dam at gage height 10.29 ft (3.136 m) and slope-area measurement at gage height 12.30 ft (3.749 m); minimum, 1.3 ft³/s (0.037 m³/s) Sept. 23, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s (31 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 9	1815	1360	38.5	6.25	1.905	Jan. 9	-	1600	45	a*7.67	2.238
Oct. 17	1600	*1740	49.3	6.70	2.042	Jan. 26	-	1200	34	-	-

a Ice jam.

Minimum discharge, 7.9 ft³/s (0.22 m³/s) Sept. 9-11.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	61	523	85	160	44	357	171	44	24	14	12
2	439	58	453	78	130	43	486	162	41	23	14	11
3	194	56	303	74	115	42	381	150	70	22	14	10
4	125	55	233	68	105	41	311	144	116	22	43	9.7
5	88	59	192	65	98	40	365	135	65	22	31	9.2
6	67	61	160	64	93	40	443	125	56	21	21	8.8
7	58	58	140	63	89	39	406	117	70	20	19	8.7
8	51	64	120	62	85	39	348	111	100	20	18	8.3
9	592	120	105	1000	82	38	328	126	140	18	16	8.3
10	670	103	86	800	78	38	359	213	180	18	15	8.1
11	309	207	73	440	75	36	592	169	140	17	14	8.8
12	192	153	66	280	72	36	798	142	100	16	26	17
13	144	128	87	200	69	36	771	125	75	15	35	14
14	130	112	106	170	66	80	674	114	70	14	23	12
15	254	98	319	150	64	110	493	117	58	13	18	10
16	221	94	282	130	62	140	393	158	50	13	16	11
17	1060	98	213	120	59	95	359	187	45	20	14	10
18	836	132	169	110	57	84	420	171	45	19	13	10
19	419	112	161	100	55	75	500	163	50	16	13	10
20	272	94	144	97	54	69	740	139	65	15	13	9.9
21	203	86	142	95	52	90	620	137	51	13	12	9.4
22	163	82	190	93	51	140	580	128	45	11	12	9.0
23	138	75	161	90	50	190	450	111	39	12	11	8.8
24	120	133	142	89	49	210	360	100	33	14	12	8.8
25	108	132	199	86	48	194	301	91	29	14	15	12
26	99	252	314	800	47	168	272	80	26	13	14	12
27	92	282	174	650	46	259	246	71	25	13	13	11
28	83	181	133	430	45	375	223	64	25	22	12	11
29	74	145	105	350	---	397	199	59	24	18	12	10
30	68	137	100	260	---	372	183	54	24	16	11	9.4
31	63	---	90	200	---	325	---	42	---	15	11	---
TOTAL	7391	3428	5685	7299	2056	3885	12958	3876	1901	529	525	308.2
MEAN	238	114	183	235	73.4	125	432	125	63.4	17.1	16.9	10.3
MAX	1060	282	523	1000	160	397	798	213	180	24	43	17
MIN	51	55	66	62	45	36	183	42	24	11	11	8.1
CFSM	2.88	1.38	2.21	2.84	.89	1.51	5.22	1.51	.77	.21	.20	.13
IN.	3.32	1.54	2.56	3.28	.92	1.75	5.83	1.74	.86	.24	.24	.14

CAL YR 1977 TOTAL 52904.4 MEAN 145 MAX 2630 MIN 5.7 CFSM 1.75 IN 23.80
WTR YR 1978 TOTAL 49841.2 MEAN 137 MAX 1060 MIN 8.1 CFSM 1.66 IN 22.42

01155050 CONNECTICUT RIVER AT WALPOLE, NH
(National stream-quality accounting network station)

LOCATION.--Lat 43°05'04", long 72°26'04", Cheshire County, Hydrologic Unit 01080104, near left bank on downstream end of bridge pier on State Highway 123 at Walpole, 2.6 mi (4.2 km) downstream from Cold River, and at mile 169.6 (272.9 km).

DRAINAGE AREA.--5,612 mi² (14,535 km²).

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1975 to current year.
WATER TEMPERATURES: September 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1975.

REMARKS.--Discharge based on records for gaging stations at North Walpole (station 01154500) and Cold River at Drewsville (station 01155000). Interruptions in the record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 175 micromhos Sept. 18, 1978, but may have been higher during periods of missing record in August and September 1978; minimum recorded, 56 micromhos May 12, 1978.
WATER TEMPERATURES: Maximum recorded, 27.5°C July 21, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 175 micromhos Sept. 18, but may have been higher during periods of missing record in August and September; minimum recorded, 56 micromhos May 12.
WATER TEMPERATURES: Maximum recorded, 27.0°C July 23, Aug. 17, but may have been higher during period of missing record in August; minimum, 0.0°C on many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)
OCT											
18...	1100	48800	72	6.8	9.5	10.0	30	--	11.1	8200	2100
NOV											
29...	1400	12000	84	6.2	5.5	3.0	2	--	11.2	--	440
DEC											
19...	1200	10500	93	6.6	.0	1.0	1	--	E14.0	--	750
JAN											
26...	1200	18000	94	6.5	4.0	.5	6	--	E13.0	--	20
FEB											
23...	1130	6280	110	6.8	-2.0	.0	2	--	E12.0	--	220
MAR											
15...	1030	12100	105	6.8	5.0	.5	6	--	E12.0	--	480
APR											
25...	1000	38900	79	7.7	7.0	6.0	8	--	14.3	--	K60
MAY											
17...	1000	24700	63	6.7	16.5	11.0	4	--	10.8	--	380
JUN											
28...	1030	9820	86	6.7	--	22.0	--	3.0	8.4	--	290
JUL											
24...	1100	6760	118	6.8	29.0	25.0	--	2.0	5.4	--	1900
AUG											
30...	1300	1300	120	6.8	23.0	21.0	--	1.0	7.8	--	60
SEP											
21...	1015	1350	165	6.2	19.0	18.0	--	1.0	9.0	--	890

E, ESTIMATED.
K, NON-IDEAL COLONY COUNT.

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
OCT											
18...	260	27	11	9.0	1.1	2.8	1.2	20	0	16	5.1
NOV											
29...	28	33	8	11	1.3	4.2	1.2	30	0	25	30
DEC											
19...	34	38	14	13	1.4	4.5	1.0	30	0	25	12
JAN											
26...	51	39	12	13	1.5	5.6	1.0	32	0	26	16
FEB											
23...	--	44	19	15	1.6	5.9	1.5	31	0	25	7.9
MAR											
15...	60	38	10	13	1.4	5.6	1.1	35	0	29	8.9
APR											
25...	58	26	10	8.8	1.0	3.6	2.2	20	0	16	.6
MAY											
17...	76	27	8	8.8	1.1	3.0	.9	22	0	18	7.0
JUN											
28...	140	30	1	10	1.1	5.0	2.2	--	--	29	--
JUL											
24...	780	49	3	17	1.7	7.5	2.8	--	--	46	--
AUG											
30...	350	48	11	16	1.9	7.0	5.7	--	--	37	--
SEP											
21...	2200	51	15	17	2.0	6.3	1.4	--	--	36	--

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
OCT											
18...	9.1	4.0	.0	4.7	60	42	72	58	.11	.01	--
NOV											
29...	9.6	4.9	.0	5.9	64	53	--	--	.21	.03	--
DEC											
19...	9.0	5.9	.0	12	62	62	--	--	.29	.15	--
JAN											
26...	10	7.2	.1	6.3	77	61	--	--	.41	.14	.28
FEB											
23...	11	7.4	.0	6.8	67	64	--	--	.45	.08	.49
MAR											
15...	10	7.8	.0	6.3	72	62	--	--	.38	.04	.29
APR											
25...	9.0	3.8	.0	5.1	58	43	13	76	.29	.02	.47
MAY											
17...	9.0	2.7	.0	4.3	47	41	--	--	.26	.02	.15
JUN											
28...	7.1	7.1	.1	5.1	64	55	--	--	.25	.13	.97
JUL											
24...	8.1	12	.1	4.3	97	81	--	--	.24	.06	.38
AUG											
30...	8.6	15	.1	4.2	106	81	--	--	.25	.09	1.1
SEP											
21...	11	9.8	.0	.4	81	70	--	--	.25	.03	.40

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 18...	--	--	.52	--	.12	.01	9.1	8.1	--	--	--
NOV 29...	--	--	.44	--	.01	.01	--	--	10	324	100
DEC 19...	--	--	.51	--	.01	.01	11	--	7	198	100
JAN 26...	.42	.16	.26	.83	.02	.01	--	7.4	22	1070	100
FEB 23...	.57	.06	.51	1.0	.01	.01	4.1	--	6	102	100
MAR 15...	.33	.00	.57	.71	.01	.01	--	--	16	523	100
APR 25...	.49	.19	.30	.78	.02	.02	--	4.0	--	--	--
MAY 17...	.17	.00	.21	.43	.02	.00	9.7	--	12	800	100
JUN 28...	1.1	.21	.89	1.4	.01	.00	--	--	7	186	100
JUL 24...	.44	.00	.73	.68	.01	.00	--	--	4	73	100
AUG 30...	1.2	.00	1.3	1.5	.01	.01	--	--	5	18	100
SEP 21...	.43	.00	.53	.68	.01	.01	3.2	--	2	7.3	100

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
OCT 18...	2	0	2	0	0	0	0	0	3	30
JAN 26...	0	0	0	0	0	0	1	0	8	<10
APR 25...	1	0	1	0	0	0	2	0	7	--
JUL 24...	0	0	0	0	0	0	0	0	10	--

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
OCT 18...	29	1	4	3	1	8	6	2	4000	--
JAN 26...	<8	2	2	2	0	11	1	10	1100	--
APR 25...	--	0	0	0	0	9	3	6	1000	--
JUL 24...	--	2	2	0	6	13	7	6	310	170

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 18...	210	10	10	0	230	190	40	<.5	.0	<.5
JAN 26...	100	42	30	12	40	20	20	<.5	.0	<.5
APR 25...	60	23	9	14	50	30	20	<.5	.0	<.5
JUL 24...	140	33	0	40	70	0	70	.5	.0	.5

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 18...	0	0	0	--	--	0	30	20	10
JAN 26...	0	0	0	--	--	0	60	30	30
APR 25...	0	0	0	0	0	0	30	20	10
JUL 24...	0	0	0	--	--	0	80	30	50

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
OCT 18...	.8	6.0	3.5	6.4	2.8	5.3	.05	.22
APR 25...	<.8	.6	1.9	1.0	1.8	1.0	.06	.07

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2) Dry weight	Biomass (g/m^2) Ash weight	Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
Nov. 29 to Dec. 19	21	.630	.472	.000	.000	Polyethelene strip
May 17 to June 28	43	4.33	3.70	1.22	.280	Polyethelene strip

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, NOVEMBER 1977 TO SEPTEMBER 1978

DATE	NOV 29,77		MAR 15,78		MAY 17,78		JUN 28,78		JUL 24,78		SEP 21,78	
TIME	1400		1030		1000		1030		1100		1015	
TOTAL CELLS/ML	220		99		310		570		4700		2300	
DIVERSITY: DIVISION	1.4		1.2		0.0		1.5		1.5		1.0	
.CLASS	1.4		1.2		0.0		1.5		1.8		1.5	
..ORDER	1.4		1.2		0.6		1.5		2.2		2.1	
...FAMILY	2.0		1.4		2.5		2.5		3.3		2.5	
....GENUS	2.1		1.4		2.9		2.6		3.7		3.2	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...COELASTRACEAE												
....COELASTRUM	--	-	--	-	--	-	--	-	390	8	--	-
...HYDRODICTYACEAE												
....PEDIASTRUM	--	-	--	-	--	-	--	-	260	6	--	-
...MICRACTINIACEAE												
....GOLENKINIA	--	-	--	-	--	-	--	-	290	6	22	1
....MICRACTINIUM	--	-	--	-	--	-	--	-	130	3	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	6	3	--	-	--	-	--	-	32	1	67	3
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	880#	19	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	160	3	--	-
....OOCYSTIS	--	-	--	-	--	-	44	8	32	1	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	--	-	22	1
....TETRAEDRON	--	-	--	-	--	-	--	-	32	1	--	-
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	66#	67	--	-	59	10	32	1	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CARTERIA	--	-	--	-	--	-	--	-	--	-	44	2
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	97	2	130	6
....CHLOROGONIUM	--	-	--	-	--	-	--	-	65	1	--	-
..ZYGNEMATALES												
...DESMIDIACEAE												
....CLOSTERIUM	--	-	--	-	--	-	--	-	32	1	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	--	-	--	-	--	-	450	10	350#	15
....MELOSIRA	--	-	--	-	27	9	--	-	65	1	67	3
....SKELETONEMA	--	-	--	-	--	-	--	-	--	-	690#	30
....STEPHANODISCUS	--	-	--	-	14	4	--	-	--	-	--	-
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	6	3	--	-	27	9	--	-	32	1	130	6
....COCCONEIS	6	3	--	-	--	-	15	3	--	-	--	-
...CYMBELLACEAE												
....CYMBELLA	6	3	8	8	27	9	120#	21	--	-	--	-
...FRAGILARIACEAE												
....ASTERIONELLA	--	-	--	-	--	-	120#	21	--	-	--	-
....FRAGILARIA	--	-	--	-	14	4	15	3	--	-	--	-
....HANNAEA	--	-	--	-	14	4	--	-	--	-	--	-
....SYNEDRA	--	-	16#	17	41	13	--	-	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	110#	35	--	-	--	-	22	1
...MERIDIONACEAE												
....MERIDION	--	-	--	-	27	9	--	-	--	-	--	-
...NAVICULACEAE												
....NAVICULA	6	3	--	-	14	4	29	5	32	1	89	4
...NITZSCHIACEAE												
....NITZSCHIA	31	14	--	-	--	-	--	-	230	5	--	-
...TABELLARIACEAE												
....TABELLARIA	18	8	--	-	--	-	--	-	--	-	180	8
.CHRYSOPHYCEAE												
..CHRYSOMONADALES												
...MALLOMONADACEAE												
....MALLOMONAS	--	-	--	-	--	-	--	-	97	2	22	1
...OCHROMONADACEAE												
....OCHROMONAS	--	-	--	-	--	-	--	-	940#	20	220	10
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONIDALES												
...CRYPTOMONODACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	--	-	130	3	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, NOVEMBER 1977 TO SEPTEMBER 1978--Continued

DATE TIME	NOV 29,77 1400		MAR 15,78 1030		MAY 17,78 1000		JUN 28,78 1030		JUL 24,78 1100		SEP 21,78 1015	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..HORMOGONALES												
...NOSTOCACEAE												
....CYLINDROSPERMUM	130#	58	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	--	-	--	-	180#	31	--	-	270	11
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....TRACHELOMONAS	12	6	--	-	--	-	--	-	230	5	--	-
PYRRHOPHYTA (FIRE ALGAE)												
.DINOPHYCEAE												
..PERIDINIALES												
...GLENODINIACEAE												
....GLENODINIUM	--	-	8	8	--	-	--	-	--	-	--	-
...PERIDINIACEAE												
....PERIDINIUM	--	-	--	-	--	-	--	-	65	1	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	114	105	112	109	94	99	86	77	81	110	97	104
2	106	92	100	103	91	97	84	82	83	110	101	105
3	94	84	87	102	93	98	84	81	82	108	104	106
4	92	83	86	103	94	99	85	80	83	107	100	104
5	93	81	85	107	100	103	84	81	83	102	96	99
6	81	80	80	110	96	104	88	83	85	102	93	98
7	85	79	82	103	91	96	90	84	87	102	98	100
8	88	84	85	93	89	91	95	84	88	107	101	103
9	91	80	85	96	89	92	93	85	89	117	76	92
10	92	81	86	96	87	90	94	87	91	99	71	86
11	88	80	82	96	84	88	96	85	91	83	65	75
12	82	74	77	91	84	86	98	86	92	80	76	79
13	86	77	82	86	82	84	100	89	95	89	77	84
14	80	78	79	85	81	82	97	90	94	86	82	84
15	79	77	78	86	84	85	97	87	92	86	80	84
16	83	79	81	84	83	84	99	92	95	85	76	82
17	83	67	77	83	78	80	100	97	98	91	81	86
18	83	70	74	93	79	88	100	89	93	93	84	89
19	74	69	71	90	80	82	93	90	92	95	87	91
20	76	74	76	83	79	80	97	89	93	94	90	91
21	80	76	78	88	79	83	99	94	96	100	94	97
22	82	79	80	80	77	78	101	95	97	101	86	97
23	83	79	81	79	77	78	103	99	100	98	85	92
24	85	81	83	81	78	80	105	97	101	101	89	94
25	92	82	87	81	78	79	104	93	99	99	90	96
26	91	83	87	88	78	82	100	93	97	100	87	94
27	93	84	88	80	77	79	99	94	97	102	90	96
28	90	86	88	84	78	80	98	89	93	101	84	89
29	96	90	93	89	84	86	97	92	94	85	75	82
30	105	91	97	93	87	89	101	92	97	87	67	79
31	109	92	98	---	---	---	109	98	104	91	81	86
MONTH	114	67	85	110	77	87	109	77	92	117	65	92

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	94	71	84	118	111	117	102	96	100	68	65	67
2	92	80	87	113	108	109	99	94	96	70	67	69
3	95	86	90	111	107	109	100	96	98	74	69	72
4	95	88	91	113	106	109	100	98	99	78	74	76
5	96	89	93	114	110	113	102	98	100	81	76	79
6	94	91	92	115	110	112	104	99	102	87	82	85
7	95	93	94	120	115	117	105	92	99	91	83	87
8	98	94	96	120	100	112	97	92	95	94	83	88
9	101	96	99	107	100	103	98	93	96	87	79	83
10	103	101	102	108	101	105	102	97	100	87	63	75
11	106	103	104	109	100	104	101	94	98	62	57	59
12	109	104	107	111	103	107	96	89	93	59	56	58
13	108	106	107	110	103	107	92	83	88	60	58	59
14	109	107	107	107	101	103	87	79	82	60	59	59
15	111	107	110	104	95	100	83	79	81	59	59	59
16	111	106	108	103	96	99	88	79	83	63	59	61
17	113	107	109	106	101	103	87	84	85	63	61	62
18	110	108	109	109	102	106	89	85	86	62	59	61
19	110	105	109	113	104	107	87	82	85	62	58	60
20	107	105	106	118	111	114	84	80	82	64	62	63
21	110	105	108	119	110	115	85	78	81	67	64	66
22	114	109	111	118	106	114	83	78	80	75	66	71
23	110	101	106	113	104	108	82	78	80	77	72	74
24	103	100	102	111	107	109	81	77	79	79	73	77
25	105	98	103	110	100	107	79	72	78	89	79	84
26	111	105	108	117	110	112	79	75	77	102	79	87
27	114	111	112	117	105	112	78	73	76	103	88	94
28	118	114	117	106	100	102	75	71	73	93	88	91
29	---	---	---	106	98	104	72	68	70	92	86	88
30	---	---	---	98	95	97	69	66	67	93	84	87
31	---	---	---	99	94	97	---	---	---	101	87	97
MONTH	118	71	103	120	94	108	105	66	87	103	56	74

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978--Continued

DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBER	MEAN
1	99	88	95	92	86	90	132	126	127	129	121	125
2	112	90	96	96	87	92	136	131	133	136	128	132
3	108	97	101	100	89	95	142	136	139	144	135	140
4	113	95	102	100	89	94	141	132	136	148	140	144
5	111	98	106	105	95	100	131	123	126	152	141	148
6	98	93	95	111	95	102	129	120	125	154	142	147
7	104	95	99	115	104	110	129	121	125	152	141	145
8	103	90	96	105	96	101	123	120	121	153	143	150
9	96	86	90	112	99	105	---	---	---	154	142	147
10	86	77	83	112	104	109	---	---	---	157	143	152
11	84	76	80	111	104	107	---	---	---	155	146	151
12	78	75	77	116	111	113	---	---	---	158	152	156
13	83	77	80	120	115	118	---	---	---	156	147	153
14	77	76	77	119	109	115	136	131	133	161	150	156
15	89	76	80	109	105	107	150	135	140	162	152	156
16	81	77	79	106	103	104	160	141	153	168	164	166
17	85	76	79	106	100	103	148	138	143	173	171	172
18	91	85	88	121	107	112	---	---	---	175	164	169
19	102	86	94	126	121	122	---	---	---	170	165	168
20	109	97	102	137	126	131	---	---	---	168	163	166
21	93	78	83	125	118	122	---	---	---	170	164	167
22	87	73	79	125	122	123	---	---	---	165	147	160
23	78	74	76	127	121	123	---	---	---	---	---	---
24	78	75	76	123	118	120	---	---	---	---	---	---
25	77	74	75	122	118	120	---	---	---	---	---	---
26	77	74	76	122	117	120	---	---	---	---	---	---
27	82	78	80	120	115	118	---	---	---	---	---	---
28	86	83	84	125	118	121	---	---	---	---	---	---
29	91	81	86	132	123	128	125	108	123	157	154	155
30	101	85	91	132	120	126	125	118	122	161	151	152
31	---	---	---	126	120	122	128	116	120	---	---	---
MONTH	113	73	87	137	86	112	---	---	---	175	121	153
YEAR	175	56	99									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

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

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978--Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.5	.5	1.0	.5	.5	1.5	1.0	1.0	7.5	6.0	6.5
2	.5	.5	.5	.5	.5	.5	1.5	.5	1.0	7.0	5.5	6.5
3	.5	.0	.5	.5	.5	.5	2.0	.5	1.0	7.5	6.0	7.0
4	.5	.5	.5	.5	.5	.5	1.0	1.0	1.0	8.5	6.5	7.5
5	.5	.5	.5	.5	.5	.5	2.0	1.0	1.5	8.5	7.5	8.0
6	.5	.0	.5	.5	.5	.5	2.0	1.0	1.5	9.5	8.0	8.5
7	.5	.0	.0	.5	.5	.5	1.5	1.0	1.0	11.0	9.0	10.0
8	.5	.0	.5	1.0	.5	.5	2.0	1.0	1.5	12.0	10.0	11.0
9	.5	.0	.5	1.0	.5	.5	3.0	1.0	2.0	12.5	11.5	12.0
10	.5	.0	.0	1.0	.5	.5	5.0	2.5	4.0	12.5	10.5	11.5
11	.5	.0	.0	1.0	.5	.5	5.5	4.0	4.5	11.0	10.0	10.5
12	.5	.0	.0	1.0	.5	.5	5.5	4.0	4.5	11.0	10.0	10.5
13	.5	.0	.0	1.0	.5	.5	5.5	4.5	5.0	11.5	10.5	11.0
14	.0	.0	.0	.5	.5	.5	5.0	4.5	4.5	12.5	11.0	12.0
15	.5	.0	.0	1.0	.5	.5	4.5	3.5	4.0	12.5	12.0	12.0
16	.0	.0	.0	.5	.5	.5	4.5	4.0	4.0	12.0	11.5	12.0
17	.0	.0	.0	1.0	.5	.5	4.5	4.0	4.5	12.0	12.0	12.0
18	.0	.0	.0	1.0	.5	.5	6.0	4.5	5.5	12.0	12.0	12.0
19	.5	.0	.0	1.0	.5	1.0	6.0	5.5	6.0	14.0	12.0	13.0
20	.5	.0	.0	1.5	.5	1.0	6.0	5.0	5.0	15.0	14.0	14.5
21	.0	.0	.0	1.5	.5	1.0	5.0	4.5	4.5	16.5	15.0	15.5
22	.5	.0	.0	2.0	.5	1.0	5.5	4.5	5.0	17.0	15.5	16.0
23	.5	.0	.5	1.5	.5	1.0	6.5	5.0	5.5	17.0	15.5	16.5
24	.5	.5	.5	1.5	.5	1.0	7.0	5.0	6.0	17.5	16.0	17.0
25	.5	.5	.5	1.5	.5	1.0	6.5	5.5	6.0	17.5	17.0	17.0
26	.5	.5	.5	1.0	.5	.5	7.0	5.5	6.5	18.5	17.0	17.5
27	.5	.5	.5	1.0	.5	.5	7.5	6.0	7.0	20.0	18.5	19.0
28	.5	.5	.5	2.0	.5	1.0	8.0	6.5	7.0	22.0	19.0	20.5
29	---	---	---	2.0	1.0	1.0	8.0	6.5	7.5	22.5	20.5	21.5
30	---	---	---	2.0	.5	1.0	8.0	7.0	7.5	23.5	19.0	22.0
31	---	---	---	2.0	.5	1.0	---	---	---	24.5	23.0	23.5
MONTH	.5	.0	.5	2.0	.5	.5	8.0	.5	4.0	24.5	5.5	13.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.5	23.5	24.0	23.5	22.0	23.0	22.5	22.0	22.5	22.5	19.5	20.5
2	23.5	23.0	23.5	24.0	21.0	22.5	23.5	22.0	22.5	22.0	19.5	20.0
3	23.0	22.5	23.0	23.0	21.5	22.5	23.5	22.5	23.0	21.5	19.0	20.5
4	23.0	22.0	22.5	22.5	21.5	22.0	23.5	22.5	23.0	22.0	19.5	20.5
5	22.0	20.5	21.0	22.5	20.5	21.5	24.0	22.5	23.0	23.0	19.5	21.0
6	20.0	19.0	19.5	23.0	21.0	22.5	24.5	23.0	23.5	21.5	20.0	20.5
7	19.5	18.5	19.0	23.5	21.5	22.5	24.5	23.5	24.0	21.5	20.0	20.5
8	19.5	19.0	19.0	24.0	22.5	23.0	24.5	22.0	23.5	22.0	19.0	20.5
9	19.0	18.0	18.5	25.5	22.5	24.0	---	---	---	20.5	19.0	19.5
10	19.0	17.5	18.5	25.5	23.5	24.5	---	---	---	20.0	18.5	19.0
11	19.5	18.0	18.5	25.0	23.5	24.5	---	---	---	19.0	18.5	19.0
12	20.5	18.5	19.5	25.0	23.0	24.5	22.0	19.0	20.5	19.0	18.0	18.5
13	20.0	19.5	19.5	25.5	23.0	24.0	---	---	---	21.0	17.5	18.5
14	19.0	18.5	18.5	24.5	23.0	23.5	25.5	21.5	24.0	19.5	17.0	18.5
15	19.0	18.0	18.5	23.5	22.5	23.0	26.5	24.5	25.5	18.0	17.0	17.5
16	19.0	17.5	18.5	23.0	22.0	22.5	26.0	24.5	25.5	18.5	17.0	17.5
17	19.0	18.5	18.5	23.0	22.0	22.5	27.0	21.5	25.5	19.0	17.0	18.0
18	19.5	18.0	18.5	23.5	21.5	22.5	---	---	---	18.5	17.5	18.0
19	20.0	18.5	19.5	24.0	22.0	23.0	---	---	---	19.5	18.0	18.5
20	21.0	19.5	20.0	24.0	22.5	23.5	---	---	---	20.0	18.0	19.0
21	21.5	20.0	21.0	25.0	23.5	24.0	---	---	---	20.0	18.0	19.0
22	21.5	20.5	21.5	25.5	24.0	25.0	---	---	---	19.5	18.5	19.0
23	21.0	20.0	20.5	27.0	24.5	25.5	---	---	---	---	---	---
24	21.5	20.0	20.5	26.0	24.0	25.0	---	---	---	---	---	---
25	21.5	19.5	20.5	26.5	24.0	25.0	---	---	---	---	---	---
26	21.0	20.0	20.5	26.0	23.5	24.5	---	---	---	---	---	---
27	21.5	21.0	21.5	25.0	23.5	24.5	---	---	---	---	---	---
28	23.0	21.5	22.0	25.5	23.5	24.5	---	---	---	---	---	---
29	23.5	21.5	23.0	24.5	23.0	24.0	21.0	18.0	20.0	18.0	16.0	17.0
30	24.0	23.0	23.0	24.5	23.0	23.5	22.0	19.5	20.5	17.5	15.5	16.5
31	---	---	---	23.5	22.0	22.5	22.0	19.5	20.5	---	---	---
MONTH	24.5	17.5	20.5	27.0	20.5	23.5	---	---	---	23.0	15.5	19.0
YEAR	27.0	.0	9.5									

01155500 WEST RIVER AT JAMAICA, VT

LOCATION.--Lat 43°06'32", long 72°46'33", Windham County, Hydrologic Unit 01080107, on left bank 0.2 mi (0.3 km) upstream from highway bridge at Jamaica, 0.4 mi (0.6 km) upstream from Ball Mountain Brook, and 2.8 mi (4.5 km) downstream from Ball Mountain Dam, and at mile 26.2 (42.2 km).

DRAINAGE AREA.--179 mi² (464 km²).

PERIOD OF RECORD.--Discharge: October 1946 to current year.
Water-quality records: Water year 1954.

GAGE.--Water-stage recorder. Altitude of gage is 640 ft (195 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Ball Mountain Reservoir since 1961 (Reservoirs in Connecticut River basin). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--32 years, 368 ft³/s (10.42 m³/s), 27.92 in/yr (709 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,500 ft³/s (835 m³/s) Dec. 31, 1948, gage height, 14.87 ft (4.532 m), from rating curve extended above 9,800 ft³/s (280 m³/s), verified by slope-area measurement of peak flow; minimum, 0.94 ft³/s (0.027 m³/s) Sept. 23-25, 1968; minimum daily, 0.94 ft³/s (0.027 m³/s) Sept. 23, 24, 1968. Maximum discharge since construction of Ball Mountain Dam in 1961, 5,080 ft³/s (144 m³/s) Mar. 17, 1977, gage height, 9.27 ft (2.825 m); maximum gage height, 9.46 ft (2.883 m) Feb. 4, 1970, ice jam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,160 ft³/s (118 m³/s) Oct. 18, gage height, 8.79 ft (2.679 m); minimum, 15 ft³/s (0.42 m³/s) Sept. 28; minimum daily, 31 ft³/s (0.88 m³/s) Sept. 29, 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	313	189	653	320	430	126	635	980	154	40	75	135
2	907	175	1090	300	350	130	1110	390	138	40	72	109
3	1230	175	1100	280	270	140	1070	186	275	42	52	64
4	1160	173	665	260	240	145	806	402	368	49	43	38
5	641	175	499	246	225	145	954	693	377	49	43	38
6	275	184	462	230	220	140	1390	613	231	48	74	38
7	279	198	447	224	240	136	1410	550	149	48	113	38
8	544	224	369	220	255	134	1190	328	716	48	113	38
9	986	580	320	900	250	132	752	222	1290	48	86	38
10	1700	758	280	2430	240	130	635	678	1200	48	70	38
11	1560	954	250	3090	224	130	962	781	701	47	69	39
12	695	954	230	2540	230	135	2200	446	474	47	250	47
13	521	556	220	1280	220	150	2670	1120	215	46	553	44
14	504	390	210	647	210	200	2970	898	135	46	357	160
15	527	360	500	450	210	350	1840	423	136	47	197	478
16	562	324	1310	390	205	275	1310	687	150	46	97	239
17	2050	328	683	350	195	220	1070	1500	147	49	69	72
18	3300	532	499	320	180	195	986	1120	147	125	56	72
19	2030	596	457	300	170	176	1220	694	147	168	48	74
20	915	373	413	275	160	160	1950	686	129	112	47	73
21	713	287	352	260	150	200	2070	584	115	47	47	73
22	544	317	365	250	144	400	1610	454	93	34	47	58
23	447	324	369	240	140	600	1500	321	76	35	44	39
24	432	427	328	230	136	660	1520	275	76	34	40	39
25	365	515	413	220	130	574	1520	274	75	34	209	39
26	328	618	772	450	128	442	1420	220	74	44	254	39
27	313	683	689	1190	124	462	1420	191	74	56	121	39
28	248	504	532	1950	124	907	1600	189	74	58	62	35
29	224	432	300	1530	---	1280	1610	188	54	57	62	31
30	220	352	330	1040	---	923	1460	187	40	68	62	31
31	214	---	340	499	---	659	---	187	---	74	108	---
TOTAL	24747	12657	15447	22911	5800	10456	42860	16467	8030	1734	3540	2295
MEAN	798	422	498	739	207	337	1429	531	268	55.9	114	76.5
MAX	3300	954	1310	3090	430	1280	2970	1500	1290	168	553	478
MIN	214	173	210	220	124	126	635	186	40	34	40	31
MEAN†	767	420	501	756	208	337	1432	541	268	57.1	114	79.2
CFSM†	4.28	2.35	280	4.22	1.16	1.88	8.00	3.02	1.50	.32	.64	.44
IN.†	4.94	2.62	3.23	4.87	1.21	2.17	8.93	3.48	1.67	.37	.73	.49

CAL YR 1977 TOTAL 160483 MEAN 440 MAX 4570 MIN 30 MEAN† 440 CFSM† 2.46 IN† 33.37
WTR YR 1978 TOTAL 166944 MEAN 457 MAX 3300 MIN 31 MEAN† 458 CFSM† 2.56 IN† 34.71

† Adjusted for change in contents in Ball Mountain Reservoir.

01156000 WEST RIVER AT NEWFANE, VT

LOCATION.--Lat 42°59'43", long 72°38'13", Windham County, Hydrologic Unit 01080107, on left bank 400 ft (100 m) downstream from highway bridge, 1.0 mi (1.6 km) northeast of Newfane, and at mile 12.7 (20.4 km).

DRAINAGE AREA.--308 mi² (798 km²).

PERIOD OF RECORD.--Discharge: September 1919 to September 1923, October 1928 to current year.
Water-quality records: Water year 1954.
Water temperatures: October 1954 to September 1965.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1231: 1922-23, 1929-31(M).

GAGE.--Water-stage recorder. Datum of gage is 384.21 ft (117.107 m) National Geodetic Vertical Datum of 1929. Prior to June 27, 1931, nonrecording gage at site 600 ft (200 m) upstream and June 27, 1931, to Aug. 21, 1972, water-stage recorder on right bank 600 ft (200 m) downstream from highway bridge at same datum.

REMARKS.--Records good except those for winter period and period of no gage-height record, Dec. 3 to Jan. 5, which are fair. Flow regulated since 1961 by Ball Mountain Reservoir and Townshend Reservoir 6.8 mi (10.9 km) upstream (Reservoirs in Connecticut River basin). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--54 years, 631 ft³/s (17.87 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52,300 ft³/s (1,480 m³/s) Sept. 21, 1938, gage height, 22.81 ft (6.952 m), from floodmarks, from rating curve extended above 20,000 ft³/s (570 m³/s) on basis of contracted-opening measurement at gage height 19.3 ft (5.88 m) and slope-area measurements at gage heights 19.46 ft (5.931 m) and 22.81 ft (6.952 m); minimum, 7.6 ft³/s (0.22 m³/s) Aug. 24, 25, 26, 1962; minimum daily, 8.2 ft³/s (0.23 m³/s) Aug. 25, 1962. Maximum discharge since construction of Ball Mountain and Townshend Reservoirs in 1961, 9,530 ft³/s (270 m³/s) Mar. 17, 1977, gage height, 9.81 ft (2.990 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1869, that of Sept. 21, 1938. Flood of Nov. 3, 1927, reached a discharge of 45,000 ft³/s (1,270 m³/s), gage height, 23.0 ft (7.01 m), from floodmarks, at nonrecording-gage site, from rating curve extended above 20,000 ft³/s (570 m³/s) on basis of computation of peak flow over dam at West Dummerston, about 5 mi (8 km) downstream, adjusted for flow from intervening area.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,610 ft³/s (187 m³/s) Jan. 11, gage height, 8.77 ft (2.673 m); minimum, 63 ft³/s (1.78 m³/s) Sept. 30; minimum daily, 64 ft³/s (1.81 m³/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	903	346	1360	640	900	220	1300	1550	275	93	101	164
2	1480	317	2210	580	560	230	2450	976	241	89	109	172
3	1590	310	1900	540	480	250	2070	468	410	89	113	153
4	1540	307	1400	500	420	250	1530	565	544	89	108	110
5	1250	297	1100	470	380	250	1750	916	537	89	107	95
6	440	297	900	432	380	250	2610	967	451	89	107	89
7	376	298	780	421	420	245	2530	821	275	83	140	89
8	427	446	670	393	450	240	2110	705	794	67	168	86
9	440	1560	580	2840	440	235	1730	690	1850	73	173	84
10	1130	1430	510	4100	420	230	1140	1140	1890	73	144	84
11	2500	1980	450	4570	410	230	1900	1180	934	84	132	73
12	1700	1690	420	3480	400	235	3510	932	811	94	246	95
13	1100	1180	390	2210	380	260	4990	1220	435	91	716	160
14	800	707	370	1230	370	330	5310	1220	322	89	562	126
15	720	662	700	900	370	600	3390	857	253	89	347	415
16	720	582	2000	700	370	500	2320	1370	248	89	200	465
17	1500	1130	1300	630	360	400	2040	2790	248	98	156	195
18	5100	1200	950	560	320	350	1830	2210	244	102	138	136
19	4030	1250	800	520	310	320	2240	1360	245	179	121	136
20	1780	700	700	480	280	290	3860	1190	278	187	112	133
21	1010	600	650	460	260	280	3730	1110	217	123	110	136
22	995	520	620	440	250	690	2850	905	212	99	110	133
23	808	560	600	430	250	1030	2660	614	179	94	108	126
24	733	650	580	410	240	1160	2600	487	157	86	107	98
25	683	954	560	390	230	980	2650	412	117	86	170	81
26	574	1150	1300	1550	230	746	2390	304	133	88	368	65
27	493	1370	1100	2860	220	1080	2360	267	130	90	298	65
28	357	1060	960	3840	220	1850	2520	286	130	95	164	65
29	410	836	860	3150	---	2220	2510	282	123	96	153	65
30	368	704	760	4080	---	1840	2280	257	101	98	126	64
31	366	---	700	3160	---	1260	---	254	---	98	113	---
TOTAL	36323	25093	28180	46966	10320	19051	77160	28305	12784	2989	5827	3958
MEAN	1172	836	909	1515	369	615	2572	913	426	96.4	188	132
MAX	5100	1980	2210	4570	900	2220	5310	2790	1890	187	716	465
MIN	357	297	370	390	220	220	1140	254	101	67	101	64

CAL YR 1977 TOTAL 293195 MEAN 803 MAX 8530 MIN 65
WTR YR 1978 TOTAL 296956 MEAN 814 MAX 5310 MIN 64

01157000 ASHUELOT RIVER NEAR GILSUM, NH

LOCATION.--Lat 43°02'21", long 72°16'14", Cheshire County, Hydrologic Unit 01080201, on right bank 50 ft (15 m) downstream from White Brook, 60 ft (18 m) upstream from stone-arch bridge just off Keene-Newport Road, 0.7 mi (1.1 km) downstream from Gilsum, and at mile 43.4 (69.8 km).
DRAINAGE AREA.--71.1 mi^2 (184.1 km^2).
PERIOD OF RECORD.--Discharge: August 1922 to current year.
Water-quality records: Water year 1955.
REVISED RECORDS.--WSP 661: Drainage area. WSP 781: 1934(M). WSP 1231: 1923-27(M), 1928, 1929-30(M), 1931, 1932(M).
GAGE.--Water-stage recorder. Datum of gage is 772.86 ft (235.568 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1964, datum was 1.00 ft (0.305 m) higher.
REMARKS.--Records fair except those for winter period, which are poor. Some regulation by reservoir upstream. Prior to 1938, diurnal fluctuation caused by powerplant upstream. Several observations of water temperature and specific conductance were made during the year.
AVERAGE DISCHARGE.--56 years, 126 ft^3/s (3.568 m^3/s), 24.07 in/yr (611 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,220 ft^3/s (148 m^3/s) Sept. 21, 1938, gage height, 12.24 ft (3.731 m) in gage well, present datum, from rating curve extended above 2,000 ft^3/s (57 m^3/s) on basis of float measurements at gage heights 11.66 ft (3.554 m) and 11.72 ft (3.572 m) and slope-area measurement at gage height 12.24 ft (3.731 m), all at present datum; maximum gage height, 13.80 ft (4.206 m) present datum, Mar. 19, 1936; minimum discharge, about 1 ft^3/s (0.03 m^3/s) Oct. 6, 1922, July 10, 1923, Nov. 14, 1952.
Maximum discharge since at least 1859, that of Sept. 21, 1938.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	1930	*1780	50.4	7.94	2.420						

Minimum discharge, 7.3 ft^3/s (0.21 m^3/s) Sept. 26-28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	68	331	108	200	47	291	248	58	20	7.5	10
2	558	67	462	100	170	46	453	216	52	19	7.5	11
3	496	61	386	85	140	45	368	183	53	20	7.5	10
4	392	59	322	80	120	45	304	156	69	20	47	9.2
5	282	57	254	75	110	44	324	141	66	19	40	8.3
6	211	56	200	70	100	44	409	126	57	19	33	8.3
7	163	54	170	68	92	43	397	116	51	19	31	7.7
8	123	53	140	68	90	43	313	104	107	19	30	7.7
9	344	79	120	250	88	43	280	118	171	18	30	7.7
10	798	110	100	790	86	42	284	184	218	18	23	7.7
11	584	153	95	700	84	44	473	184	146	18	19	7.7
12	428	180	90	450	80	45	625	154	100	18	20	8.8
13	314	171	85	300	75	50	690	128	76	18	22	8.5
14	240	146	110	250	70	63	732	111	69	17	20	8.3
15	276	115	278	190	66	96	625	110	57	17	17	8.1
16	319	102	317	160	64	150	534	200	50	17	16	8.1
17	1160	102	270	140	62	110	450	374	45	18	16	8.3
18	1400	138	229	120	60	100	397	450	41	19	13	8.1
19	696	144	198	110	58	90	431	355	40	19	12	8.8
20	459	119	170	105	56	80	700	268	45	18	11	8.3
21	329	102	153	105	55	75	787	214	42	18	11	8.1
22	252	95	190	105	54	130	658	192	39	18	9.9	7.7
23	198	86	187	100	53	200	555	156	35	17	9.0	7.5
24	164	107	168	100	52	242	513	126	30	17	9.2	7.9
25	146	125	208	100	51	202	465	111	28	17	11	7.9
26	124	203	304	200	50	176	418	96	26	17	10	7.9
27	111	338	240	600	49	200	374	83	25	17	9.4	7.3
28	100	295	202	450	48	306	341	72	23	14	8.8	7.5
29	89	244	167	350	---	350	315	63	21	8.3	9.4	7.9
30	81	197	140	300	---	343	282	57	20	8.3	8.8	7.7
31	74	---	120	250	---	286	---	52	---	7.7	9.4	---
TOTAL	11087	3826	6406	6879	2283	3780	13788	5148	1860	529.3	528.4	248.0
MEAN	358	128	207	222	81.5	122	460	166	62.0	17.1	17.0	8.27
MAX	1400	338	462	790	200	350	787	450	218	20	47	11
MIN	74	53	85	68	48	42	280	52	20	7.7	7.5	7.3
CFSM	5.04	1.80	2.91	3.12	1.15	1.72	6.47	2.34	.87	.24	.24	.12
IN.	5.80	2.00	3.35	3.60	1.19	1.98	7.21	2.69	.97	.28	.28	.13

CAL YR 1977 TOTAL 60982.5 MEAN 167 MAX 2520 MIN 5.6 CFSM 2.35 IN 31.91
WTR YR 1978 TOTAL 56362.7 MEAN 154 MAX 1400 MIN 7.3 CFSM 2.17 IN 29.49

NOTE.--No gage-height record Jan. 9 to Feb. 9.

01158000 ASHUELOT RIVER BELOW SURRY MOUNTAIN DAM, NEAR KEENE, NH

LOCATION.--Lat 42°59'40", long 72°18'40", Cheshire County, Hydrologic Unit 01080201, on right bank 600 ft (200 m) downstream from Surry Mountain Dam, 2.5 mi (4.0 km) upstream from Sturtevant Brook, 4.5 mi (7.2 km) north of Keene, and at mile 34.0 (54.7 km).

DRAINAGE AREA.--101 mi² (262 km²).

PERIOD OF RECORD.--Discharge: September 1945 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 480.00 ft (146.304 m) Corps of Engineers datum.

REMARKS.--Records good. Flow regulated by Surry Mountain Lake (Reservoirs in Connecticut River basin). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--33 years, 174 ft³/s (4.928 m³/s), 23.40 in/yr (594 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,320 ft³/s (37.4 m³/s) Oct. 28, 1959, gage height, 9.60 ft (2.926 m); minimum daily, 0.4 ft³/s (0.011 m³/s) Sept. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,130 ft³/s (32.0 m³/s) Oct. 20, gage height, 9.11 ft (2.777 m); minimum daily, 5.2.ft³/s (0.15 m³/s) Nov. 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	136	244	161	470	70	451	309	71	20	17	13
2	372	133	632	160	300	70	555	273	69	17	19	12
3	531	76	631	125	206	70	566	239	70	16	15	12
4	477	37	508	89	148	70	480	208	81	16	36	12
5	377	59	398	82	127	70	445	185	86	16	66	10
6	291	79	330	101	127	70	531	169	82	14	60	9.5
7	226	86	228	110	128	70	561	158	74	12	56	9.7
8	178	91	244	110	128	69	504	143	103	11	53	8.2
9	261	113	209	107	143	69	447	144	157	10	50	7.7
10	669	136	182	522	148	69	422	184	220	9.5	44	5.2
11	786	186	145	958	148	69	518	211	208	8.8	36	6.3
12	743	222	125	843	134	69	646	200	167	7.3	35	9.8
13	503	228	125	882	125	69	776	178	129	6.4	36	22
14	360	214	126	874	125	69	938	160	109	6.1	34	35
15	344	192	207	747	125	77	936	142	91	6.3	30	38
16	361	168	374	442	125	130	790	165	75	6.7	26	37
17	351	157	427	358	110	168	594	262	64	8.2	24	37
18	715	180	340	282	104	168	509	394	56	10	21	36
19	913	195	296	210	104	167	479	415	53	10	18	36
20	874	183	265	191	90	143	628	357	58	10	17	35
21	987	165	221	167	82	132	778	294	56	9.5	15	35
22	723	151	207	154	82	133	814	254	56	8.9	15	34
23	676	140	238	154	82	204	777	215	51	8.7	16	19
24	607	149	255	154	83	368	669	181	45	7.6	18	11
25	411	171	252	126	83	362	548	160	38	6.1	23	11
26	280	201	301	177	83	290	489	137	33	6.1	23	11
27	216	317	324	506	83	269	446	120	30	6.5	24	11
28	183	353	303	717	74	373	412	105	27	11	24	11
29	161	325	243	764	---	475	382	93	26	13	27	11
30	147	144	197	816	---	522	348	83	24	14	27	11
31	139	---	159	787	---	488	---	74	---	14	18	---
TOTAL	14047	4987	8736	11876	3767	5442	17439	6212	2409	326.7	923	556.4
MEAN	453	166	282	383	135	176	581	200	80.3	10.5	29.8	18.5
MAX	987	353	632	958	470	522	938	415	220	20	66	38
MIN	139	37	125	82	74	69	348	74	24	6.1	15	5.2
MEAN†	449	176	280	410	107	176	583	192	78.5	9.65	29.8	9.33
CFSM†	4.45	1.74	2.77	4.06	1.06	174	5.77	1.90	0.78	0.10	0.30	0.09
IN.†	5.13	1.94	3.20	4.68	1.10	2.00	6.45	2.19	0.87	0.11	0.34	0.10

CAL YR 1977 TOTAL 76786.1 MEAN 210 MAX 1080 MIN 7.6 MEAN† 210 CFSM† 2.08 IN† 28.26
WTR YR 1978 TOTAL 76721.1 MEAN 210 MAX 987 MIN 5.2 MEAN† 209 CFSM† 2.07 IN† 28.12

† Adjusted for change in contents in Surry Mountain Lake.

01158600 OTTER BROOK BELOW OTTER BROOK DAM, NEAR KEENE, NH

LOCATION.--Lat 42°56'45", long 72°14'14", Cheshire County, Hydrologic Unit 01080201, on right bank 450 ft (150 m) downstream from Otter Brook Dam, 2 mi (3 km) northeast of Keene, 2.4 mi (3.9 km) upstream from Minnewawa Brook, and 4.9 mi (7.9 km) upstream from mouth.

DRAINAGE AREA.--47.2 mi² (122.2 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 658.65 ft (200.757 m) Corps of Engineers datum.

REMARKS.--Records good. Flow regulated by Otter Brook Lake (Reservoirs in Connecticut River basin). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--20 years, 77.8 ft³/s (2.203 m³/s), 22.38 in/yr (568 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 685 ft³/s (19.4 m³/s) Apr. 20, 1959, gage height, 8.59 ft (2.618 m); maximum gage height, 8.61 ft (2.624 m) Apr. 26, 1972, Oct 20, 1977; minimum discharge, 0.1 ft³/s (0.003 m³/s) Nov. 28, 1959; minimum daily, 0.3 ft³/s (0.008 m³/s) Sept. 27 to Oct. 2, Oct. 9, 10, 12-20, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 663 ft³/s (18.8 m³/s) Oct. 20, gage height, 8.61 ft (2.624 m); minimum, 1.2 ft³/s (0.034 m³/s) Sept. 9, 10; minimum daily, 2.1 ft³/s (0.059 m³/s) Sept. 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	37	200	80	187	30	187	102	30	11	5.6	5.6
2	246	35	261	80	126	28	327	101	28	9.5	5.6	5.6
3	173	33	180	80	89	28	268	88	29	8.4	5.6	4.6
4	104	32	139	64	69	29	201	77	40	7.7	18	4.0
5	69	31	111	57	68	29	204	72	35	8.0	44	3.3
6	53	30	82	57	66	29	283	72	30	8.0	33	2.7
7	44	29	86	58	66	29	286	59	26	7.4	30	2.7
8	36	29	111	57	66	29	228	53	72	7.1	31	2.1
9	119	51	73	72	69	29	205	53	127	6.8	26	2.5
10	322	57	57	276	69	29	206	53	97	6.5	20	6.5
11	241	59	57	546	69	29	305	41	68	7.1	16	21
12	125	57	59	520	69	40	355	35	49	7.7	17	25
13	92	50	59	489	52	45	465	35	37	7.4	21	22
14	76	45	59	340	44	44	519	35	40	6.5	17	18
15	102	41	139	229	44	57	504	37	35	6.2	12	16
16	113	39	212	158	61	94	392	44	28	6.2	10	15
17	148	43	212	131	62	106	262	129	24	6.8	9.1	15
18	369	62	135	127	59	79	248	143	21	9.5	7.7	14
19	433	59	92	87	59	60	248	125	21	9.1	6.2	15
20	498	50	91	84	50	57	519	108	25	7.7	5.6	14
21	586	45	91	92	44	43	537	88	24	6.5	4.9	13
22	348	42	135	93	44	59	335	89	22	5.9	4.2	13
23	101	39	154	86	44	88	295	77	21	5.1	3.8	12
24	85	46	92	65	44	154	246	69	18	4.6	4.0	12
25	74	50	101	49	44	132	295	65	16	4.4	4.9	11
26	66	94	145	95	44	126	295	58	14	4.4	5.4	11
27	55	148	159	253	38	122	171	51	13	4.4	4.9	10
28	54	108	135	376	35	123	148	47	14	4.9	4.4	9.9
29	49	86	92	370	---	191	133	40	12	6.8	4.4	9.9
30	45	73	79	348	---	208	111	36	13	6.5	4.4	9.1
31	41	---	80	318	---	185	---	34	---	5.9	4.9	---
TOTAL	4903	1600	3678	5737	1781	2331	8778	2116	1029	214.0	390.6	325.5
MEAN	158	53.3	119	185	63.6	75.2	293	68.3	34.3	6.90	12.6	10.9
MAX	586	148	261	546	187	208	537	143	127	11	44	25
MIN	36	29	57	49	35	28	111	34	12	4.4	3.8	2.1
MEAN†	158	53.6	119	192	53.8	76.6	285	75.2	33.9	6.79	12.7	11.0
CFSM†	3.35	1.14	2.52	4.07	1.14	1.62	6.04	1.59	.72	.14	.27	.23
IN.†	3.87	1.27	2.91	4.69	1.19	1.87	6.74	1.84	.80	.17	.31	.26

CAL YR 1977 TOTAL 34246.4 MEAN 93.8 MAX 620 MIN 4.9 MEAN† 93.9 CFSM† 1.99 IN† 27.00
WTR YR 1978 TOTAL 32883.1 MEAN 90.1 MAX 586 MIN 2.1 MEAN† 90.1 CFSM† 1.91 IN† 25.91

† Adjusted for change in contents in Otter Brook Lake.

01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, NH

LOCATION.--Lat 42°52'20", long 72°12'51", Cheshire County, Hydrologic Unit 01080201, on right bank 15 ft (5 m) downstream from bridge, at Webb, 2.5 mi (4.0 km) south of Marlborough, and at mile 10.9 (17.5 km).
DRAINAGE AREA.--36.0 mi^2 (93.2 km^2).
PERIOD OF RECORD.--Discharge: October 1920 to September 1978 (discontinued). Monthly discharge only October 1920, published in WSP 1301.
Water-quality records: August 1972 to October 1977 (discontinued).
Water temperatures: October 1954 to October 1977 (discontinued).
REVISED RECORDS.--WSP 641: 1925(M). WSP 871: Drainage area. WSP 1231: 1921-24(M), 1926(M), 1929, 1933-34(M), 1939. WDR MA-NH-RI-VT-71-1: 1966(M), 1967-69.
GAGE.--Water-stage recorder. Concrete control since July 18, 1938. Datum of gage is 667.11 ft (203.335 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).
REMARKS.--Records good except those for winter period, which are fair. Regulation at times prior to 1962 by powerplant and several small reservoirs upstream; regulation greater prior to 1956.
AVERAGE DISCHARGE.--58 years, 59.6 ft^3/s (1.688 m^3/s), 22.48 in/yr (571 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,960 ft^3/s (169 m^3/s) Sept. 21, 1938, gage height, 7.89 ft (2.405 m), from rating curve extended above 3,300 ft^3/s (94 m^3/s) on basis of contracted-opening and slope-area measurements of peak flow; maximum gage height, 9.70 ft (2.957 m) Mar. 12, 1936, ice jam; practically no flow for part of Mar. 22, 1931; minimum daily discharge, 0.4 ft^3/s (0.01 m^3/s) Sept. 15-17, 1926.
Maximum discharge known since at least 1869, that of Sept. 21, 1938.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft^3/s (16 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 17	1545	791	22.4	5.45	1.661	Jan. 9	-	*1900	54	a*6.97	2.124

a Ice jam.

Minimum discharge, 2.8 ft (0.079 m^3/s) Aug. 21, Sept. 8, 15, 16, 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	38	130	63	110	25	180	67	21	16	5.1	5.1
2	149	35	180	60	96	25	309	65	20	11	5.1	4.8
3	89	34	130	55	82	24	209	59	20	9.1	5.1	9.4
4	52	34	101	50	72	24	146	55	31	11	11	11
5	33	35	86	47	62	24	170	53	27	12	13	6.3
6	26	36	76	43	58	23	235	54	24	9.0	12	4.2
7	24	40	68	41	56	23	226	50	19	7.9	13	3.4
8	20	48	60	40	54	23	177	51	60	6.9	17	3.1
9	153	64	55	800	53	23	168	61	100	6.3	14	3.2
10	300	80	50	561	52	22	167	95	81	7.1	9.8	3.1
11	117	91	48	300	50	22	233	78	50	11	7.3	3.8
12	76	96	45	280	46	22	318	62	33	9.9	6.2	4.5
13	61	81	44	250	42	25	316	53	27	7.9	6.7	3.8
14	54	72	90	180	40	30	321	48	31	6.7	6.3	3.3
15	96	66	140	140	38	40	234	49	36	6.3	5.5	3.1
16	101	62	150	110	36	100	171	68	43	6.7	4.8	3.0
17	562	68	130	90	35	70	143	100	16	7.7	4.3	3.1
18	417	79	110	75	34	55	135	88	13	8.5	4.0	3.2
19	193	83	85	65	33	50	140	77	14	6.9	3.8	4.3
20	127	73	75	55	32	45	340	63	20	5.9	3.6	4.4
21	98	64	82	52	31	40	303	66	16	5.3	3.1	4.1
22	83	60	120	50	30	90	216	67	18	5.0	3.7	4.0
23	74	56	100	49	29	105	155	52	17	4.7	5.4	4.0
24	65	56	85	48	28	113	126	44	19	4.7	4.3	4.1
25	59	58	100	47	28	97	110	40	15	4.2	4.7	4.5
26	55	80	150	350	27	81	99	38	11	4.5	4.6	4.3
27	51	104	120	300	26	105	91	34	11	4.2	4.2	4.1
28	48	110	100	260	26	215	85	29	10	7.1	4.0	4.2
29	43	99	85	220	---	219	80	26	10	6.5	5.1	4.0
30	39	87	75	180	---	201	73	23	20	5.5	4.0	4.1
31	39	---	68	130	---	166	---	21	---	4.9	4.2	---
TOTAL	3337	1989	2938	4991	1306	2127	5676	1736	833	230.4	204.9	131.5
MEAN	108	66.3	94.8	161	46.6	68.6	189	56.0	27.8	7.43	6.61	4.38
MAX	562	110	180	800	110	219	340	100	100	16	17	11
MIN	20	34	44	40	26	22	73	21	10	4.2	3.1	3.0
CFSM	3.00	1.84	2.63	4.47	1.29	1.91	5.25	1.56	.77	.21	.18	.12
IN.	3.45	2.06	3.04	5.16	1.35	2.20	5.87	1.79	.86	.24	.21	.14

CAL YR 1977 TOTAL 26724.1 MEAN 73.2 MAX 1380 MIN 4.8 CFSM 2.03 IN 27.61
WTR YR 1978 TOTAL 25499.8 MEAN 69.9 MAX 800 MIN 3.0 CFSM 1.94 IN 26.35

01161000 ASHUELOT RIVER AT HINSDALE, NH

LOCATION.--Lat 42°47'07", long 72°29'12", Cheshire County, Hydrologic Unit 01080201, on left bank 40 ft (12 m) upstream from highway bridge at Hinsdale, 0.2 mi (0.3 km) downstream from dam, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--420 mi^2 (1,088 km^2).

PERIOD OF RECORD.--Discharge: March 1907 to December 1911, July 1914 to current year. Water-quality records: Water years 1953, 1958, 1968.

REVISED RECORDS.--WSP 661: Drainage area. WSP 781: 1907-10, 1914-34. WSP 1301: 1915(M), 1917-19(M), 1921-33(M). WSP 1701: 1920.

GAGE.--Water-stage recorder. Datum of gage is 201.32 ft (61.362 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 29, 1933, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Surry Mountain Lake 33 mi (53 km) upstream since 1942 and by Otter Brook Lake 29 mi (47 km) upstream on Otter Brook since 1958 (Reservoirs in Connecticut River basin). Occasional diurnal fluctuation at low flow by mills upstream; greater regulation prior to 1952. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--68 years, 667 ft^3/s (18.89 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,600 ft^3/s (470 m^3/s) Mar. 19, 1936, by computation of peak flow over dam; maximum gage height, 20.2 ft (6.16 m) Mar. 19, 1936, from floodmarks, backwater from Connecticut River; minimum discharge, 10 ft^3/s (0.28 m^3/s) Sept. 9, 1953; minimum daily, 12 ft^3/s (0.34 m^3/s) Sept. 15, 1929.
Maximum discharge since at least 1859, that of Mar. 19, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,920 ft^3/s (111 m^3/s) Jan. 9, gage height, 6.96 ft (2.121 m); minimum, 48 ft^3/s (1.36 m^3/s) Aug. 23, 24, Sept. 9, 10; minimum daily, 49 ft^3/s (1.39 m^3/s) Aug. 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	488	503	1190	800	1500	320	2000	1050	283	140	78	75
2	1070	479	2100	763	1200	315	2460	968	267	125	78	77
3	1420	458	2130	713	950	315	2530	898	264	114	80	72
4	1230	393	1850	635	800	310	2150	818	318	110	93	68
5	970	367	1520	583	740	310	1900	757	334	110	209	65
6	764	393	1250	554	750	300	2130	714	296	112	225	63
7	608	403	1100	540	746	290	2300	679	267	104	212	59
8	476	427	940	526	763	280	2210	622	433	97	134	55
9	679	677	820	2160	723	280	2000	658	818	91	97	51
10	1880	827	720	3740	725	282	1850	833	898	90	88	53
11	2040	987	640	3010	709	304	1890	865	764	90	81	66
12	1730	1050	580	2700	699	332	2310	764	602	90	77	90
13	1440	929	580	2300	652	365	2590	686	454	86	70	99
14	1130	843	650	1900	601	415	2760	615	394	81	66	98
15	1140	757	1800	1700	567	695	2820	586	346	78	62	97
16	1250	692	2000	1450	547	843	2650	665	292	80	63	96
17	1950	682	1700	1250	554	852	2280	907	264	85	78	96
18	3010	825	1500	1100	524	763	1890	1160	221	86	83	95
19	2930	903	1200	950	504	682	1690	1200	242	88	77	95
20	2580	811	1010	840	487	651	1930	1110	351	83	75	94
21	2340	719	1000	800	460	646	2440	977	296	78	72	94
22	2320	660	1010	780	441	952	2480	907	292	77	54	93
23	1800	611	1180	760	437	1220	2240	826	267	70	51	93
24	1450	607	1200	740	417	1440	1990	714	225	68	49	88
25	1280	612	1300	740	400	1500	1750	615	193	63	59	77
26	1020	720	1510	1890	389	1330	1640	545	173	59	83	69
27	840	1160	1420	3240	381	1350	1420	468	160	57	78	65
28	730	1200	1040	3220	370	1850	1310	420	150	83	75	63
29	655	1090	900	2920	---	2130	1220	375	143	97	72	61
30	594	977	870	2510	---	2230	1150	334	140	90	61	59
31	543	---	840	1900	---	2100	---	300	---	81	70	---
TOTAL	42357	21762	37550	47714	18036	25652	61980	23036	10147	2763	2750	2326
MEAN	1366	725	1211	1539	644	827	2066	743	338	89.1	88.7	77.5
MAX	3010	1200	2130	3740	1500	2230	2820	1200	898	140	225	99
MIN	476	367	580	526	370	280	1150	300	140	57	49	51

CAL YR 1977 TOTAL 293731 MEAN 805 MAX 5780 MIN 61
WTR YR 1978 TOTAL 296073 MEAN 811 MAX 3740 MIN 49

Reservoirs in Connecticut River basin

01127850; 01128000. FIRST CONNECTICUT AND SECOND CONNECTICUT LAKES on Connecticut River are operated as a unit for storage of water for power and are used for recreation. The downstream order and usable capacity of each are as follows: Second Lake, 12 mi (19 km) northeast of Pittsburg, NH, 506,000,000 ft³ (14,300,000 m³); First Lake, 5.6 mi (9.0 km) northeast of Pittsburg, NH, 3,330,000,000 ft³ (94,300,000 m³). Records furnished by New England Power Co.

01129000. LAKE FRANCIS on Connecticut River at Pittsburg, NH, completed in March 1940, used for storage of water for power and for recreation, has usable capacity of 4,326,000,000 ft³ (122,500,000 m³). Records furnished by New Hampshire Water Resources Board.

01132000; 01132500. MOORE AND COMERFORD RESERVOIRS on Connecticut River are operated as a unit for storage of water for hydroelectric power development and are used for recreation. The downstream order and usable capacity of each are as follows: Moore Reservoir, 4.5 mi (7.2 km) northwest of Littleton, NH, filled in April 1956, 4,970,000,000 ft³ (141,000,000 m³); Comerford Reservoir, 5 mi (8 km) northeast of Monroe, NH, completed in 1930, 1,279,000,000 ft³ (36,220,000 m³). Records furnished by New England Power Co.

01141000. UNION VILLAGE RESERVOIR on Ompompanoosuc River, 0.3 mi (0.5 km) north of Union Village, VT, completed in 1949 for flood control, has usable capacity of 1,660,000,000 ft³ (47,000,000 m³). Records furnished by Corps of Engineers.

01148000; 01150000. LAKES AND PONDS IN MASCOMA RIVER BASIN are operated as a unit for storage of water for power and are used for recreation. The reservoirs and usable capacity of each are as follows: 01148000 Goose Pond, 5.2 mi (8.4 km) northeast of Mascoma, NH, 509,000,000 ft³ (14,400,000 m³); Grafton Pond, 8.5 mi (13.7 km) southeast of Mascoma, 144,000,000 ft³ (4,080,000 m³); Crystal Lake, 5.8 mi (9.3 km) southeast of Mascoma, 75,000,000 ft³ (2,100,000 m³); 01150000 Mascoma Lake at Mascoma, 337,000,000 ft³ (9,540,000 m³); total usable capacity of the four reservoirs, 1,060,000,000 ft³ (30,000,000 m³). Records furnished by New Hampshire Water Resources Board.

01151400. NORTH HARTLAND RESERVOIR on Ottauquechee River at North Hartland, VT, completed in 1961, used for flood control and recreation, has usable capacity of 3,110,000,000 ft³ (88,100,000 m³). Records furnished by Corps of Engineers.

01152000. SUNAPEE LAKE on Sugar River at Sunapee, NH, used for recreation and storage of water for power, has usable capacity of 862,000,000 ft³ (24,400,000 m³). Records collected by Geological Survey.

01152900. NORTH SPRINGFIELD RESERVOIR on Black River at North Springfield, VT, completed in 1960, used for flood control and recreation, has usable capacity of 2,230,000,000 ft³ (63,200,000 m³). Records furnished by Corps of Engineers.

01155400. BALL MOUNTAIN RESERVOIR on West River, 2 mi (3.2 km) north of Jamaica, VT, completed in 1961, used for flood control and recreation, has usable capacity of 2,380,000,000 ft³ (67,400,000 m³). Records furnished by Corps of Engineers.

01155900. TOWNSHEND RESERVOIR on West River, 1.8 mi (2.9 km) northwest of Townshend, VT, completed in 1961, used for flood control and recreation, has usable capacity of 1,460,000,000 ft³ (41,300,000 m³). Records furnished by Corps of Engineers.

01157500. SURRY MOUNTAIN LAKE on Ashuelot River, 4.5 mi (7.2 km) north of Keene, NH, completed in 1942, used for flood control and recreation, has usable capacity of 1,420,000,000 ft³ (40,200,000 m³). Records furnished by Corps of Engineers.

01158550. OTTER BROOK LAKE on Otter Brook, 2.5 mi (4.0 km) northeast of Keene, NH, completed in 1958, used for flood control and recreation, has usable capacity of 798,000,000 ft³ (22,600,000 m³). Records furnished by Corps of Engineers.

MONTHEND USABLE CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	First and Second Connecticut Lakes	Lake Francis	Moore and Comerford Reservoirs	Union Village Reservoir	Lakes and Ponds in Mascoma River basin	North Hartland Reservoir
Sept. 30, 1977	3074.6	3886.2	5664.5	2.0	923.5	122.0
Oct. 31	2668.3	3810.4	5940.2	3.4	805.8	24.8
Nov. 30	1679.9	3988.1	5755.5	15.8	718.8	67.0
Dec. 31	359.0	3455.5	5958.3	18.4	692.0	72.0
Jan. 31, 1978	414.9	2639.4	5288.2	69.5	795.1	73.0
Feb. 28	215.9	1106.3	3648.5	13.6	632.4	65.4
Mar. 31	211.4	607.4	752.3	20.3	696.2	58.2
Apr. 30	1118.7	1742.0	1150.6	8.9	1105.7	83.2
May 31	3355.3	3439.3	6059.4	2.5	1114.6	133.0
June 30	3495.7	3869.2	5675.0	1.6	1094.9	121.0
July 31	3377.9	3536.9	5651.5	1.5	973.7	121.0
Aug. 31	3145.1	3128.0	5122.4	1.5	933.0	123.0
Sept. 30	2764.8	3128.0	5516.2	2.2	837.1	122.0

Date	Sunapee Lake	North Springfield Reservoir	Ball Mountain Reservoir	Townshend Reservoir	Surry Mountain Lake	Otter Brook Lake
Sept. 30, 1977	496	26.2	100.4	39.4	66.9	38.2
Oct. 31	422	15.3	15.7	37.6	56.3	38.6
Nov. 30	345	28.4	11.1	36.2	80.7	39.3
Dec. 31	371	26.9	19.3	38.0	76.9	40.4
Jan. 31, 1978	447	31.3	65.3	80.4	148.5	58.5
Feb. 28	282	21.8	66.3	36.2	82.0	34.8
Mar. 31	321	33.4	65.0	38.3	82.0	38.6
Apr. 30	532	34.1	72.7	41.4	87.4	19.2
May 31	612	31.3	98.1	35.2	64.5	37.9
June 30	622	23.3	97.7	36.6	59.8	36.8
July 31	568	23.3	100.8	35.8	57.4	36.5
Aug. 31	471	23.3	100.0	35.5	57.4	36.8
Sept. 30	396	21.6	107.1	34.4	33.5	37.2

01329000 BATTEN KILL AT ARLINGTON, VT

LOCATION.--Lat 43°04'38", long 73°09'26", Bennington County, Hydrologic Unit 02020003, on left bank 5 ft (1.5 m) upstream from bridge on Highway 313 at Arlington and 0.9 mi (1.4 km) downstream from Warm Brook.

DRAINAGE AREA.--152 mi² (394 km²).

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 851: 1936 (maximum gage height). WSP 1302: 1929-34(M).

GAGE.--Water-stage recorder. Datum of gage is 597.68 ft (182.173 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1941, nonrecording gage at downstream side of bridge at same datum.

REMARKS.--Records excellent except those for winter period, which are fair. Prior to 1949, diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--50 years, 341 ft³/s (9.657 m³/s), 30.47 in/yr (774 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft³/s (314 m³/s) Mar. 18, 1936, gage height, 11.3 ft (3.44 m), from floodmarks, present site, from rating curve extended above 6,100 ft³/s (170 m³/s) on basis of slope-area measurement at gage height 10.8 ft (3.29 m) and computation of peak flow over dam; minimum, 37 ft³/s (1.05 m³/s) Sept. 25, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft³/s (62 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0130	*2290	64.9	7.86	2.396	Jan. 9	1230	2270	64.3	7.84	2.390

Minimum discharge, 67 ft³/s (1.90 m³/s) July 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	391	279	685	339	355	174	461	629	197	128	108	140
2	1130	270	776	328	332	175	790	514	197	118	107	117
3	760	259	579	311	312	175	568	500	398	113	99	102
4	563	253	479	300	303	177	471	532	381	121	347	93
5	453	295	419	304	295	172	709	532	273	117	284	87
6	433	292	404	294	320	170	735	482	237	110	174	85
7	429	268	400	283	320	168	675	482	215	104	172	83
8	365	287	355	280	315	166	622	504	843	100	169	80
9	883	450	358	1440	310	169	529	1130	1080	97	163	80
10	1270	383	330	1200	300	167	498	990	936	96	173	77
11	842	441	305	750	290	161	573	638	541	96	136	130
12	577	375	300	600	280	165	1100	518	397	91	361	700
13	483	330	316	520	270	180	1220	460	342	87	521	441
14	432	310	664	500	260	202	1360	419	364	84	265	233
15	534	289	1780	460	250	317	996	514	319	96	167	188
16	490	314	1290	410	240	255	714	624	269	93	133	185
17	1490	388	741	390	235	218	624	729	237	164	117	163
18	1980	574	559	370	230	199	609	729	230	241	109	146
19	1170	411	498	360	225	193	734	609	234	132	104	165
20	787	342	447	330	220	186	843	469	254	107	98	148
21	627	325	436	330	210	236	1030	500	209	98	93	130
22	539	369	477	305	200	646	788	439	214	97	88	166
23	485	330	412	293	195	510	777	380	196	96	84	147
24	435	386	379	309	192	423	849	343	176	87	111	129
25	408	385	666	319	190	354	900	319	163	75	313	121
26	384	520	753	1210	188	324	793	292	154	71	195	114
27	363	454	472	1130	184	439	954	266	152	77	141	108
28	343	379	378	669	179	613	984	248	146	437	119	106
29	320	354	358	478	---	483	930	238	138	232	123	103
30	303	336	376	416	---	425	860	228	134	143	110	104
31	290	---	378	383	---	392	---	213	---	115	107	---
TOTAL	19959	10648	16770	15611	7200	8634	23696	15470	9626	3823	5291	4671
MEAN	644	355	541	504	257	279	790	499	321	123	171	156
MAX	1980	574	1780	1440	355	646	1360	1130	1080	437	521	700
MIN	290	253	300	280	179	161	461	213	134	71	84	77
CFSM	4.24	2.34	3.56	3.32	1.69	1.84	5.20	3.28	2.11	.81	1.13	1.03
IN.	4.88	2.61	4.10	3.82	1.76	2.11	5.80	3.79	2.36	.94	1.29	1.14

CAL YR 1977 TOTAL 156928 MEAN 430 MAX 3680 MIN 100 CFSM 2.83 IN 38.41
WTR YR 1978 TOTAL 141399 MEAN 387 MAX 1980 MIN 71 CFSM 2.55 IN 34.61

01334000 WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT

LOCATION.--Lat 42°54'47", long 73°15'25", Bennington County, Hydrologic Unit 02020003, on left bank 0.6 mi (1.0 km) downstream from Paran Creek and 1.4 mi (2.3 km) south of North Bennington.
DRAINAGE AREA.--111 mi² (287 km²).
PERIOD OF RECORD.--Discharge: June 1931 to current year.
Water-quality records: Water years 1953-54.
REVISED RECORDS.--WSP 781: 1933(M).
GAGE.--Water-stage recorder. Altitude of gage is 525 ft (160 m), from topographic map.
REMARKS.--Records good except those for winter period and periods of no gage-height record, Jan. 10-31, July 11 to Aug. 20, which are fair. Occasional diurnal fluctuation at low flow caused by mills upstream; diurnal fluctuation greater prior to 1960. Diversion upstream for municipal supply of Bennington and North Bennington since 1961. Several observations of water temperature and specific conductance were made during the year.
AVERAGE DISCHARGE.--47 years, 222 ft³/s (6.287 m³/s).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,450 ft³/s (239 m³/s) Sept. 21, 1938, gage height, 12.04 ft (3.670 m), from rating curve extended above 2,800 ft³/s (79 m³/s) on basis of contracted-opening measurements at gage heights 10.13 ft (3.088 m), 10.49 ft (3.197 m), 11.50 ft (3.505 m), and 12.04 ft (3.670 m) and slope-area measurement and computation of flow over dam at gage height 12.04 ft (3.670 m); minimum, 4 ft³/s (0.1 m³/s) Sept. 27, 1932; minimum daily, 21 ft³/s (0.59 m³/s) Sept. 22, 23, 1964, July 12, 1965.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (57 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1545	2040	57.8	5.72	1.743	Jan. 26	-	2300	65	-	-
Jan. 9	1115	*3670	104	7.67	2.338						

Minimum discharge, 15 ft³/s (0.42 m³/s) Sept. 3; minimum daily, 33 ft³/s (0.93 m³/s) Sept. 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	156	836	211	250	105	400	354	104	93	69	60
2	658	149	664	201	241	105	600	301	114	83	64	58
3	376	143	473	185	210	110	450	283	235	75	54	44
4	345	145	398	181	215	102	310	278	216	76	140	36
5	273	184	345	190	205	105	460	270	143	74	110	38
6	284	195	335	184	210	98	520	255	123	67	86	35
7	268	168	313	175	220	95	470	243	117	62	120	34
8	223	182	269	175	225	93	400	232	408	59	200	34
9	772	245	276	2000	215	91	330	374	517	57	90	34
10	676	209	220	950	210	94	350	481	361	56	76	33
11	388	296	185	550	205	95	500	320	223	54	68	57
12	300	229	180	410	195	103	800	258	172	52	93	229
13	255	205	185	350	182	121	900	229	166	50	110	120
14	245	196	480	300	166	187	750	211	190	48	80	77
15	318	183	1300	270	153	292	550	243	157	52	65	64
16	287	233	800	260	145	181	410	268	133	60	60	66
17	1430	316	450	250	143	141	370	288	120	60	54	63
18	972	479	360	240	139	125	391	326	127	68	50	55
19	580	308	320	230	134	121	457	291	188	60	46	92
20	508	250	290	210	130	121	545	236	234	55	43	89
21	407	255	345	200	125	195	688	285	145	51	41	63
22	344	366	394	195	125	501	490	244	144	48	39	54
23	301	279	309	190	120	315	511	203	123	46	37	51
24	267	314	275	185	115	258	547	184	110	44	42	49
25	246	281	478	200	115	211	548	172	99	42	69	47
26	226	548	415	1300	113	197	497	156	95	41	64	45
27	217	423	265	800	111	390	562	143	93	45	51	44
28	205	326	221	450	105	430	550	132	127	190	49	43
29	184	292	214	330	---	340	505	124	163	90	48	43
30	172	275	235	290	---	280	452	115	133	74	45	43
31	165	---	246	270	---	250	---	108	---	62	49	---
TOTAL	12110	7830	12076	11932	4722	5852	15313	7607	5280	1994	2212	1800
MEAN	391	261	390	385	169	189	510	245	176	64.3	71.4	60.0
MAX	1430	548	1300	2000	250	501	900	481	517	190	200	229
MIN	165	143	180	175	105	91	310	108	93	41	37	33

CAL YR 1977 TOTAL 108406 MEAN 297 MAX 5250 MIN 59
WTR YR 1978 TOTAL 88728 MEAN 243 MAX 2000 MIN 33

04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT

LOCATION.--Lat 43°37'40", long 73°18'50", Rutland County, Hydrologic Unit 02010001, on right bank 0.3 mi (0.5 km) downstream from Carver Falls, 1.9 mi (3.1 km) upstream from Hubbardton River, and 3.2 mi (5.1 km) northwest of Fair Haven.

DRAINAGE AREA.--187 mi² (484 km²).

PERIOD OF RECORD.--Discharge: October 1928 to current year.
Water-quality records: Water year 1954.

REVISED RECORDS.--WSP 1114: 1929(M), 1932-35.

GAGE.--Water-stage recorder. Altitude of gage is 105 ft (32 m), from topographic map.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. Flow regulated by powerplant upstream and by Lake Bomoseen. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--50 years, 249 ft³/s (7.052 m³/s), 18.08 in/yr (459 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft³/s (419 m³/s) July 20, 1945, gage height, 24.36 ft (7.425 m), from high-water mark in well, from rating curve extended above 2,600 ft³/s (74 m³/s) on basis of computations of flow over dam at gage heights 16.10 ft (4.907 m), 21.40 ft (6.523 m), and 24.36 ft (7.425 m); minimum daily, 2.1 ft³/s (0.059 m³/s) Aug. 8, 1965, Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,600 ft³/s (74 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0145	*3650	103	13.35	4.069						

Minimum daily discharge, 11 ft³/s (0.31 m³/s) Sept. 8, 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	378	179	769	240	720	220	800	235	165	50	17	20
2	1110	139	732	225	680	215	1050	210	126	47	16	16
3	755	155	690	210	640	210	850	190	329	44	15	14
4	616	250	582	200	610	205	800	180	335	40	80	13
5	513	419	500	190	570	200	1100	165	217	39	60	12
6	407	440	420	185	540	195	1200	160	200	36	33	12
7	371	458	355	180	520	195	1100	155	166	34	25	12
8	278	476	315	175	485	190	1000	145	381	32	25	11
9	303	780	275	1700	460	190	950	165	359	34	24	11
10	1090	694	255	1350	440	185	900	258	296	31	25	15
11	753	740	240	1000	420	190	1000	227	237	28	22	45
12	601	740	225	800	410	195	1970	183	210	26	45	100
13	520	662	210	700	380	205	1560	164	169	24	78	80
14	447	633	200	640	365	220	1430	158	286	23	60	54
15	809	598	290	600	345	280	1180	141	310	21	45	35
16	920	547	275	570	330	350	1010	125	251	30	24	26
17	1710	508	260	540	315	300	909	134	205	45	19	24
18	2710	866	240	520	305	265	833	144	148	64	17	21
19	1380	797	230	495	295	250	720	162	151	45	16	24
20	1090	595	220	480	280	230	737	134	147	34	15	21
21	964	519	215	460	270	220	681	136	147	28	15	19
22	856	505	210	450	260	700	614	130	226	23	14	24
23	779	583	210	435	255	600	547	114	201	21	13	21
24	707	598	205	430	245	520	495	102	161	19	17	19
25	647	528	290	415	240	450	452	98	103	17	44	18
26	549	504	450	700	235	400	415	90	87	16	35	17
27	268	1160	420	1400	230	640	373	79	78	14	25	16
28	246	1130	370	1100	225	900	326	82	69	66	17	17
29	207	954	320	940	---	840	290	76	60	52	19	18
30	193	854	290	850	---	770	255	46	55	24	17	16
31	164	---	260	760	---	680	---	129	---	19	16	---
TOTAL	22341	18011	10523	18940	11070	11210	25547	4517	5875	1026	893	751
MEAN	721	600	339	611	395	362	852	146	196	33.1	28.8	25.0
MAX	2710	1160	769	1700	720	900	1970	258	381	66	80	100
MIN	164	139	200	175	225	185	255	46	55	14	13	11
CFSM	3.86	3.21	1.81	3.27	2.11	1.94	4.56	.78	1.05	.18	.15	.13
IN.	4.44	3.58	2.09	3.77	2.20	2.23	5.08	.90	1.17	.20	.18	.15

CAL YR 1977 TOTAL 151747.3 MEAN 416 MAX 5500 MIN 2.1 CFSM 2.23 IN 30.19
WTR YR 1978 TOTAL 130704.0 MEAN 358 MAX 2710 MIN 11 CFSM 1.91 IN 26.00

NOTE.--No gage-height record Dec. 7 to Jan. 9, June 25 to Sept. 30.

04282000 OTTER CREEK AT CENTER RUTLAND, VT

LOCATION.--Lat 43°36'13", long 73°00'49", Rutland County, Hydrologic Unit 02010002, on right bank 500 ft (150 m) upstream from bridge on U.S. Highway 4 at Center Rutland, 200 ft (60 m) downstream from dam, 1.2 mi (1.9 km) downstream from East Creek, and 1.5 mi (2.4 km) west of Rutland.

DRAINAGE AREA.--307 mi² (795 km²).

PERIOD OF RECORD.--Discharge: May 1928 to current year.
Water-quality records: Water years 1955, 1971.

REVISED RECORDS.--WSP 1084: 1929.

GAGE.--Water-stage recorder. Datum of gage is 474.80 ft (144.719 m) National Geodetic Vertical Datum of 1929; prior to Oct. 1, 1964, datum was 1.00 ft (0.305 m) higher. Prior to July 22, 1929, nonrecording gage at same site.

REMARKS.--Records good except those for period of no gage-height record Aug. 19 to Sept. 24, which are fair. Flow regulated by powerplants and Chittenden Reservoir 14 mi (22.5 km) upstream on East Creek, usable capacity, 819,800,000 ft³ (23,220,000 m³); prior to June 3, 1947, also regulated by East Pittsford Reservoir, usable capacity, 150,000,000 ft³ (4,250,000 m³). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--50 years, 553 ft³/s (15.66 m³/s), 24.46 in/yr (621 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,700 ft³/s (388 m³/s) Sept. 22, 1938, gage height, 13.45 ft (4.100 m), present datum, from rating curve extended above 7,400 ft³/s (210 m³/s) on basis of computation of peak flow over dam; minimum daily, 45 ft³/s (1.27 m³/s) Sept. 21, 1947, Aug. 7, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,400 ft³/s (96 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0945	*4390	124	8.74	2.664						

Minimum daily discharge, 104 ft³/s (2.95 m³/s) July 15.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	656	407	1320	510	740	365	922	932	375	156	170	210
2	1620	384	1510	500	676	350	1400	761	325	142	160	170
3	1280	370	1070	500	624	343	1090	694	925	168	150	140
4	894	365	856	500	560	361	857	682	852	139	800	130
5	757	490	695	495	540	341	1490	675	526	185	470	125
6	616	507	607	490	576	339	1570	629	498	186	340	120
7	599	479	728	460	580	334	1340	607	414	175	255	120
8	516	496	600	450	576	326	1130	625	1140	181	250	115
9	971	676	580	2000	563	330	985	985	1520	135	240	110
10	2030	694	560	2530	540	332	924	1370	1680	160	260	110
11	1520	735	460	1630	530	334	1430	967	1120	176	200	250
12	960	691	450	1220	540	225	2530	748	635	225	450	1000
13	791	539	520	1070	525	264	2730	641	549	193	780	720
14	678	546	595	873	460	339	3120	619	849	209	450	500
15	1100	519	1170	755	440	606	2230	608	655	104	274	330
16	908	549	1280	722	460	635	1410	772	493	131	191	260
17	2330	701	1150	675	500	486	1120	1030	388	328	193	245
18	4070	1150	798	646	460	372	1090	872	331	607	165	210
19	2700	843	812	627	460	352	1280	779	375	369	160	245
20	1530	656	778	597	440	334	1760	630	391	256	150	220
21	1100	598	763	563	430	445	1900	609	354	214	140	190
22	942	621	867	516	425	1140	1560	588	464	167	135	245
23	879	574	672	515	415	1150	1410	518	424	132	125	225
24	744	553	596	533	408	1020	1400	491	285	139	180	205
25	705	560	1180	576	401	751	1430	457	221	179	470	194
26	663	704	1610	1590	404	620	1300	407	247	135	330	177
27	625	868	984	2170	401	716	1400	322	204	250	230	197
28	596	684	759	1830	381	1190	1460	271	181	680	170	188
29	553	642	666	1290	---	1100	1360	258	175	385	190	160
30	512	593	719	943	---	961	1240	472	186	250	160	155
31	480	---	713	818	---	809	---	404	---	180	155	---
TOTAL	34325	18194	26068	28594	14055	17270	44868	20423	16782	6936	8393	7266
MEAN	1107	606	841	922	502	557	1496	659	559	224	271	242
MAX	4070	1150	1610	2530	740	1190	3120	1370	1680	680	800	1000
MIN	480	365	450	450	381	225	857	258	175	104	125	110
CFSM	3.61	1.97	2.74	3.00	1.64	1.81	4.87	2.15	1.82	.73	.88	.79
IN.	4.16	2.20	3.16	3.46	1.70	2.09	5.44	2.47	2.03	.84	1.02	.88

CAL YR 1977 TOTAL 247030 MEAN 677 MAX 6890 MIN 81 CFSM 2.21 IN 29.93
WTR YR 1978 TOTAL 243174 MEAN 666 MAX 4070 MIN 104 CFSM 2.17 IN 29.47

04282500 OTTER CREEK AT MIDDLEBURY, VT

LOCATION.--Lat 44°00'47", long 73°10'06", Addison County, Hydrologic Unit 02010002, on right bank 150 ft (46 m) upstream from highway bridge in Middlebury and 3.5 mi (5.6 km) downstream from Middlebury River.

DRAINAGE AREA.--628 mi² (1,627 km²).

PERIOD OF RECORD.--Discharge: April 1903 to April 1907, October 1910 to January 1920, October 1928 to current year.
Water-quality records: Water years 1954, 1967-74.

REVISED RECORDS.--WSP 434: 1903-4. WSP 684: 1913(M), drainage area. WSP 1114: 1913. WSP 1207: 1929, 1931.

GAGE.--Water-stage recorder. Datum of gage is 335.75 ft (102.337 m) National Geodetic Vertical Datum of 1929. Apr. 1, 1903, to Apr. 30, 1907, and Oct. 5, 1910, to Jan. 31, 1920, nonrecording gage at site 1,800 ft (550 m) upstream at datum 10 ft (3 m) lower, and Oct. 1, 1928, to Oct. 17, 1933, at present datum.

REMARKS.--Records good except those for periods of no gage-height record and backwater from grass, which are fair. Some regulation by Chittenden Reservoir, usable capacity, 819,800,000 ft³ (23,220,000 m³) on East Creek. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--62 years (water years 1904-06, 1911-19, 1929-78), 986 ft³/s (27.92 m³/s), 21.32 in/yr (542 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft³/s (312 m³/s) Mar. 20, 21, 1936, gage height, 10.3 ft (3.14 m); minimum daily, 92 ft³/s (2.61 m³/s) Aug. 9, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 13,600 ft³/s (385 m³/s) Nov. 4, 1927, gage height, 13.3 ft (4.05 m), present datum, at site 1,800 ft (550 m) upstream, from rating curve extended above 9,000 ft³/s (250 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,550 ft³/s (101 m³/s) Mar. 30, gage height, 5.31 ft (1.618 m); minimum daily, 129 ft³/s (3.65 m³/s) Sept. 11.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	846	1510	1250	1840	690	3150	1900	1000	536	343	302
2	1730	727	2000	1070	1700	660	3010	1700	970	314	322	266
3	1800	682	2100	940	1600	650	2840	1500	1400	286	335	225
4	1920	675	2050	860	1500	640	2740	1400	1500	330	396	146
5	1830	746	1950	810	1450	630	2800	1300	1450	339	831	162
6	1630	801	1800	805	1400	620	2780	1250	1400	396	788	262
7	1360	852	1650	795	1370	600	2750	1200	1600	428	524	298
8	1080	859	1500	760	1300	590	2730	1150	1700	401	406	302
9	954	1090	1400	1600	1150	580	2900	1230	1750	396	380	262
10	1520	1250	1300	1900	1110	550	3000	1500	1700	322	360	187
11	1720	1330	1220	1820	1100	540	3100	1650	1650	339	339	129
12	1820	1330	1180	1870	1080	540	3170	1690	1600	355	401	500
13	1820	1270	1110	1930	1050	520	3200	1600	1550	343	699	768
14	1720	1140	1040	1990	1000	630	3250	1380	1640	335	965	699
15	1890	1070	1650	1900	930	1120	3200	1180	1570	391	754	560
16	1820	1080	1780	1750	920	1160	3100	1120	1410	274	518	401
17	2330	1310	1780	1700	920	1130	2900	1200	1070	222	406	278
18	2590	1940	1700	1600	910	988	2800	1400	820	460	370	219
19	2480	1910	1650	1500	880	821	2850	1420	702	640	347	318
20	2460	1850	1550	1400	840	749	3000	1400	996	518	274	335
21	2520	1710	1500	1340	810	818	3100	1350	969	401	214	302
22	2580	1520	1510	1300	810	1450	3050	1250	1010	380	318	282
23	2590	1370	1450	1200	800	1680	2900	1180	1040	298	315	274
24	2550	1250	1360	1200	790	1800	2700	1120	935	203	262	251
25	2440	1120	1300	1300	770	1850	2600	1050	679	278	406	151
26	2260	1150	1700	1800	740	1870	2500	900	530	247	542	232
27	2050	1360	1800	1900	700	2090	2400	800	602	232	417	322
28	1810	1410	1600	2000	700	2610	2200	680	500	412	290	294
29	1530	1340	1450	1980	---	2730	2150	580	449	584	370	290
30	1220	1250	1380	1950	---	3100	2050	550	477	471	343	310
31	933	---	1300	1900	---	3330	---	990	---	466	318	---
TOTAL	58027	36238	48270	46120	30170	37736	84920	38620	34669	11597	13553	9327
MEAN	1872	1208	1557	1488	1078	1217	2831	1246	1156	374	437	311
MAX	2590	1940	2100	2000	1840	3330	3250	1900	1750	640	965	768
MIN	933	675	1040	760	700	520	2050	550	449	203	214	129
CFSM	2.98	1.92	2.48	2.37	1.72	1.94	4.51	1.98	1.84	.60	.70	.50
IN.	3.44	2.15	2.86	2.73	1.79	2.24	5.03	2.29	2.05	.69	.80	.55

CAL YR 1977 TOTAL 436257 MEAN 1195 MAX 6990 MIN 98 CFSM 1.90 IN 25.84
WTR YR 1978 TOTAL 449247 MEAN 1231 MAX 3330 MIN 129 CFSM 1.96 IN 26.61

NOTE.--No gage-height record Jan. 15 to Feb. 21, Apr. 9 to May 8, May 16 to June 13.

04284000 JAIL BRANCH AT EAST BARRE, VT

LOCATION.--Lat 44°09'30", long 72°26'44", Washington County, Hydrologic Unit 02010003, on right bank 1,400 ft (430 m) upstream from highway bridge, at East Barre, 1,400 ft (430 m) downstream from East Barre Detention Reservoir, and 4.2 mi (6.8 km) upstream from mouth.
DRAINAGE AREA.--38.9 mi² (100.8 km²).
PERIOD OF RECORD.--August 1920 to September 1923, October 1933 to current year. October 1933 monthly discharge only, published in WSP 1307. Prior to October 1922, published as Jail Brook at East Barre.
REVISED RECORDS.--WSP 564: 1922. WSP 1034: Drainage area. WSP 1307: 1921-23(M).
GAGE.--Water-stage recorder. Datum of gage is 1,107.25 ft (337.490 m) National Geodetic Vertical Datum of 1929. Aug. 14, 1920, to Sept. 30, 1923, nonrecording gage at site 0.1 mi (0.2 km) downstream at different datum. Nov. 1, 1933, to Jan. 25, 1935, nonrecording gage and Jan. 26, 1935, to Aug. 7, 1972, water-stage recorder at site 1,500 ft (460 m) downstream. Datum of gage was 1,071.59 ft (326.621 m) National Geodetic Vertical Datum of 1929 Nov. 1, 1933, to Sept. 30, 1964, and 1,069.59 ft (326.011 m) NGVD Oct. 1, 1964, to Aug. 7, 1972 (levels by Corps of Engineers).
REMARKS.--Records good except those for winter period and period of no gage-height record, which are poor. Discharge affected by East Barre Detention Reservoir since 1935 (Reservoirs in Winooski River basin). Prior to 1964, occasional diurnal fluctuation at low flow caused by mill upstream. Diversion from reservoir on Orange Brook, a tributary upstream, for city of Barre. Several observations of water temperature and specific conductance were made during the year.
AVERAGE DISCHARGE.--48 years, 54.7 ft³/s (1.549 m³/s), 19.10 in/yr (485 mm/yr), adjusted for storage.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,820 ft³/s (51.5 m³/s) Oct. 1, 1920, gage height, 9.50 ft (2.896 m), from graph based on gage readings, site and datum then in use, from rating curve extended above 900 ft³/s (25 m³/s); minimum, 0.1 ft³/s (0.003 m³/s) Aug. 18, 1950, Aug. 3, 4, 31, Sept. 1, 3, 1953. Maximum discharge since construction of East Barre Detention Reservoir in 1935, 634 ft³/s (18.0 m³/s) Apr. 19, 1969, gage height, 3.31 ft (1.009 m), site and datum then in use; maximum gage height, 9.48 ft (2.890 m) Jan. 7, 1973, ice jam.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 452 ft³/s (12.8 m³/s) Oct. 17, gage height, 4.47 ft (1.362 m); maximum gage height, 5.89 ft (1.795 m) Jan. 9 (ice jam); minimum discharge, 3.1 ft³/s (0.945 m³/s) Aug. 24, Sept. 3-7, 10-11.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	36	94	34	78	25	67	211	101	21	11	4.2
2	282	36	161	31	75	24	128	174	85	16	9.6	3.8
3	116	35	104	29	71	23	90	160	239	14	8.4	3.7
4	83	32	72	28	68	23	62	151	118	12	14	3.1
5	56	45	46	27	64	22	135	165	82	11	10	3.1
6	42	40	42	26	60	21	109	174	96	10	7.0	3.1
7	34	38	38	25	57	20	95	163	49	9.8	6.6	3.8
8	26	45	35	24	54	20	73	164	154	9.4	6.2	4.6
9	99	49	33	190	52	20	64	218	94	20	7.4	4.0
10	199	43	31	400	48	20	65	283	80	17	6.1	3.1
11	75	75	29	200	46	20	118	196	58	15	5.4	3.8
12	56	58	28	130	44	21	260	150	36	13	10	39
13	50	48	27	110	43	22	256	131	48	11	15	16
14	46	45	26	96	41	24	357	111	99	9.7	11	10
15	125	31	40	86	40	34	191	101	62	8.2	7.8	8.2
16	77	39	35	79	38	32	161	158	42	15	5.2	7.1
17	302	58	33	72	36	29	192	142	34	34	6.1	5.7
18	446	116	32	66	34	27	256	134	30	26	4.6	5.7
19	338	84	30	61	33	26	308	129	57	20	4.6	5.1
20	120	60	29	57	31	25	383	102	235	15	4.2	4.6
21	83	50	28	54	30	24	377	114	162	11	3.8	4.6
22	72	44	27	50	29	65	311	133	120	19	3.8	4.6
23	67	40	27	48	28	56	331	106	72	15	3.5	4.6
24	61	58	27	45	28	49	318	86	56	18	6.0	3.8
25	56	66	45	43	27	43	343	58	45	14	17	3.7
26	55	67	62	120	27	41	315	49	35	11	7.8	3.8
27	52	85	56	180	26	52	362	43	30	7.8	5.7	4.0
28	48	58	50	115	26	304	374	40	27	22	5.4	4.0
29	43	52	44	100	---	120	370	34	21	16	4.9	4.0
30	40	66	39	92	---	74	321	76	25	14	5.1	4.0
31	38	---	35	85	---	63	---	92	---	13	4.2	---
TOTAL	3329	1599	1405	2703	1234	1369	6792	4048	2392	467.9	227.4	182.8
MEAN	107	53.3	45.3	87.2	44.1	44.2	226	131	79.7	15.1	7.34	6.09
MAX	446	116	161	400	78	304	383	283	239	34	17	39
MIN	26	31	26	24	26	20	62	34	21	7.8	3.5	3.1
MEAN†	107	53.6	45.3	89.0	42.0	45.5	230	127	78.0	14.8	7.34	6.09
CFSM†	2.75	1.38	1.16	2.29	1.08	1.17	5.91	3.26	2.01	.38	.19	.16
IN.†	3.16	1.54	1.34	2.64	1.13	1.35	6.60	3.77	2.24	.44	.22	.17

CAL YR 1977 TOTAL 21342.8 MEAN 58.5 MAX 593 MIN 1.8 MEAN† 58.5 CFSM† 1.50 IN† 20.41
WTR YR 1978 TOTAL 25749.1 MEAN 70.5 MAX 446 MIN 3.1 MEAN† 70.5 CFSM† 1.81 IN† 24.59

† Adjusted for change in contents in East Barre Detention Reservoir.
NOTE.--No gage-height record June 30 to Aug. 17.

04285500 NORTH BRANCH WINOOSKI RIVER AT WRIGHTSVILLE, VT

LOCATION.--Lat 44°17'58", long 72°34'45", Washington County, Hydrologic Unit 02010003, on right bank at Wrightsville, 0.8 mi (1.3 km) downstream from Wrightsville Detention Reservoir, and 3.5 mi (5.6 km) upstream from mouth.

DRAINAGE AREA.--69.2 mi² (179.2 km²).

PERIOD OF RECORD.--Discharge: October 1933 to current year.
Water-quality records: Water year 1957.

REVISED RECORDS.--WSP 1237: 1937: 1934-39.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 550.53 ft (167.802 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Nov. 21, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period, which are fair and those for period of no gage-height record, Oct. 18 to Nov. 16, which are poor. Discharge affected since 1935 by Wrightsville Detention Reservoir (Reservoirs in Winooski River basin). Occasional diurnal fluctuation at low flow caused by small mill upstream; more frequent diurnal fluctuation prior to 1968. Several observations of water temperatures and specific conductance were made during the year.

AVERAGE DISCHARGE.--45 years, 134 ft³/s (3.795 m³/s), 26.30 in/yr (668 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,170 ft³/s (61.5 m³/s) Apr. 12, 1934, gage height, 6.53 ft (1.990 m), from rating curve extended above 920 ft³/s (26 m³/s); minimum daily, 0.2 ft³/s (0.006 m³/s) Aug. 13, 1941. Maximum discharge since construction of Wrightsville Detention Reservoir in 1935, 1,040 ft³/s (29.5 m³/s) Mar. 21, 1936, gage height, 4.32 ft (1.317 m); maximum gage height, 5.43 ft (1.655 m) Mar. 12, 1936, ice jam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 17,200 ft³/s (487 m³/s) Nov. 3, 1927, by computation of peak flow over dam 0.8 mi (1.3 km) above gage.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 750 ft³/s (21 m³/s) Oct. 18, maximum gage height, 3.87 ft (1.180 m) Mar. 25, ice jam; minimum daily discharge, 5.2 ft³/s (0.15 m³/s) Sept. 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	150	120	82	180	40	170	684	41	36	11	8.4
2	600	150	200	72	160	39	287	660	38	29	10	6.9
3	570	150	208	70	140	38	274	627	46	25	11	6.2
4	520	180	150	68	125	38	208	592	43	22	12	5.8
5	500	220	125	61	110	37	286	560	38	19	10	5.4
6	469	180	110	60	105	36	334	539	61	17	9.4	5.2
7	409	210	100	60	98	36	323	519	44	15	8.5	11
8	334	235	95	60	94	36	280	509	120	13	7.8	14
9	287	225	90	150	88	36	210	511	145	18	8.4	10
10	420	210	85	350	84	36	184	528	162	22	7.8	7.7
11	401	240	81	410	80	37	254	515	109	18	9.1	8.5
12	354	210	78	400	76	38	421	491	61	13	12	15
13	309	180	74	280	70	41	481	461	68	11	15	20
14	207	165	72	220	66	45	547	427	198	10	12	15
15	307	145	90	170	63	50	553	388	136	14	10	11
16	340	105	110	145	58	54	534	345	77	18	9.0	16
17	500	128	90	130	56	50	515	302	55	22	10	20
18	720	327	84	120	54	48	502	247	50	20	8.7	14
19	680	343	80	110	52	46	514	223	102	14	8.0	10
20	620	298	77	100	50	44	547	174	318	12	7.2	8.4
21	520	197	75	94	47	42	574	196	272	11	6.8	7.5
22	440	162	75	90	46	70	586	218	276	14	6.2	7.7
23	380	145	74	88	45	100	599	159	282	14	5.8	9.7
24	330	149	74	84	44	90	610	127	144	14	9.6	9.6
25	260	162	100	80	44	80	625	105	98	12	21	8.5
26	230	164	180	140	43	74	632	80	69	11	16	7.4
27	220	181	140	260	42	85	652	65	57	9.4	11	7.1
28	200	130	125	280	41	190	673	55	55	20	9.9	7.5
29	180	115	110	300	---	276	690	48	48	15	15	7.6
30	165	105	90	240	---	219	698	48	42	12	15	7.2
31	140	---	84	205	---	179	---	43	---	11	11	---
TOTAL	11952	5561	3246	4979	2161	2230	13763	10446	3255	511.4	324.2	298.3
MEAN	386	185	105	161	77.2	71.9	459	337	109	16.5	10.5	9.94
MAX	720	343	208	410	180	276	698	684	318	36	21	20
MIN	140	105	72	60	41	36	170	43	38	9.4	5.8	5.2
MEAN†	379	185	104	163	74.4	74.3	569	228	108	16.1	10.5	9.90
CFSM†	5.48	2.67	1.50	2.36	1.08	1.07	8.22	3.29	1.56	.23	.15	.14
IN.†	6.32	2.99	1.74	2.71	1.12	1.24	9.18	3.79	1.75	.27	.17	.16

CAL YR 1977 TOTAL 58512.8 MEAN 160 MAX 737 MIN 6.2 MEAN† 160 CFSM† 2.31 IN† 31.46
WTR YR 1978 TOTAL 58726.9 MEAN 161 MAX 720 MIN 5.2 MEAN† 160 CFSM† 2.31 IN† 31.44

† Adjusted for change in contents in Wrightsville Detention Reservoir.

RESERVOIRS IN WINOOSKI RIVER BASIN ABOVE MONTPELIER, VT

04283500 EAST BARRE DETENTION RESERVOIR.--Lat 44°09'18", long 72°26'42", Washington County, Hydrologic Unit 02010003, at dam on Jail Branch at East Barre, 4.5 mi (7.2 km) upstream from mouth. DRAINAGE AREA, 38.8 mi² (100.5 km²). PERIOD OF RECORD, February 1936 (in WSP 1307), March and April 1936 (in WSP 798), May 1936 to August 1938 (in WSP 1307), September 1938 (in WSP 867), October 1938 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Aug. 30, 1960, nonrecording gage, and Aug. 30 to Sept. 30, 1960, water-stage recorder, at present site at datum 1,127.9 ft (343.78 m) National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam completed by Corps of Engineers in 1935 for flood control. Usable capacity, 525,000,000 ft³ (14,900,000 m³) between elevation 1,124.9 ft (342.87 m, bottom of outlet opening) and 1,165.0 ft (355.09 m, crest of spillway). Dam has no gates; below elevation 1,165.0 ft (355.09 m), outflow from reservoir is dependent on capacity of outlet opening near base of dam. Outlet-opening enlargement and reservoir-construction modifications completed in November 1959. Size of opening since enlargement, height, 7 ft (2.1 m) and average width, 3.7 ft (1.13 m). Figures given herein represent usable contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,163.9 ft (354.76 m), present datum, Mar. 22, 1936; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,143.19 ft (348.444 m) Oct. 18; minimum not determined.

04285000 WRIGHTSVILLE DETENTION RESERVOIR.--Lat 44°18'38", long 72°34'31", Washington County, Hydrologic Unit 02010003, at dam on North Branch Winooski River at Wrightsville, 0.3 mi (0.5 km) downstream from Long Meadow Brook, and 4.2 mi (6.8 km) upstream from mouth. DRAINAGE AREA, 66.5 mi² (172.2 km²). PERIOD OF RECORD, November 1935 to February 1936 (in WSP 1307), March to May 1936 (in WSP 798), June 1936 to August 1938 (in WSP 1307), September 1938 (in WSP 867), October 1938 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to July 28, 1960, nonrecording gage, and July 28 to Sept. 30, 1960, water-stage recorder, at present site at datum 612.75 ft (186.766 km) National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam completed by Corps of Engineers in 1935 for flood control; modification of intake-structure works to create a recreational pool completed in June 1965. Usable capacity for recreation, 22,000,000 ft³ (620,000 m³) between elevations 612.75 ft (186.766 m, bottom of outlet opening) and 620.00 ft (188.976 m); for flood control, 851,500,000 ft³ (24,110,000 m³) between elevations 620.00 ft (188.976 m) and 685.00 ft (208.788 m, crest of spillway); total usable capacity, 873,500,000 ft³ (24,740,000 m³). Dam has no gates; below elevation 685.00 ft (208.788 m), outflow from reservoir is dependent on capacity of outlet opening, 5.25 ft (1.600 m) square near base of dam. Figures given herein represent usable contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 676.4 ft (206.17 m), present datum, Mar. 22, 1936, from graph based on gage readings; minimum observed, 613.00 ft (186.84 m) Aug. 17, 1949, and Aug. 17-19, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 655.43 ft (199.775 m) Apr. 30; minimum, 619.98 ft (188.970 m) Aug. 23, Sept. 5, 6.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (millions of cubic feet)	Change in contents: Millions of cubic feet	Change in contents: Equivalent, cubic feet per second
	04283500 East Barre Detention Reservoir			
Sept. 30	1130.87	6.7	-	-
Oct. 31	1129.42	4.9	-1.8	-0.67
Nov. 30	1130.21	5.8	+.9	+.35
Dec. 31	1130.08	5.7	-.1	-.04
CAL YR 1977	-	-	+.1	0
Jan. 31	1133.44	10.5	+4.8	+1.79
Feb. 28	1130.02	5.6	-4.9	-2.03
Mar. 31	1132.55	9.1	+3.5	+1.31
Apr. 30	1136.98	18.3	+9.2	+3.55
May 31	1132.85	9.5	-8.8	-3.29
June 30	1129.44	4.9	-4.6	-1.77
July 31	-	*4	-.9	-.34
Aug. 31	-	*4	0	0
Sept. 30	-	*4	0	0
WTR YR 1978	-	-	-2.7	-.09
	04285000 Wrightsville Detention Reservoir			
Sept. 30	*624.70	42.3	-	-
Oct. 31	*620.90	25.6	-16.7	-6.24
Nov. 30	620.90	25.6	0	0
Dec. 31	620.57	24.2	-1.4	-.52
CAL YR 1977	-	-	+.8	+.03
Jan. 31	622.00	30.1	+5.9	+2.20
Feb. 28	620.33	23.3	-6.8	-2.81
Mar. 31	621.90	29.7	+6.4	+2.39
Apr. 30	654.53	316.3	+286.6	+111
May 31	620.32	23.3	-293.0	-109
June 30	620.30	23.2	-.1	-.04
July 31	620.02	22.1	-1.1	-.41
Aug. 31	620.04	22.2	+.1	+.04
Sept. 30	620.02	22.1	-.1	-.04
WTR YR 1978	-	-	-20.2	-.64

* Estimated.

04286000 WINOOSKI RIVER AT MONTPELIER, VT

LOCATION.--Lat 44°15'23", long 72°35'36", Washington County, Hydrologic Unit 02010003, on right bank 0.4 mi (0.6 km) upstream from Dog River and 1 mi (1.6 km) downstream from depot at Montpelier.
DRAINAGE AREA.--397 mi² (1,028 km²).
PERIOD OF RECORD.--May 1909 to June 1914 (fragmentary), July 1914 to September 1923, August 1928 to current year.
REVISED RECORDS.--WSP 424: 1915. WSP 894: Drainage area. WSP 1437: 1912-14(M), 1915-18, 1919(M), 1920, 1921(M), 1922-23, 1929, 1933, 1934(M), 1936, 1937(M), 1938, 1946(M). WDR MA-NH-RI-VT-72-1: 1969(M), 1970(P), 1971(M).
GAGE.--Water-stage recorder. Datum of gage is 499.99 ft (152.397 m) National Geodetic Vertical Datum of 1929. Prior to June 16, 1914, nonrecording gage at site 0.9 mi (1.4 km) upstream at different datum. June 16 to July 3, 1914, nonrecording gage at present site and datum.
REMARKS.--Records good except those for winter period and period of shifting control, Apr. 13 to June 14, which are fair. Flow regulated by several small powerplants upstream, by Peacham Pond and, since 1926, by Mollys Falls Reservoir, combined usable capacity, 492,000,000 ft³ (13,900,000 m³), which regulate runoff from 24 mi² (62 km²), and by East Barre and Wrightsville Detention Reservoirs since 1935 (Reservoirs in Winooski River basin). See table below for monthend contents in Peacham Pond and Mollys Falls Reservoir. Several observations of water temperature and specific conductance were made during the year.
AVERAGE DISCHARGE.--59 years (water years 1915-23, 1929-78), 590 ft³/s (16.71 m³/s).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,200 ft³/s (487 m³/s) Apr. 7, 1912, gage height, 17.31 ft (5.276 m), from floodmarks, present datum, from rating curve extended above 6,900 ft³/s (200 m³/s); maximum gage height, 17.55 ft (5.349 m) June 30, 1973; minimum daily discharge, 17 ft³/s (0.48 m³/s) Sept. 3, 1933.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 57,000 ft³/s (1,610 m³/s) Nov. 3, 1927, gage height, 27.1 ft (8.26 m), from rating curve extended above 6,900 ft³/s (200 m³/s).
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,900 ft³/s (110 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1530	*5920	168	10.64	3.243	Apr. 13	2200	4120	117	8.72	2.658
Jan. 9	1400	4400	125	a*13.66	4.164						

a Ice jam.

Minimum daily discharge, 65 ft³/s (1.84 m³/s) Sept. 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	450	790	380	860	265	540	1880	452	330	137	117
2	2110	460	1100	340	780	260	900	1700	393	243	132	108
3	1500	450	940	335	740	250	850	1570	611	203	186	77
4	1290	480	720	330	640	245	800	1460	521	226	217	72
5	1100	650	600	330	560	225	1200	1430	354	184	214	68
6	951	540	560	330	500	200	1180	1410	424	200	126	65
7	860	640	570	340	540	230	1120	1340	354	196	123	85
8	748	640	490	330	570	230	1080	1310	563	189	187	95
9	901	640	470	1800	560	240	1000	1350	733	176	249	88
10	1530	640	520	2400	530	340	950	1730	722	172	257	71
11	1110	740	560	2000	490	360	1350	1520	506	193	203	83
12	919	680	350	1600	440	290	2200	1320	346	173	208	203
13	867	540	370	1300	390	350	2730	1170	306	140	179	155
14	710	490	440	1050	440	640	3070	1050	710	123	152	115
15	1210	480	510	980	430	820	2130	953	665	168	202	98
16	1130	520	600	890	400	580	1870	1020	466	297	147	99
17	3460	574	540	760	400	440	1950	994	346	337	120	109
18	2650	1380	460	550	390	390	2040	980	240	282	169	96
19	1810	1010	410	520	370	370	2300	953	251	201	143	109
20	1400	856	430	500	340	340	2930	836	1790	137	94	105
21	1250	727	420	500	370	430	2750	757	1350	133	84	101
22	1200	685	500	460	360	700	2410	906	1180	248	122	90
23	1130	636	470	420	350	660	2430	775	1040	184	124	86
24	950	634	460	420	340	620	2360	638	782	153	126	75
25	790	720	540	500	300	570	2490	536	560	125	183	91
26	710	721	780	1200	240	520	2290	461	434	109	165	93
27	680	901	550	2100	240	520	2440	401	414	108	111	105
28	610	650	480	1600	270	830	2490	313	391	270	95	95
29	550	630	460	1250	---	740	2440	272	369	198	149	74
30	490	600	455	1150	---	720	2230	279	348	159	186	84
31	440	---	490	1050	---	580	---	457	---	150	102	---
TOTAL	36096	19764	17035	27715	12840	13955	56520	31771	17621	6007	4892	2912
MEAN	1164	659	550	894	459	450	1884	1025	587	194	158	97.1
MAX	3460	1380	1100	2400	860	830	3070	1880	1790	337	257	203
MIN	440	450	350	330	240	200	540	272	240	108	84	65
(†)	407.3	372.8	291.6	279.7	159.0	15.9	281.0	437.3	417.4	425.7	349.0	339.9

CAL YR 1977 TOTAL 249505 MEAN 684 MAX 6910 MIN 83
WTR YR 1978 TOTAL 247128 MEAN 677 MAX 3460 MIN 65

† Monthend contents, in millions of cubic feet, in Peacham Pond and Mollys Falls Reservoir; records furnished by Green Mountain Power Corp.

04287000 DOG RIVER AT NORTHFIELD FALLS, VT

LOCATION.--Lat 44°10'58", long 72°38'27", Washington County, Hydrologic Unit 02010003, on right bank 1 mi (1.6 km) downstream from Northfield Falls and 1.2 mi (1.9 km) downstream from Cox Branch.

DRAINAGE AREA.--76.1 mi² (197.1 km²).

PERIOD OF RECORD.--Discharge: October 1934 to current year. October 1934 monthly discharge only, published in WSP 1307.
Water-quality records: Water year 1957.

REVISED RECORDS.--WSP 1237: 1935-37.

GAGE.--Water-stage recorder. Datum of gage is 603.00 ft (183.794 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records good except those for winter period, which are fair. Infrequent diurnal fluctuation at low flow by powerplant upstream; regulation much greater prior to 1955. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--44 years, 122 ft³/s (3.455 m³/s), 21.77 in/yr (553 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s (300 m³/s) June 30, 1973, gage height, 11.57 ft (3.527 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of computation of flow over dam at gage height 8.49 ft (2.588 m) and slope-area measurements at gage heights 8.96 ft (2.731 m), 11.53 ft (3.514 m), and 11.57 ft (3.527 m); minimum, 4.3 ft³/s (0.12 m³/s) Aug. 31, Sept. 7, 1942.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1100	a*5090	144	7.93	2.417	Apr. 13	1945	1650	46.7	4.67	1.423
Jan. 9	1330	2950	83.5	6.13	1.868						

a From rating curve extended as explained above.

Minimum discharge, 10 ft³/s (0.28 m³/s) Sept. 20-25.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	265	92	191	94	190	59	251	358	72	46	26	14
2	692	88	262	88	180	58	325	291	70	40	23	13
3	251	85	209	83	170	56	238	251	105	37	21	12
4	194	88	176	80	165	55	209	245	82	34	27	13
5	146	98	140	78	155	54	419	272	73	31	22	12
6	118	90	125	75	145	53	358	280	78	30	20	11
7	101	87	115	72	140	52	313	272	67	26	19	15
8	92	96	105	70	135	52	258	269	116	23	18	14
9	460	105	98	1290	125	52	222	321	103	52	20	12
10	431	98	92	500	120	52	225	347	90	35	18	12
11	231	145	88	320	115	53	400	251	73	30	17	12
12	185	118	84	250	105	55	768	203	64	24	26	21
13	156	111	80	210	100	57	955	176	68	22	34	19
14	156	103	100	190	98	64	848	156	90	21	21	14
15	508	98	120	180	90	85	544	156	73	31	18	13
16	287	103	105	165	86	75	465	188	61	46	16	13
17	2050	162	100	155	80	70	477	191	54	70	18	12
18	687	325	97	145	78	68	576	197	60	45	17	12
19	396	203	90	140	75	66	648	182	70	33	15	11
20	302	162	88	130	72	62	832	154	80	28	14	11
21	245	143	89	125	70	77	712	182	74	24	13	10
22	212	135	90	120	68	160	657	159	80	39	13	10
23	185	125	87	115	67	140	657	135	94	32	12	11
24	159	151	84	115	65	120	667	121	82	33	21	10
25	148	143	140	110	64	110	652	109	68	23	38	11
26	135	156	180	350	63	105	657	99	61	21	21	12
27	125	140	160	380	62	200	707	90	55	20	18	12
28	116	125	145	280	60	392	727	83	52	47	16	11
29	107	118	125	240	---	309	667	76	48	32	19	12
30	101	111	110	220	---	248	517	76	55	30	16	11
31	96	---	100	200	---	215	---	85	---	24	14	---
TOTAL	9337	3804	3775	6570	2943	3274	15951	5975	2218	1029	611	376
MEAN	301	127	122	212	105	106	532	193	73.9	33.2	19.7	12.5
MAX	2050	325	262	1290	190	392	955	358	116	70	38	21
MIN	92	85	80	70	60	52	209	76	48	20	12	10
CFSM	3.96	1.67	1.60	2.79	1.38	1.39	6.99	2.54	.97	.44	.26	.16
IN.	4.56	1.86	1.85	3.21	1.44	1.60	7.80	2.92	1.08	.50	.30	.18

CAL YR 1977 TOTAL 49063 MEAN 134 MAX 2530 MIN 13 CFSM 1.76 IN 23.98
WTR YR 1978 TOTAL 55863 MEAN 153 MAX 2050 MIN 10 CFSM 2.01 IN 27.31

04288000 MAD RIVER NEAR MORETOWN, VT

LOCATION.--Lat 44°16'42", long 72°44'37", Washington County, Hydrologic Unit 02010003, on left bank at downstream side of highway bridge, 2.4 mi (3.9 km) downstream from Moretown, and 3.8 mi (6.1 km) upstream from mouth.
DRAINAGE AREA.--139 mi² (360 km²).
PERIOD OF RECORD.--Discharge: July to November 1910, October 1928 to current year. October 1928 monthly discharge only, published in WSP 1307.
Water-quality records: Water years 1954-55, 1957, 1967-74.
REVISED RECORDS.--WSP 744: Drainage area. WSP 854: 1934(M). WSP 1114: 1929, 1930(M), 1936-37.
GAGE.--Water-stage recorder. Concrete control since Oct. 13, 1933. Datum of gage is 543.93 ft (165.790 m) National Geodetic Vertical Datum of 1929 (levels by Vermont Department of Highways). July 6 to Nov. 4, 1910, nonrecording gage at same site at different datum. Nov. 20, 1928, to Sept. 27, 1930, nonrecording gage at same site at present datum.
REMARKS.--Records good except those for winter period, which are fair. Occasional diurnal fluctuation at low flow; much greater regulation prior to 1958. Several observations of water temperature and specific conductance were made during the year.
AVERAGE DISCHARGE.--50 years (water years 1928-78), 256 ft³/s (7.250 m³/s), 25.01 in/yr (635 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft³/s (521 m³/s) Sept. 22, 1938, gage height, 16.34 ft (4.980 m), from floodmarks, from rating curve extended above 2,700 ft³/s (76 m³/s) on basis of computations of flow over dam at gage heights 9.98 ft (3.042 m), 11.51 ft (3.508 m), 16.34 ft (4.980 m), and 19.4 ft (5.91 m); minimum, 1.4 ft³/s (0.040 m³/s) Oct. 1, 1930.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 23,000 ft³/s (650 m³/s) Nov. 3, 1927, gage height, 19.4 ft (5.91 m), from floodmarks, by computation of peak flow over dam.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,400 ft³/s (96 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0215	5030	142	8.32	2.536	Jan. 9	1330	4600	130	b*11.75	3.581
Oct. 17	1330	a*7240	205	9.83	2.996						

a From rating curve extended as explained above.
b Ice jam.

Minimum discharge, 22 ft³/s (0.62 m³/s) Sept. 5, 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	155	580	215	460	140	660	700	144	78	53	30
2	2280	147	726	205	420	135	800	566	141	69	47	28
3	807	144	500	195	400	135	500	510	328	62	42	26
4	756	220	395	185	380	130	445	513	194	60	102	25
5	490	336	300	175	360	130	1220	629	154	55	54	23
6	368	239	280	170	340	125	848	703	194	51	49	23
7	288	216	260	165	325	125	684	785	130	47	54	87
8	244	239	240	160	310	125	574	953	340	44	50	47
9	950	304	220	2300	300	125	462	1410	312	126	72	34
10	905	263	205	1000	280	130	488	1240	281	69	44	30
11	502	390	195	880	255	130	1220	836	185	55	36	30
12	419	293	185	620	250	135	1540	741	137	49	58	96
13	357	263	200	530	240	145	1920	707	147	44	83	76
14	315	248	235	480	230	160	1370	676	454	42	50	48
15	1130	225	270	440	220	200	900	614	309	51	40	40
16	637	293	260	410	210	180	809	641	184	62	35	40
17	3160	438	245	380	200	170	805	635	140	67	46	37
18	1660	927	235	355	190	160	935	629	140	57	40	34
19	883	522	225	340	185	155	1140	579	175	46	33	35
20	630	387	220	325	175	150	1330	501	283	42	30	31
21	496	336	210	310	170	200	1190	709	211	42	29	30
22	419	352	210	295	165	380	1080	536	413	55	27	28
23	362	303	205	285	160	320	1060	399	248	47	25	29
24	315	359	200	270	160	290	1120	338	175	42	65	27
25	283	331	320	260	150	270	1080	289	133	38	111	27
26	253	367	430	500	150	250	1140	248	113	35	52	34
27	234	336	370	1000	145	600	1320	211	101	35	40	29
28	211	329	330	640	145	950	1390	177	93	88	37	28
29	193	286	290	560	---	760	1340	149	85	65	45	31
30	175	289	260	500	---	640	1060	142	96	57	37	28
31	167	---	235	470	---	540	---	170	---	53	32	---
TOTAL	20939	9537	9036	14620	6975	8085	30430	17936	6040	1733	1518	1111
MEAN	675	318	291	472	249	261	1014	579	201	55.9	49.0	37.0
MAX	3160	927	726	2300	460	950	1920	1410	454	126	111	96
MIN	167	144	185	160	145	125	445	142	85	35	25	23
CFSM	4.86	2.29	2.09	3.40	1.79	1.88	7.30	4.17	1.45	.40	.35	.27
IN.	5.60	2.55	2.42	3.91	1.87	2.16	8.14	4.80	1.62	.46	.41	.30

CAL YR 1977 TOTAL 117247 MEAN 321 MAX 4900 MIN 15 CFSM 2.31 IN 31.38
WTR YR 1978 TOTAL 127960 MEAN 351 MAX 3160 MIN 23 CFSM 2.53 IN 34.25

NOTE.--No gage-height record Jan. 9 to Feb. 15.

04288500 WATERBURY RESERVOIR NEAR WATERBURY, VT

LOCATION.--Lat 44°22'54", long 72°46'13", Washington County, Hydrologic Unit 02010003, at dam on Little River 2.7 mi (4.3 km) upstream from mouth and 3.5 mi (5.6 km) north of Waterbury.

DRAINAGE AREA.--109 mi² (282 km²).

PERIOD OF RECORD.--Elevation: September 1937 to current year. September 1937 to September 1938 monthend contents only, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Dec. 10, 1938, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earthfill dam completed by Corps of Engineers during summer of 1937 for flood control and storage of water for power. Usable capacity for storage of water for power, 1,582,700,000 ft³ (44,822,000 m³) between elevations 500.0 ft (152.40 m) and 592.0 ft (180.44 m), sill of taintor gate; for flood control, 1,229,000,000 ft³ (34,822,000 m³) between elevations 592.0 ft (180.44 m) and 617.5 ft (188.21 m), crest of spillway; total usable capacity, 2,812,300,000 ft³ (79,644,000 m³).

Capacity table (elevation, in feet, and contents, in millions of cubic feet)

530.0	180.8	570.0	891.9
540.0	302.7	580.0	1,168.5
550.0	461.7	590.0	1,505.0
560.0	658.8	600.0	1,913.4

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 613.45 ft (186.980 m) May 4, 1940; minimum observed, 501.3 ft (152.80 m) Oct. 16, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 596.00 ft (181.66 m) Oct. 3; minimum, 534.33 ft (162.86 m) Apr. 4.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	593.08	590.24	589.92	588.00	588.69	568.17	535.83	577.63	589.71	590.10	588.09	584.00
2	595.47	589.90	591.02	588.34	588.26	566.89	537.03	576.32	590.06	589.86	587.86	584.00
3	595.58	589.56	590.95	588.04	587.55	565.66	535.85	575.85	590.31	589.74	587.56	584.00
4	594.27	589.71	590.68	587.73	586.73	564.40	534.33	575.26	590.20	589.44	587.46	584.00
5	592.74	590.00	590.48	587.45	586.45	563.14	537.49	575.24	590.20	589.16	587.02	583.90
6	592.02	590.21	590.28	587.18	586.02	561.78	538.41	575.83	590.21	588.97	586.85	584.00
7	591.30	590.21	590.02	587.45	584.54	560.46	538.30	576.94	590.15	588.97	586.95	584.00
8	590.47	590.12	589.70	587.79	584.96	559.16	537.73	578.94	590.52	589.11	587.09	584.00
9	591.24	589.88	589.40	592.07	584.33	557.85	536.47	582.16	591.30	589.29	586.80	584.00
10	591.97	589.96	589.35	592.81	583.67	556.56	535.48	585.01	591.54	589.20	586.89	584.00
11	591.63	590.30	589.20	592.49	583.01	555.16	536.40	586.08	591.28	588.99	586.76	584.00
12	590.68	590.22	588.74	591.92	582.37	553.86	543.17	587.08	590.78	588.80	586.36	584.00
13	590.04	589.80	588.33	591.17	581.68	552.48	547.73	588.05	591.08	589.10	585.92	584.00
14	589.33	589.80	588.00	590.46	580.69	551.08	550.40	589.12	591.81	589.16	585.92	584.00
15	590.13	589.54	587.95	589.66	579.92	549.02	551.80	589.43	591.45	589.19	586.16	584.00
16	589.98	589.22	587.70	589.00	579.00	547.70	551.60	589.73	591.03	589.30	585.55	584.00
17	594.20	589.52	588.18	588.58	578.67	546.29	551.80	590.23	591.32	589.07	585.29	584.20
18	594.98	590.88	588.57	588.30	578.17	545.30	552.80	590.43	591.11	588.96	585.13	584.00
19	593.71	591.82	588.15	587.95	577.81	546.00	554.40	590.38	590.67	588.82	585.14	583.80
20	592.68	591.58	587.80	588.00	577.19	545.00	556.20	590.23	590.87	588.69	585.35	583.57
21	592.11	591.11	587.45	588.20	576.47	543.76	557.80	591.05	591.15	588.23	584.90	583.35
22	591.56	590.78	586.76	588.34	575.14	542.80	558.20	590.84	591.51	588.51	584.80	582.92
23	590.93	590.15	586.65	588.25	574.95	543.06	558.90	590.50	591.46	588.66	584.70	583.01
24	590.68	589.52	587.00	588.12	573.85	541.12	563.50	590.18	591.52	588.76	584.90	583.07
25	590.68	589.38	587.91	587.72	572.72	539.97	564.00	590.10	591.52	588.58	584.80	583.00
26	590.85	589.55	588.60	587.96	571.57	538.87	567.75	589.91	590.98	588.34	584.80	583.07
27	590.79	590.09	588.18	588.60	570.51	537.36	570.08	590.31	590.37	588.08	584.80	583.13
28	590.64	589.83	587.88	589.00	569.35	539.23	572.67	590.38	590.51	587.88	584.90	583.20
29	590.51	589.24	587.40	589.44	---	540.05	574.98	590.20	590.10	587.78	584.50	583.29
30	590.83	588.99	587.31	589.24	---	539.18	576.51	590.44	590.00	587.86	584.30	583.36
31	590.51	---	587.69	588.97	---	537.58	---	590.20	---	587.98	584.20	---
MEAN	591.79	590.04	588.62	588.98	580.15	550.29	550.92	585.94	590.82	588.86	585.86	583.70
MAX	595.58	591.82	591.02	592.81	588.69	568.17	576.51	591.05	591.81	590.10	588.09	584.20
MIN	589.33	588.99	586.65	587.18	569.35	537.36	534.33	575.24	589.71	587.78	584.20	582.92
(†)	1524.8	1469.2	1423.2	1468.5	876.1	271.0	1067.3	1512.7	1505.0	1433.5	1302.7	1275.8
(‡)	-20.3	-21.5	-17.2	+16.9	-244.9	-225.9	+307.2	+166.3	-2.97	-26.7	-48.8	-10.4

CAL YR 1977 MEAN 590.92 MAX 601.00 MIN 586.65 (‡) -5.80
WTR YR 1978 MEAN 581.37 MAX 595.58 MIN 534.33 (‡) -9.62

† Contents, in millions of cubic feet, at end of month.
‡ Change in contents, equivalent in cubic feet per second.

04289000 LITTLE RIVER NEAR WATERBURY, VT

LOCATION.--Lat 44°22'12", long 72°46'11", Washington County, Hydrologic Unit 02010003, on right bank 1 mi (1.6 km) downstream from Waterbury Reservoir, 1.7 mi (2.7 km) upstream from mouth, and 2.5 mi (4.0 km) north of Waterbury.

DRAINAGE AREA.--111 mi² (287 km²).

PERIOD OF RECORD.--July to October 1910 (gage heights only), October 1935 to current year. October, November 1935 monthly discharge only, published in WSP 1307. Prior to October 1962, published as Waterbury River near Waterbury.

REVISED RECORDS.--WSP 824: 1936.

GAGE.--Water-stage recorder. Concrete control since Dec. 8, 1937. Datum of gage is 428.00 ft (130.454 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). July 7 to Oct. 31, 1910, nonrecording gage at site 2 mi (3 km) upstream at different datum.

REMARKS.--Records excellent except those for periods of no gage-height record Dec. 6 to Jan. 4, Apr. 5 to May 9, and Sept. 21-30, which are poor. Flow completely regulated by Waterbury Reservoir (station 04288500). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--43 years, 240 ft³/s (6.797 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,520 ft³/s (185 m³/s) Mar. 18, 1936, gage height, 19.38 ft (5.907 m); minimum daily, 0.6 ft³/s (0.017 m³/s) several times during summers of 1938-39, 1941, and 1944. Maximum discharge since construction of Waterbury Reservoir in 1937, 4,080 ft³/s (116 m³/s) Dec. 9, 1937, gage height, 14.88 ft (4.535 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,860 ft³/s (52.7 m³/s) Oct. 18, gage height, 10.27 ft (3.130 m); minimum daily, 13 ft³/s (0.37 m³/s) July 8, 12, 13, 22, 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	617	118	418	40	317	316	615	610	236	15	150	110
2	742	81	165	200	338	443	620	630	221	14	150	15
3	828	370	295	250	394	436	617	620	18	244	150	15
4	1320	336	258	290	476	435	614	620	17	15	150	40
5	930	322	350	238	266	444	630	620	235	178	15	70
6	653	314	330	237	346	438	530	620	196	178	60	80
7	582	246	320	18	326	442	620	610	277	178	170	75
8	580	379	310	17	393	441	470	600	464	13	120	80
9	591	146	330	390	391	439	600	590	281	15	260	50
10	587	408	210	597	383	442	580	611	114	88	240	15
11	578	130	310	597	361	442	560	607	268	127	270	80
12	580	370	330	597	362	442	600	588	248	13	15	80
13	580	390	330	594	381	446	620	606	342	13	100	80
14	580	260	330	585	391	566	620	606	619	19	260	80
15	595	450	330	583	394	426	620	610	574	26	100	15
16	587	440	330	550	412	407	620	610	388	14	170	20
17	620	450	25	362	243	398	610	579	17	258	290	50
18	887	48	24	332	281	213	610	613	355	104	50	140
19	1210	517	340	322	279	22	620	611	419	34	15	140
20	761	467	300	192	289	364	650	612	447	99	15	125
21	604	594	340	110	394	545	620	620	250	103	74	170
22	582	398	350	114	394	488	620	616	423	13	86	240
23	582	225	320	199	445	526	620	591	344	13	100	20
24	252	246	30	213	445	552	630	388	213	149	130	15
25	123	416	24	262	444	445	660	341	85	151	83	100
26	175	166	100	576	443	443	630	290	392	150	15	50
27	317	23	340	573	421	515	630	17	404	150	15	20
28	48	425	260	157	447	611	630	110	233	150	60	15
29	212	298	330	87	---	611	630	237	147	20	240	15
30	242	342	100	315	---	611	610	164	247	15	150	15
31	335	---	25	324	---	611	---	234	---	150	90	---
TOTAL	17880	9375	7854	9921	10456	13960	18306	15781	8474	2709	3793	2020
MEAN	577	313	253	320	373	450	610	509	282	87.4	122	67.3
MAX	1320	594	418	597	476	611	660	630	619	258	290	240
MIN	48	23	24	17	243	22	470	17	17	13	15	15

CAL YR 1977 TOTAL 115303 MEAN 316 MAX 1860 MIN 13
WTR YR 1978 TOTAL 120529 MEAN 330 MAX 1320 MIN 13

04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT

LOCATION.--Lat 44°28'44", long 73°08'21", Chittenden County, Hydrologic Unit 02010003, on right bank 0.5 mi (0.8 km) downstream from Muddy Brook and 2 mi (3 km) southwest of Essex Junction.
DRAINAGE AREA.--1,044 mi² (2,704 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year.
REVISED RECORDS.--WSP 714: 1930(M). WSP 894: Drainage area. WSP 1307: 1929(M).
GAGE.--Water-stage recorder. Altitude of gage is 185 ft (56 m), from topographic map; prior to Oct. 1, 1964, datum was 1.00 ft (0.305 m) higher.
REMARKS.--Records good except those for winter period and period of no gage-height record Oct. 5 to Jan. 3, which are fair. Flow regulated by powerplants upstream, by Peacham Pond and Mollys Falls Reservoir, combined usable capacity, 492,000,000 ft³ (13,900,000 m³), by Waterbury Reservoir (station 04288500) since 1937, and by East Barre and Wrightsville Detention Reservoirs (Reservoirs in Winooski River basin) since 1935. See table with station 04286000 for monthend contents in Peacham Pond and Mollys Falls Reservoir. Several observations of water temperature and specific conductance were made during the year.
AVERAGE DISCHARGE.--50 years, 1,707 ft³/s (48.34 m³/s).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,300 ft³/s (1,280 m³/s) Mar. 19, 1936, gage height, 24.54 ft (7.480 m), present datum, from rating curve extended above 27,000 ft³/s (760 m³/s) on basis of computations of flow over dam at gage heights 19.72 (6.011 m), 24.54 (7.480 m), and 51.4 ft (15.67 m) and slope-area measurement at gage height 51.4 ft (15.67 m), all at present datum; minimum daily, 24 ft³/s (0.68 m³/s) Sept. 7, 1968.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 113,000 ft³/s (3,200 m³/s) Nov. 4, 1927, gage height, 51.4 ft (15.67 m), present datum, from floodmarks, from rating curve extended above 27,000 ft³/s (760 m³/s) by method explained above.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 12,500 ft³/s (354 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	Unknown	*21600	612	a14.06	4.285	Apr. 14	0645	14100	399	10.21	3.112
Jan. 10	0615	19800	561	13.17	4.014						

a From peak-stage indicator.

Minimum daily discharge, 58 ft³/s (1.64 m³/s) Aug. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4300	1000	3400	1200	1800	1200	3860	5180	1200	784	546	349
2	9000	1400	4200	1150	1900	1200	6370	4310	1020	244	436	293
3	4500	1500	3000	1200	1900	1250	4720	3840	1100	814	571	163
4	6230	1600	2700	1300	2000	1250	3560	3560	1250	436	540	154
5	4000	2300	2200	1300	1800	1100	7200	3600	1080	316	691	252
6	3200	2000	2100	1150	1700	1100	6930	3990	1090	280	225	221
7	2700	2200	2000	1100	1600	1200	5180	3880	1050	349	481	280
8	2300	1900	1800	1000	1700	1200	4290	4270	1550	469	504	527
9	3300	2000	1700	5880	1700	1200	3440	5290	1830	469	389	311
10	6800	1900	1600	16900	1700	1300	3040	6410	1910	546	534	78
11	4000	2600	1400	4000	1600	1300	4310	4700	1370	852	713	307
12	3300	2200	1100	2800	1500	1200	9560	4020	1080	527	558	431
13	2900	1900	1500	2300	1450	1250	8980	3690	1260	311	193	442
14	2700	1800	1900	2200	1400	1500	11700	3480	2530	276	546	521
15	6300	1700	2600	2100	1400	1800	7370	3110	2480	221	527	492
16	4500	2800	2100	1900	1350	1700	5750	3150	1880	225	426	354
17	18000	2500	1600	1850	1400	1400	5690	3160	1120	939	534	117
18	11500	7000	1500	1800	1350	1300	5750	3060	822	706	436	349
19	5000	5200	1700	1700	1250	1100	6880	3090	1250	436	552	354
20	3400	3900	1800	1650	1250	1000	8520	2670	3000	379	58	475
21	2700	2800	1900	1600	1300	1300	8860	3020	2860	358	240	458
22	2600	2300	2000	1550	1350	2900	7440	3180	2760	558	311	330
23	2400	2200	2000	1500	1350	3000	7200	2480	2830	354	268	268
24	2200	2400	1600	1600	1350	2400	6860	1910	2020	179	334	123
25	2000	2300	1900	1700	1300	2000	7300	1760	1410	349	616	285
26	1800	2400	2600	2500	1350	1700	6550	1470	792	410	410	354
27	1700	2100	1700	6600	1250	2100	7370	1200	1180	349	229	225
28	1500	2000	1700	3500	1200	5500	7650	956	1240	609	349	285
29	1500	2000	1750	2200	---	4600	7460	972	777	603	706	302
30	1200	2100	1700	1900	---	4700	6750	956	837	325	311	67
31	1400	---	1500	1900	---	3930	---	1250	---	492	431	---
TOTAL	128930	72000	62250	81030	42200	59680	196540	97614	46578	14165	13665	9167
MEAN	4159	2400	2008	2614	1507	1925	6551	3149	1553	457	441	306
MAX	18000	7000	4200	16900	2000	5500	11700	6410	3000	939	713	527
MIN	1200	1000	1100	1000	1200	1000	3040	956	777	179	58	67

CAL YR 1977 TOTAL 776918 MEAN 2129 MAX 29500 MIN 96
WTR YR 1978 TOTAL 823819 MEAN 2257 MAX 18000 MIN 58

04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1953, June 1976 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L)	C.O.D. TOTAL IN BOTTOM MA-TERIAL (MG/KG)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)
MAY 24...	1100	1990	92	7.5	28.0	18.0	10	5	6.1	15	6100	29

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)
MAY 24...	K3	K10	11	1.6	54	0	44	2.7	9.8	6.1	8	73

DATE	SOLIDS, VOLA-TILE IN BOTTOM MA-TERIAL (MG/KG)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)
MAY 24...	6680	.36	.05	.22	.27	.63	.04	10	10	0	0

K, NON-IDEAL COLONY COUNT.

04292000 LAMOILLE RIVER AT JOHNSON, VT

LOCATION.--Lat 44°37'22", long 72°40'50", Lamoille County, Hydrologic Unit 02010005, on right bank above falls, 0.7 mi (1.1 km) upstream from bridge in Johnson and 0.8 mi (1.3 km) upstream from Gihon River.

DRAINAGE AREA.--310 mi² (803 km²).

PERIOD OF RECORD.--Discharge: July to December 1910, June 1911 to December 1913 (monthly discharge only, January to March 1912, Feburary 1913), September 1928 to current year.
Water-quality records: Water year 1953.

REVISIED RECORDS.--WSP 894: Drainage area. WSP 1114: 1933, 1934(M). WSP 1237: 1912(M), 1930, 1932(M).

GAGE.--Water-stage recorder. Altitude of gage is 495 ft (151 m), from topographic map. Prior to Dec. 31, 1913, nonrecording gage at bridge 0.7 mi (1.1 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Some regulation by powerplant upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--52 years (water years 1912-13, 1929-78), 535 ft³/s (15.15 m³/s), 23.44 in/yr (595 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,400 ft³/s (408 m³/s) July 1, 1973, gage height, 17.33 ft (5.282 m), from rating curve extended above 8,500 ft³/s (240 m³/s) on basis of computation of flow over dam at gage height 16.48 ft (5.023 m); minimum, 11 ft³/s (0.31 m³/s) Sept. 2, 1935; minimum daily, 16 ft³/s (0.45 m³/s) Oct. 26, 1947.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,400 ft³/s (150 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0700	*5470	155	10.66	3.249						

Minimum discharge, 33 ft³/s (0.93 m³/s) Sept. 7; minimum daily, 39 ft³/s (1.10 m³/s) Sept. 7.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	392	480	430	1000	400	686	1610	292	398	236	106
2	4110	420	1020	380	990	390	1250	1230	294	366	231	88
3	2210	368	924	360	900	400	985	1050	297	258	218	73
4	1680	440	660	360	840	390	748	962	291	132	145	73
5	1130	661	580	360	800	380	1180	1120	299	132	227	73
6	846	571	510	350	830	360	1270	1430	305	138	222	66
7	671	662	450	350	770	390	1020	1490	291	145	184	39
8	564	611	420	350	710	400	837	1670	519	166	145	80
9	1110	517	370	800	660	390	625	2270	1410	218	198	78
10	2400	470	340	3000	620	370	560	2730	1060	339	303	78
11	1110	734	360	2300	660	380	754	1820	644	282	317	100
12	882	720	400	1300	600	370	1910	1320	486	218	214	109
13	849	635	440	1050	570	380	2410	1130	445	241	214	121
14	760	722	480	950	540	380	3070	994	1060	214	209	152
15	1480	635	520	880	500	480	1950	824	806	148	187	148
16	1350	502	560	840	520	720	1570	790	572	177	159	125
17	3000	639	530	790	490	990	1610	820	496	254	159	83
18	3390	1860	500	730	470	700	1890	832	524	317	132	152
19	1710	1440	460	690	460	540	2480	711	533	270	100	91
20	1210	963	400	640	440	470	3430	588	2400	209	97	88
21	973	766	420	620	420	400	3100	898	1550	218	94	88
22	870	863	430	600	440	1100	2550	955	1530	245	83	94
23	841	736	440	560	420	900	2690	654	1170	245	80	91
24	727	743	420	520	400	690	2580	453	836	245	100	85
25	667	794	520	480	390	500	2800	421	630	222	109	85
26	601	743	750	550	420	430	2550	415	477	214	118	88
27	549	794	680	1100	400	850	3030	404	366	205	121	88
28	454	640	560	1600	420	1800	3220	391	366	250	115	88
29	376	580	490	1200	---	1130	3140	360	366	241	112	91
30	376	520	400	1050	---	861	2670	341	353	250	109	88
31	376	---	420	1000	---	655	---	295	---	236	109	---
TOTAL	38632	21141	15934	26190	16680	18596	58565	30978	20668	7193	5047	2809
MEAN	1246	705	514	845	596	600	1952	999	689	232	163	93.6
MAX	4110	1860	1020	3000	1000	1800	3430	2730	2400	398	317	152
MIN	376	368	340	350	390	360	560	295	291	132	80	39
CFSM	4.02	2.27	1.66	2.73	1.92	1.94	6.30	3.22	2.22	.75	.53	.30
IN.	4.64	2.54	1.91	3.14	2.00	2.23	7.03	3.72	2.48	.86	.61	.34

CAL YR 1977 TOTAL 228292 MEAN 625 MAX 5590 MIN 28 CFSM 2.02 IN 27.39
WTR YR 1978 TOTAL 262433 MEAN 719 MAX 4110 MIN 39 CFSM 2.32 IN 31.49

04292500 LAMOILLE RIVER AT EAST GEORGIA, VT

LOCATION.--Lat 44°40'45", long 73°04'23", Franklin County, Hydrologic Unit 02010005, on right bank at East Georgia, 0.5 mi (0.8 km) upstream from railroad bridge, and 1 mi (1.6 km) downstream from Beaver Meadow Brook.

DRAINAGE AREA.--686 mi² (1,777 km²).

PERIOD OF RECORD.--Discharge: August 1929 to current year. Prior to October 1937, published as "near Milton." Water-quality records: Water years 1955, 1967-74.

REVISED RECORDS.--WSP 894: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 285 ft (86.9 m), from topographic map. Prior to Dec. 1, 1937, at site 3.5 mi (5.6 km) downstream at different datum.

REMARKS.--Records good except those for winter period and periods of no gage-height record, Jan. 10 to Feb. 15, May 10 to June 12, which are fair. Low flow regulated by powerplants upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--49 years, 1,236 ft³/s (35.00 m³/s), 24.47 in/yr (622 mm/yr), adjusted to present drainage area.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,200 ft³/s (657 m³/s) Mar. 19, 1936, gage height, 12.52 ft (3.816 m), site and datum then in use, by computation of peak flow over dam; maximum gage height, 18.81 ft (5.733 m) Apr. 3, 1959, ice jam; minimum daily discharge, 74 ft³/s (2.10 m³/s) Sept. 26, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,400 ft³/s (290 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	1130	*11100	314	9.28	2.829	Jan. 9	1730	ice jam		*10.59	3.228

Minimum daily discharge, 144 ft³/s (4.08 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2700	845	1800	950	2500	1000	1800	3730	690	777	399	270
2	8400	857	3190	910	2300	1000	3000	2700	680	736	373	200
3	7050	823	2710	880	2200	1000	2000	2270	680	663	400	230
4	5110	1190	1800	850	2100	980	2500	1980	690	594	477	210
5	3480	3050	1400	830	2000	970	3000	2080	710	311	489	190
6	2350	2020	1250	820	1950	960	2500	2760	720	382	416	160
7	1780	2030	1100	800	1900	930	2000	3190	700	305	400	155
8	1480	1690	1000	800	1800	940	1700	3740	2800	330	370	210
9	1550	1540	950	3000	1700	960	1500	5000	4500	469	666	180
10	4450	1270	900	8500	1600	970	1400	6500	3700	496	565	160
11	3050	2170	870	5800	1550	960	2500	4500	2300	573	571	190
12	2110	2170	850	3700	1500	960	5000	3400	1700	443	507	230
13	2000	1630	1000	2900	1400	960	6000	2900	1500	344	396	260
14	1680	1570	1200	2400	1350	1200	7780	2600	3810	386	387	320
15	3240	1480	1400	2100	1250	1700	5210	2100	3070	385	347	290
16	3950	1660	1300	1900	1300	2200	3760	1900	1620	284	329	240
17	5910	1870	1200	1800	1250	1700	3600	1900	1110	417	301	190
18	10300	4300	1100	1700	1200	1400	3810	2000	1170	583	297	300
19	6160	4120	1000	1600	1150	1200	4880	1800	2500	537	313	274
20	3450	2740	950	1500	1100	1000	6340	1500	7090	420	282	179
21	2560	2020	970	1400	1050	1200	7060	2100	5820	400	144	197
22	2180	2000	1000	1300	1000	2000	5750	2300	4460	398	215	206
23	2240	1900	1000	1200	1050	2800	5370	2100	3860	435	209	237
24	1820	1710	1000	1150	1000	1700	5110	1300	2370	478	223	231
25	1590	1750	1500	1100	1000	1200	5360	1050	1680	506	300	215
26	1440	1840	2000	1400	1000	1100	5000	980	1230	392	295	211
27	1310	2000	1500	2200	1000	2000	5700	970	1030	363	290	204
28	1180	1400	1300	3400	1050	3500	6050	950	1130	358	280	200
29	997	1300	1200	3000	---	2000	6060	860	1030	385	300	203
30	920	1200	1100	2800	---	1700	5550	780	825	468	230	212
31	870	---	1000	2500	---	1500	---	720	---	459	300	---
TOTAL	97307	56145	40540	65190	41250	43690	127290	72660	65175	14077	11071	6554
MEAN	3139	1872	1308	2103	1473	1409	4243	2344	2173	454	357	218
MAX	10300	4300	3190	8500	2500	3500	7780	6500	7090	777	666	320
MIN	870	823	850	800	1000	930	1400	720	680	284	144	155
CFSM	4.58	2.73	1.91	3.07	2.15	2.05	6.19	3.42	3.17	.66	.52	.32
IN.	5.28	3.04	2.20	3.54	2.24	2.37	6.90	3.94	3.53	.76	.60	.36

CAL YR 1977 TOTAL 542970 MEAN 1488 MAX 13600 MIN 118 CFSM 2.17 IN 29.44
WTR YR 1978 TOTAL 640949 MEAN 1756 MAX 10300 MIN 144 CFSM 2.56 IN 34.76

04293000 MISSISQUOI RIVER NEAR NORTH TROY, VT

LOCATION.--Lat 44°58'22", long 72°23'15", Orleans County, Hydrologic Unit 02010007, on right bank 200 ft (60 m) upstream from Big Falls, 1.5 mi (2.4 km) downstream from Jay Branch, and 2.2 mi (3.5 km) upstream from North Troy.

DRAINAGE AREA.--131 mi² (339 km²).

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

REVISED RECORDS.--WSP 924: 1940. WSP 1114: 1933(M), 1936-39.

GAGE.--Water-stage recorder. Altitude of gage is 580 ft (177 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Occasional regulation at low flow caused by small powerplant upstream; greater regulation prior to 1967. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--47 years, 272 ft³/s (7.703 m³/s), 28.20 in/yr (716 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,980 ft³/s (226 m³/s) May 3, 1940, gage height, 12.87 ft (3.923 m), from rating curve extended above 5,500 ft³/s (160 m³/s) on basis of computation of flow over dam at gage height 11.70 ft (3.566 m); minimum, 9.4 ft³/s (0.27 m³/s) Aug. 28, 1949; minimum daily, 11 ft³/s (0.31 m³/s) Aug. 28, 1949, Aug. 30, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,300 ft³/s (93 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0945	3740	106	8.86	2.701	May 9	2400	3820	108	8.85	2.697
Oct. 17	2315	3340	94.6	8.29	2.527	June 20	1000	*5110	145	10.26	3.127

Minimum discharge, 22 ft³/s (0.62 m³/s) Sept. 2; minimum daily, 23 ft³/s (0.65 m³/s) Sept. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1340	132	285	120	280	58	275	738	144	170	51	49
2	3130	127	708	115	260	57	620	544	155	136	48	23
3	1110	121	451	110	240	56	430	457	485	117	53	35
4	814	493	275	100	230	55	310	429	186	105	148	40
5	489	682	230	98	220	54	685	625	150	91	77	55
6	323	359	210	96	200	54	720	968	256	88	55	39
7	240	435	200	94	180	54	490	1240	149	71	49	75
8	195	295	190	94	160	65	380	1540	848	74	79	59
9	475	256	185	750	140	76	295	2650	807	110	137	42
10	940	228	175	1350	130	86	280	2900	484	99	76	39
11	393	658	170	750	120	90	480	1300	246	75	59	39
12	311	482	165	480	110	91	1450	1060	162	72	50	163
13	297	318	160	380	100	92	1750	1020	180	60	51	98
14	223	270	190	350	95	93	2150	933	1090	56	46	61
15	735	232	410	300	92	110	1070	760	764	53	42	59
16	607	398	380	260	85	130	786	595	291	64	38	74
17	2020	736	280	240	82	110	804	698	183	152	39	60
18	1900	1250	230	230	84	100	1060	505	459	89	43	48
19	737	654	200	220	86	96	1360	435	2090	56	38	44
20	495	403	175	210	88	92	1680	369	3940	67	36	40
21	383	341	170	200	85	96	1480	925	1620	48	38	42
22	365	473	180	195	95	290	1230	574	1070	64	35	68
23	400	318	175	190	90	520	1310	337	643	76	25	53
24	285	326	170	185	85	280	1340	259	377	81	59	44
25	245	332	230	180	75	170	1500	213	269	72	94	41
26	220	290	390	300	68	150	1450	178	198	52	67	42
27	199	220	250	600	64	170	1790	151	174	48	37	41
28	179	195	170	500	60	600	1890	128	779	52	58	60
29	162	185	155	400	---	530	1870	115	293	52	69	61
30	148	180	140	350	---	350	1550	103	298	60	81	41
31	139	---	130	300	---	270	---	112	---	60	42	---
TOTAL	19499	11389	7429	9747	3604	5045	32485	22861	18790	2470	1820	1635
MEAN	629	380	240	314	129	163	1083	737	626	79.7	58.7	54.5
MAX	3130	1250	708	1350	280	600	2150	2900	3940	170	148	163
MIN	139	121	130	94	60	54	275	103	144	48	25	23
CFSM	4.80	2.90	1.83	2.40	.99	1.24	8.27	5.63	4.78	.61	.45	.42
IN.	5.54	3.23	2.11	2.77	1.02	1.43	9.22	6.49	5.34	.70	.52	.46

CAL YR 1977 TOTAL 113176 MEAN 310 MAX 3820 MIN 25 CFSM 2.37 IN 32.14
WTR YR 1978 TOTAL 136774 MEAN 375 MAX 3940 MIN 23 CFSM 2.86 IN 38.84

04293500 MISSISQUOI RIVER NEAR EAST BERKSHIRE, VT
(Formerly published as Missisquoi River near Richford)

LOCATION.--Lat 44°57'30", long 72°41'55", Franklin County, Hydrologic Unit 02010007, on left bank 1.7 mi (2.7 km) north of intersection of State Highways 105 and 118 in East Berkshire, 1.7 mi (2.7 km) upstream from Trout River, 3 mi (5 km) south of Richford, and 3.8 mi (6.1 km) downstream from North Branch.
DRAINAGE AREA.--479 mi² (1,241 km²).
PERIOD OF RECORD.--Discharge: July 1911 to September 1923, October 1928 to current year. Monthly discharge only for some periods, published in WSP 1307. Prior to October 1977, published as "near Richford."
Water-quality records: Water years 1954, 1967-74.
REVISED RECORDS.--WSP 784: Drainage area. WSP 1237: 1913-14(M), 1922(M), 1923, 1929-30. WSP 1307: 1916(M). WSP 1437: 1912.
GAGE.--Water-stage recorder. Altitude of gage is 410 ft (125 m), from topographic map. Prior to Aug. 1, 1915, nonrecording gage at site 0.2 mi (0.3 km) downstream at datum 4.35 ft (1.326 m) lower. Aug. 1, 1915, to Sept. 30, 1923, water-stage recorder at present site and datum. Oct. 1, 1928, to Sept. 30, 1929, nonrecording gage at former site at datum 4.6 ft (1.40 m) lower.
REMARKS.--Records good except those for winter period, which are fair. Diurnal fluctuation at low flow prior to 1934. Several observations of water temperature and specific conductance were made during the year.
AVERAGE DISCHARGE.--62 years, 928 ft³/s (26.28 m³/s), 26.31 in/yr (668 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,200 ft³/s (487 m³/s) May 4, 1940, gage height, 15.15 ft (4.618 m), from rating curve extended above 9,300 ft³/s (260 m³/s) on basis of computation of peak flow over dam at gage height 14.70 ft (4.481 m), slope-area measurement at gage height 12.90 ft (3.932 m), and study of discharge per foot of width at measuring section; maximum gage height, 18.92 ft (5.767 m) Mar. 15, 1946, ice jam; minimum discharge observed, 8 ft³/s (0.23 m³/s) July 14, 1911.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 45,000 ft³/s (1,270 m³/s) during flood of November 1927, gage height, 23.1 ft (7.04 m), from floodmarks, from rating curve extended above 9,300 ft³/s (260 m³/s) as explained above.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,600 ft³/s (220 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 2	0230	7910	224	10.28	3.133	Apr. 13	1330	ice jam		*14.11	4.301
Oct. 17	1430	7790	221	10.20	3.109	June 21	0600	*11300	320	12.41	3.783

Minimum discharge, 77 ft³/s (2.18 m³/s) Aug. 23, 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3970	505	1350	465	1050	210	1500	3460	308	1340	164	111
2	7010	425	2140	435	980	210	2300	2060	430	860	146	110
3	6390	405	1870	410	920	220	1500	1610	1420	679	152	89
4	4250	1210	920	390	840	220	1200	1450	875	525	525	94
5	2700	2000	550	390	800	220	2500	1470	496	405	508	99
6	1790	1410	700	375	720	210	2600	1910	616	348	322	97
7	1300	1410	640	365	650	200	1600	2610	538	297	236	186
8	1030	1240	610	390	600	250	1200	3070	1300	258	200	205
9	1240	1020	600	2000	550	285	1080	4120	1580	294	297	146
10	2650	905	580	4700	500	310	1020	5170	1380	336	274	118
11	2040	1670	570	4900	450	320	2500	4760	898	315	188	110
12	1470	1950	565	1700	420	325	5400	3130	592	274	160	213
13	1300	1410	560	1400	380	330	7000	2290	744	221	146	301
14	1070	1230	700	1200	350	335	5600	1940	2360	193	134	198
15	2050	1060	1500	1100	325	400	5200	1600	2470	198	121	158
16	2520	1400	1300	1000	310	450	4280	1380	1340	184	110	172
17	5070	2230	940	950	300	400	3740	1450	816	191	113	172
18	6270	3250	840	900	330	370	4430	1380	1070	267	108	142
19	4380	2730	740	870	340	300	4900	1250	4600	191	100	120
20	2300	1580	650	820	325	340	6650	1060	8630	158	95	108
21	1500	1420	620	800	340	350	6500	1650	9870	164	89	103
22	1360	1650	600	760	360	700	5400	1910	5930	198	86	110
23	1360	1430	580	740	330	1600	4750	1260	3430	208	79	128
24	1160	1240	560	720	300	1000	4550	944	1690	193	92	120
25	987	1230	800	700	275	600	4580	746	1290	204	150	105
26	875	1000	1300	1000	270	560	4630	610	987	188	158	99
27	773	840	800	2000	265	630	4920	496	787	186	127	94
28	685	760	620	1800	235	2000	5230	405	3920	233	99	99
29	616	740	570	1500	---	2100	5200	348	1980	208	130	121
30	544	700	530	1300	---	1500	4680	304	1530	200	156	123
31	496	---	500	1200	---	1000	---	311	---	181	148	---
TOTAL	71156	40050	25805	37280	13515	17945	116640	56154	63877	9697	5413	4051
MEAN	2295	1335	832	1203	483	579	3888	1811	2129	313	175	135
MAX	7010	3250	2140	4900	1050	2100	7000	5170	9870	1340	525	301
MIN	496	405	500	365	235	200	1020	304	308	158	79	89
CFSM	4.79	2.79	1.74	2.51	1.01	1.21	8.12	3.78	4.45	.65	.37	.28
IN.	5.53	3.11	2.00	2.90	1.05	1.39	9.06	4.36	4.96	.75	.42	.31

CAL YR 1977 TOTAL 372523 MEAN 1021 MAX 9050 MIN 73 CFSM 2.13 IN 28.93
WTR YR 1978 TOTAL 461583 MEAN 1265 MAX 9870 MIN 79 CFSM 2.64 IN 35.85

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT

LOCATION.--Lat 44°28'52", long 73°13'27", Chittenden County, Hydrologic Unit 02010003, 50 ft (15 m) south of Gulf Oil Co. dock at Burlington, 0.1 mi (0.2 km) north of Burlington Water Department pumping station, and 0.5 mi (0.8 km) north of railroad station.

PERIOD OF RECORD.--Gage heights: May 1907 to current year.
Water-quality records: Water year 1971.

REVISED RECORDS.--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

GAGE.--Water-stage recorder. Datum of gage is 92.86 ft (28.304 m) National Geodetic Vertical Datum of 1929. Prior to July 20, 1937, nonrecording gage at site 0.7 mi (1.1 km) south, and July 20, 1937, to Sept. 7, 1939, nonrecording gage at site 0.1 mi (0.2 km) south, both at present datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.80 ft (2.682 m) Apr. 4, 1976; minimum observed, -0.25 ft (-0.076 m) Dec. 4, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.78 ft (2.371 m) Apr. 29, 30, affected by seiche; minimum, 1.16 ft (0.354 m) Sept. 30.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.22	5.69	5.09	4.59	5.30	3.92	4.74	7.70	5.45	4.33	2.64	1.94
2	3.56	5.59	5.16	4.55	5.27	3.86	4.96	7.64	5.34	4.28	2.61	1.89
3	3.92	5.52	5.25	4.49	5.23	3.81	5.16	7.57	5.26	4.21	2.59	1.84
4	4.21	5.40	5.28	4.42	5.20	3.77	5.26	7.47	5.17	4.13	2.62	1.82
5	4.33	5.30	5.27	4.37	5.15	3.71	5.43	7.38	5.06	4.04	2.59	1.82
6	4.39	5.35	5.35	4.33	5.07	3.66	5.66	7.26	4.99	3.97	2.56	1.78
7	4.41	5.35	5.30	4.27	5.02	3.62	5.83	7.19	4.88	3.89	2.54	1.73
8	4.50	5.37	5.21	4.14	5.02	3.58	5.94	7.10	4.87	3.83	2.53	1.73
9	4.54	5.31	5.11	4.35	4.98	3.53	6.01	7.03	4.84	3.78	2.49	1.70
10	4.53	5.34	5.09	4.69	4.93	3.50	6.02	7.08	4.80	3.72	2.48	1.70
11	4.68	5.45	5.05	4.87	4.89	3.42	6.07	7.11	4.73	3.65	2.46	1.65
12	4.68	5.44	4.98	4.98	4.83	3.38	6.28	7.07	4.65	3.59	2.42	1.61
13	4.62	5.33	4.95	5.03	4.76	3.33	6.53	7.01	4.63	3.53	2.39	1.62
14	4.62	5.38	4.92	4.99	4.71	3.27	6.82	6.98	4.61	3.44	2.39	1.76
15	4.69	5.48	4.99	5.11	4.67	3.29	7.06	6.90	4.58	3.37	2.37	1.70
16	4.80	5.42	5.02	5.11	4.62	3.31	7.16	6.86	4.57	3.32	2.33	1.61
17	4.83	5.31	5.04	5.09	4.56	3.31	7.20	6.83	4.46	3.31	2.30	1.57
18	5.66	5.35	5.03	5.10	4.51	3.28	7.23	6.74	4.35	3.28	2.29	1.54
19	5.99	5.33	5.01	5.14	4.45	3.24	7.27	6.65	4.40	3.22	2.27	1.55
20	6.06	5.39	4.97	5.06	4.39	3.24	7.38	6.58	4.47	3.15	2.22	1.52
21	6.22	5.40	4.96	5.13	4.34	3.22	7.51	6.52	4.58	3.12	2.20	1.50
22	6.18	5.27	4.95	5.14	4.28	3.27	7.60	6.46	4.69	3.10	2.17	1.51
23	6.16	5.27	4.89	5.09	4.22	3.36	7.65	6.40	4.73	3.06	2.12	1.49
24	6.20	5.18	4.85	5.08	4.17	3.43	7.67	6.29	4.73	3.00	2.12	1.46
25	6.15	5.20	4.82	4.99	4.12	3.48	7.69	6.18	4.69	2.96	2.11	1.44
26	6.15	5.23	4.85	5.02	4.07	3.53	7.70	6.09	4.61	2.86	2.05	1.42
27	5.99	5.21	4.82	5.12	4.01	3.65	7.71	5.96	4.52	2.77	2.02	1.31
28	5.90	5.22	4.80	5.18	3.97	3.87	7.74	5.84	4.49	2.78	1.98	1.31
29	5.83	5.18	4.74	5.26	---	4.17	7.76	5.73	4.45	2.77	1.96	1.31
30	5.76	5.12	4.69	5.29	---	4.41	7.74	5.61	4.40	2.75	1.97	1.24
31	5.73	---	4.65	5.30	---	4.58	---	5.51	---	2.71	1.97	---
MEAN	5.11	5.35	5.00	4.88	4.67	3.58	6.69	6.73	4.73	3.42	2.31	1.60
MAX	6.22	5.69	5.35	5.30	5.30	4.58	7.76	7.70	5.45	4.33	2.64	1.94
MIN	3.22	5.12	4.65	4.14	3.97	3.22	4.74	5.51	4.35	2.71	1.96	1.24

CAL YR 1977 MEAN 3.92 MAX 7.16 MIN 1.81
WTR YR 1978 MEAN 4.50 MAX 7.76 MIN 1.24

NOTE.--No gage-height record Oct. 8 to Nov. 21, Jan. 10 to Feb. 14.

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, Hydrologic Unit 02010006, on left bank at outlet of Lake Champlain in Rouses Point, and 1.0 mi (1.6 km) south of Fort Montgomery ruins. Water-quality sampling site at stage station.

DRAINAGE AREA.--8,277 mi^2 (21,437 km^2).

WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1863 to December 1870 (maximum and minimum monthly gage heights at St. Johns, Quebec, published in WSP 97) and March 1871 to current year (daily gage heights prior to October 1970, elevations thereafter: those for 1871-1907 published in WSP 894). Gage heights prior to Oct. 1, 1925, published as "Richelieu River at Fort Montgomery, Rouses Point." Discharge records for January 1875 to September 1916 at "Chambly, Quebec," published in WSP 65, 82, 97, 129, 170, 206, 424, and 1307 have been found to be unreliable and should not be used. Daily discharge record for "Richelieu River at Fryers Rapids, Quebec," published in Water Survey of Canada annual reports.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. March 1871 to May 1923, nonrecording gage located in Fort Montgomery and May 1923 to October 1938, nonrecording gage at present site. Prior to October 1970, at datum 93.00 ft (28.346 m) higher.

REMARKS.--Area of lake surface about 490 mi^2 (1,269 km^2). Total volume below 92.5 ft (28.19 m) elevation, reported by Lake Champlain Studies Center, 902.2 bil ft^3 (25,600 hm^3).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.80 ft (31.029 m) Mar. 30, 1903; minimum observed, 92.17 ft (28.093 m) Oct. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since at least 1827, 102.1 ft (31.12 m) May 4, 1869, from marks at railroad bridge near present gage, according to data published on p. 428 of the Report of the Board of Engineers on Deep Waterways, 1900: U.S. 56th Cong., 2d sess. H. Doc. 149.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 100.61 ft (30.67 m) Apr. 29; minimum, 93.96 ft (28.64 m) Sept. 28.

ELEVATION, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96.04	98.47	98.10	97.39	98.12	96.72	97.63	100.49	98.27	97.10	95.68	94.75
2	96.38	98.41	98.05	97.37	98.09	96.67	97.76	100.42	98.28	97.07	95.59	94.81
3	96.74	98.34	98.10	97.33	98.05	96.62	97.98	100.35	98.11	97.03	95.57	94.77
4	96.97	98.22	98.09	97.33	98.02	96.58	98.13	100.28	98.00	96.98	95.48	94.65
5	97.20	98.12	98.04	97.19	97.97	96.53	98.26	100.20	97.99	96.93	95.51	94.58
6	97.23	98.17	97.99	97.12	97.89	96.48	98.48	100.11	97.87	96.87	95.47	94.71
7	97.20	98.17	98.02	97.12	97.84	96.43	98.67	100.01	97.88	96.80	95.41	94.53
8	97.32	98.19	98.02	97.22	97.84	96.38	98.76	100.01	97.75	96.74	95.39	94.56
9	97.36	98.13	98.18	97.17	97.80	96.34	98.82	100.02	97.65	96.66	95.45	94.41
10	97.35	98.16	97.83	97.51	97.75	96.27	98.85	99.94	97.63	96.59	95.33	94.54
11	97.57	98.27	97.85	97.69	97.71	96.24	98.97	99.94	97.74	96.46	95.32	94.61
12	97.50	98.26	97.82	97.80	97.65	96.19	99.12	99.94	97.64	96.40	95.39	94.43
13	97.44	98.15	97.76	97.85	97.58	96.16	99.41	99.91	97.50	96.41	95.33	94.44
14	97.44	98.20	97.82	97.81	97.53	96.20	99.67	99.82	97.43	96.34	95.27	94.58
15	97.51	98.30	97.78	97.93	97.49	96.12	99.87	99.71	97.39	96.30	95.26	94.83
16	97.62	98.24	97.83	97.93	97.43	96.12	99.98	99.65	97.40	96.25	95.30	94.43
17	97.65	98.13	97.84	97.91	97.37	96.13	100.03	99.64	97.58	96.14	95.26	94.39
18	98.48	98.17	97.83	97.92	97.31	96.14	100.05	99.59	97.44	96.11	95.14	94.36
19	98.81	98.15	97.81	97.96	97.26	96.13	100.10	99.53	97.26	96.10	95.18	94.34
20	98.88	98.21	97.82	97.88	97.20	96.09	100.18	99.45	97.37	96.10	95.07	94.39
21	99.04	98.52	97.80	97.95	97.15	96.09	100.32	99.31	97.43	96.00	95.00	94.39
22	99.00	98.06	97.81	97.96	97.10	96.11	100.38	99.28	97.54	95.94	95.01	94.33
23	98.98	98.12	97.85	97.91	97.04	96.21	100.43	99.23	97.60	95.92	94.97	94.33
24	99.02	98.19	97.75	97.90	96.99	96.25	100.47	99.16	97.55	95.84	94.92	94.37
25	98.97	97.99	97.71	97.81	96.93	96.32	100.49	99.04	97.56	95.87	94.96	94.24
26	98.97	98.03	97.69	97.84	96.88	96.37	100.51	98.93	97.57	95.95	94.94	94.29
27	98.81	98.03	97.73	97.94	96.82	96.49	100.49	98.84	97.48	95.96	94.87	94.51
28	98.72	98.02	97.64	98.00	96.76	96.80	100.51	98.72	97.33	95.69	95.04	94.20
29	98.65	98.00	97.62	98.08	---	97.02	100.53	98.60	97.31	95.68	94.89	94.19
30	98.58	97.99	97.55	98.11	---	97.25	100.50	98.48	97.17	95.55	94.83	94.40
31	98.55	---	97.44	98.12	---	97.43	---	98.40	---	95.63	94.77	---
MEAN	97.93	98.18	97.84	97.71	97.48	96.42	99.51	99.58	97.62	96.30	95.21	94.48
MAX	99.04	98.52	98.18	98.12	98.12	97.43	100.53	100.49	98.28	97.10	95.68	94.83
MIN	96.04	97.99	97.44	97.12	96.76	96.09	97.63	98.40	97.17	95.55	94.77	94.19

CAL YR 1977 MEAN 96.77 MAX 100.13 MIN 94.65
WTR YR 1978 MEAN 97.35 MAX 100.53 MIN 94.19

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-67, 1969-72, 1974 to current year.
CHEMICAL DATA: 1966-67 (a), 1969 (b), 1970 (c), 1971-72 (b), 1974-78 (c).
MINOR ELEMENTS DATA: 1974-78 (b).
PESTICIDE DATA: 1976-77 (b), 1978 (a).
ORGANIC DATA: TOC--1974 (a), 1975-77 (b), 1978 (a).
PCB--1978 (a).
NUTRIENT DATA: 1970 (c), 1971-72 (b), 1974 (b), 1975-78 (c).
BIOLOGICAL DATA:
Coliform bacteria--1974 (a), 1975-78 (c).
Phytoplankton--1974 (a), 1975-78 (c).
Periphyton--1975 (c), 1976-78 (b).
SEDIMENT DATA: 1975-78 (c).

COOPERATION.--Pesticide samples were collected by the U.S. Geological Survey and were analyzed by the Environmental Protection Agency.

WATER QUALITY DATA, WATER YEAR, OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT											
11...	1100	160	7.2	11.0	1	--	9.8	90	22	K9	65
NOV											
01...	1045	170	7.1	10.0	1	--	10.2	91	K3	K3	57
APR											
18...	1130	150	7.4	5.0	2	--	8.0	63	<1	100	53
MAY											
15...	1200	150	7.7	10.0	2	--	10.0	89	K1	K3	52
JUN											
12...	1000	140	7.5	19.0	--	2.0	7.5	82	K12	K1	49
JUL											
11...	1230	135	7.7	21.0	--	1.0	8.3	93	K18	39	53
AUG											
08...	1100	136	7.5	25.0	--	1.0	8.3	98	K2	K2	53
SEP											
05...	1145	140	7.5	20.0	--	1.0	8.5	93	K8	K1	52

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT											
11...	24	19	4.2	5.0	1.5	50	0	41	13	7.0	.0
NOV											
01...	10	16	4.1	4.9	1.4	57	0	47	14	6.9	.0
APR											
18...	13	15	3.7	4.6	1.4	49	0	40	13	6.7	.0
MAY											
15...	13	15	3.5	4.7	1.2	47	0	39	13	6.6	.0
JUN											
12...	--	14	3.4	4.6	1.3	--	--	33	11	6.8	.0
JUL											
11...	13	15	3.7	4.8	1.3	--	--	40	11	6.0	.0
AUG											
08...	14	15	3.7	4.6	1.2	--	--	39	12	7.0	.0
SEP											
05...	12	15	3.6	5.0	1.2	--	--	40	13	6.6	.0

K Results based on colony count outside the acceptable range (non-ideal colony count).

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR, OCTOBER 1977 TO SEPTEMBER 1978

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT											
11...	1.3	87	76	.20	--	--	.26	--	.46	.00	--
NOV											
01...	1.0	70	76	.17	--	--	.46	--	.63	.03	--
APR											
18...	2.0	91	71	.26	.04	.21	.25	.23	.51	.01	.01
MAY											
15...	1.4	80	69	.19	.01	.31	.32	.26	.51	.02	.00
JUN											
12...	1.2	74	--	.11	.02	.55	.57	.30	.68	.02	.00
JUL											
11...	.1	88	66	2.0	.41	.00	.24	.28	2.2	.01	.00
AUG											
08...	.8	88	68	.00	.01	.31	.32	.04	.32	.02	.00
SEP											
05...	1.2	88	70	.00	.01	.35	.36	.22	.36	.01	.01

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT , 1977									
11...	0	0	--	--	0	0	<10	1	5
APR , 1978									
18...	1	1	0	0	0	0	<10	1	0
JUL									
11...	0	0	0	--	0	0	10	0	0
SEP									
05...	1	0	0	0	1	0	100	0	5

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT , 1977									
11...	0	5	3	110	80	17	0	10	0
APR , 1978									
18...	2	2	2	90	20	7	0	0	0
JUL									
11...	0	2	0	100	0	3	0	10	10
SEP									
05...	1	5	2	580	30	10	2	20	0

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT , 1977								
11...	<.5	<.5	0	0	--	--	20	10
APR , 1978								
18...	<.5	<.5	0	0	1	1	10	0
JUL								
11...	.5	.5	0	0	0	0	10	10
SEP								
05...	<.5	<.5	0	0	0	0	10	10

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR, OCTOBER 1977 TO SEPTEMBER 1978

DATE	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	PCB, TOTAL (UG/L)	AROCLOR TOTAL 1254 PCB SERIES (UG/L)	AROCLOR TOT. IN BOT MAT 1254 PCB SERIES (UG/KG)	ATRA-ZINE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL (UG/L)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV 01...	7.0	--	ND	--	4	ND	ND	ND	ND	ND	ND	ND
APR 18...	--	1.5	--	.0	7	--	ND	ND	ND	ND	ND	ND

DATE	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	P,P' DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL (UG/L)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN TOTAL (UG/L)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL (UG/L)
NOV 01...	ND	1.6	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR 18...	ND	--	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL (UG/L)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)
NOV 01...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR 18...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	METHYL TRI-THION, TOTAL (UG/L)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA-THION, TOTAL (UG/L)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	SIMA-ZINE IN BOTTOM MATERI-AL (UG/KG DRY SOLIDS)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4,5-T TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	SILVEX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV 01...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR 18...	ND	ND	ND	ND	--	ND	ND	ND	ND	--	--	--

ND Material specifically analyzed for, but not detected.

SUSPENDED-SEDIMENT MEASUREMENTS, WATER YEAR, OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	SEDIMENT, SUSPENDED (MG/L)	DATE	TIME	SEDIMENT, SUSPENDED (MG/L)
OCT 11...	1100	1	JUN 12...	1000	10
NOV 01...	1045	1	JUL 11...	1230	18
APR 18...	1130	2	AUG 08...	1100	40
MAY 15...	1200	4	SEP 05...	1145	10

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PHYTOPLANKTON

DATE	OCT 11,77	NOV 1,77	APR 18,78	MAY 15,78	JUN 12,78
TIME	1100	1045	1130	1200	1000
TOTAL CELLS/ML	570	200	450	1100	160
DIVERSITY: DIVISION	1.7	0.9	0.4	1.2	0.0
.CLASS	1.9	0.9	0.4	1.2	0.0
..ORDER	2.6	1.6	1.3	1.3	0.6
...FAMILY	2.8	1.6	1.3	1.4	0.6
....GENUS	3.2	1.6	1.3	1.7	0.6

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	5	1	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	67#	33	--	-	--	-	--	-
....CHLORELLA	32	6	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	38	3	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	48	8	--	-	--	-	38	3	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	5	1	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	70	12	--	-	--	-	110	10	--	-
....MELOSIRA	11	2	--	-	230#	52	230#	21	130#	86
....SKELETONEMA	22	4	--	-	--	-	--	-	--	-
....STEPHANODISCUS	--	-	67#	33	--	-	--	-	--	-
....THALASSIOSIRA	5	1	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....COCCONEIS	--	-	67#	33	--	-	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	43	8	--	-	190#	42	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	19	2	--	-
....SYNEDRA	5	1	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	--	-	--	-	--	-	--	-	22	14
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...CHROMULINACEAE										
....CHRYSOCOCCUS	5	1	--	-	--	-	--	-	--	-
...MALLOMONADACEAE										
....MALLOMONAS	11	2	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROCCOCCALES										
...CHROCCOCCACEAE										
....ANACYSTIS	16	3	--	-	--	-	660#	60	--	-
....COCCOCHLORIS	59	10	--	-	--	-	--	-	--	-
..HORMOGONALES										
...OSCILLATORIACEAE										
....SCHIZOTHRIX	190#	34	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.CRYPTOPHYCEAE										
..CRYPTOMONIDALES										
...CRYPTOCHRYSIDACEAE										
....RHODOMONAS	38	7	--	-	--	-	--	-	--	-
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	14	3	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
.DINOPHYCEAE										
..PERIDINIALES										
...PERIDINIACEAE										
....PERIDINIUM	--	-	--	-	14	3	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIPHYTON

Dates of exposure	Length of exposure (days)	Biomass (g/m^2)		Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Sampling method
		Dry weight	Ash weight			
Aug. 9 to Sept. 6	28	1.73	0.944	0.052	0.469	Polyethylene strip
Sept. 6 to Oct. 11	35	1.10	.630	.147	.008	Polyethylene strip
June 12 to July 11	29	.079	.000	.900	.440	Polyethylene strip
July 11 to Aug. 8	28	.866	.315	1.95	.360	Polyethylene strip
Aug. 8 to Sept. 5	28	3.62	2.13	3.60	.810	Polyethylene strip
Sept. 5 to Oct. 2	27	8.66	6.30	8.82	1.06	Polyethylene strip

04295500 LAKE MEMPHREMAGOG AT NEWPORT, VT

LOCATION.--Lat 44°56'15", long 72°12'21", Orleans County, Hydrologic Unit 01110000, on west side of bridge on U.S. Highway 5 at Newport.

PERIOD OF RECORD.--Gage heights: May 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 673.00 ft (205.130 m) National Geodetic Vertical Datum of 1929. Prior to July 21, 1934, nonrecording gage on highway bridge 0.1 mi (0.2 km) southeast at same datum. July 21, 1934, to Aug. 22, 1961, nonrecording gage on east side, and Aug. 23, 1961, to Oct. 18, 1966, on west side of bridge at present site and datum.

REMARKS.--Elevation of lake regulated by powerplant and gates at Magog, Quebec.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 12.92 ft (3.938 m) Apr. 20, 1933; minimum recorded, 6.48 ft (1.975 m) Nov. 2, 1968 (affected by seiche), but may have been lower during period of use of nonrecording gage.

EXTREMES FOR CURRENT YEAR.--Maximum gage height not determined; maximum daily, 10.58 ft (3.225 m) Apr. 30; minimum gage height not determined; minimum daily, 6.84 ft (2.085 m) Mar. 22.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.97	8.90	9.30	9.05	9.10	7.16	7.20	10.55	9.20	9.50	8.65	8.20
2	10.23	8.87	9.34	9.02	9.01	7.10	7.25	10.45	9.21	9.39	8.65	8.15
3	10.27	8.93	9.32	9.02	8.92	7.10	7.27	10.35	9.30	9.27	8.67	8.12
4	10.25	8.97	9.32	8.99	8.85	7.05	7.35	10.15	9.34	9.18	8.74	8.12
5	10.14	9.03	9.29	8.96	8.74	7.07	7.42	10.00	9.30	9.14	8.70	8.09
6	10.03	9.10	9.38	8.92	8.63	7.11	7.48	9.90	9.23	9.10	8.69	8.00
7	9.90	9.08	9.41	8.90	8.50	7.05	7.55	9.80	9.25	9.03	8.67	8.10
8	9.68	9.04	9.40	8.91	8.38	6.98	7.62	9.73	9.28	9.01	8.70	8.02
9	9.56	9.00	9.37	8.98	8.30	6.95	7.63	9.70	9.35	8.98	8.68	8.05
10	9.54	9.02	9.33	9.20	8.20	6.92	7.63	9.72	9.45	8.94	8.68	7.94
11	9.46	9.08	9.29	9.36	8.10	6.88	7.70	9.70	9.54	8.87	8.62	7.90
12	9.50	9.17	9.26	9.45	8.00	6.85	7.90	9.67	9.50	8.85	8.59	7.96
13	9.52	9.20	9.25	9.51	7.90	6.85	8.18	9.63	9.48	8.80	8.56	7.95
14	9.50	9.22	9.32	9.55	7.85	6.85	8.45	9.58	9.52	8.77	8.53	7.88
15	9.54	9.23	9.39	9.57	7.80	6.85	8.75	9.50	9.60	8.75	8.52	7.77
16	9.60	9.18	9.40	9.53	7.75	6.85	8.90	9.54	9.56	8.76	8.47	7.84
17	9.86	9.28	9.35	9.49	7.70	6.85	9.05	9.54	9.48	8.78	8.43	7.85
18	9.91	9.45	9.31	9.48	7.65	6.85	9.23	9.50	9.57	8.78	8.44	7.82
19	9.89	9.60	9.26	9.44	7.60	6.85	9.40	9.47	9.86	8.77	8.42	7.79
20	9.83	9.74	9.17	9.38	7.55	6.85	9.70	9.50	10.23	8.76	8.41	7.76
21	9.65	9.69	9.10	9.35	7.50	6.85	10.00	9.53	10.45	8.77	8.39	7.75
22	9.55	9.69	9.05	9.30	7.45	6.84	10.15	9.55	10.55	8.78	8.35	7.78
23	9.40	9.59	9.04	9.25	7.40	6.85	10.25	9.53	10.50	8.77	8.31	7.75
24	9.24	9.46	9.06	9.16	7.34	6.87	10.31	9.50	10.40	8.76	8.30	7.73
25	9.10	9.37	9.08	9.10	7.27	6.88	10.35	9.47	10.26	8.80	8.30	7.75
26	8.96	9.34	9.10	9.10	7.25	6.90	10.40	9.44	10.13	8.82	8.28	7.70
27	8.92	9.37	9.12	9.15	7.24	6.98	10.45	9.42	9.90	8.83	8.26	7.60
28	8.93	9.41	9.11	9.17	7.20	7.03	10.50	9.40	9.85	8.74	8.17	7.63
29	8.96	9.37	9.10	9.19	---	7.08	10.55	9.35	9.78	8.72	8.20	7.62
30	9.00	9.32	9.09	9.20	---	7.12	10.58	9.30	9.67	8.71	8.22	7.54
31	8.94	---	9.07	9.15	---	7.17	---	9.25	---	8.65	8.22	---
MEAN	9.58	9.26	9.24	9.22	7.97	6.95	8.84	9.67	9.69	8.90	8.48	7.87
MAX	10.27	9.74	9.41	9.57	9.10	7.17	10.58	10.55	10.55	9.50	8.74	8.20
MIN	8.92	8.87	9.04	8.90	7.20	6.84	7.20	9.25	9.20	8.65	8.17	7.54

CAL YR 1977 MEAN 8.46 MAX 10.27 MIN 6.63
WTR YR 1978 MEAN 8.81 MAX 10.58 MIN 6.84

NOTE.--No gage-height record Oct. 1-4, Nov. 3-15, Jan. 6 to June 1, June 8 to July 27, Aug. 14, 15.

04296000 BLACK RIVER AT COVENTRY, VT

LOCATION.--Lat 44°52'08", long 72°16'14", Orleans County, Hydrologic Unit 01110000, on right bank 15 ft (5 m) downstream from highway bridge, 800 ft (250 m) upstream from Stony Brook, and 0.4 mi (0.6 km) northwest of Coventry.

DRAINAGE AREA.--122 mi² (316 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 725 ft (221 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Occasional diurnal fluctuation at low flow by mill upstream; greater regulation prior to 1960.

AVERAGE DISCHARGE.--27 years, 204 ft³/s (5.777 m³/s), 22.71 in/yr (577 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,740 ft³/s (106 m³/s) Apr. 2, 1976, gage height, 7.91 ft (2.411 m); minimum, 11 ft³/s (0.31 m³/s) Aug. 29 to Sept. 1, 1953; minimum daily, 11 ft³/s (0.31 m³/s) Aug. 29 to Sept. 1, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft³/s (48.1 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
June 19	1930	*1790	50.7	*6.24	1.902						

Minimum discharge, 22 ft³/s (0.62 m³/s) Aug. 23, 24, Sept. 4, 5, 6, 20; minimum daily, 22 ft³/s (0.62 m³/s) Aug. 23, Sept. 5, 6, 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	651	138	227	105	240	71	230	843	143	155	44	31
2	1140	132	380	98	230	69	350	679	149	129	41	27
3	960	128	359	94	220	67	400	543	162	110	40	26
4	846	191	230	88	210	65	270	436	117	93	42	24
5	697	348	170	85	190	64	380	421	102	85	42	22
6	559	289	160	84	180	63	478	479	141	81	41	22
7	398	264	150	82	165	60	405	507	115	73	36	26
8	284	213	145	80	150	60	358	525	347	68	45	30
9	373	193	145	300	135	62	305	613	650	81	45	34
10	609	187	145	600	120	65	297	798	528	81	49	27
11	481	316	145	480	115	70	346	693	328	69	49	27
12	444	342	145	400	105	72	800	617	187	60	40	49
13	374	268	150	330	100	74	1000	479	210	54	35	52
14	289	221	155	280	96	76	1080	353	479	50	34	40
15	451	195	230	240	94	82	800	277	408	48	32	30
16	454	219	220	220	93	100	600	238	250	141	28	34
17	783	422	185	200	92	140	650	232	160	87	29	32
18	914	747	160	185	94	100	750	212	225	68	29	28
19	770	638	150	175	95	90	950	201	864	55	28	25
20	680	492	145	165	99	82	1200	177	1230	49	26	22
21	532	370	140	155	98	78	1310	229	833	47	24	25
22	389	342	135	145	97	100	1240	265	843	49	23	30
23	355	309	130	140	96	125	1210	191	654	54	22	28
24	298	302	130	135	88	170	1170	151	446	65	29	26
25	250	317	170	130	87	210	1180	133	275	69	47	25
26	224	300	250	180	83	150	1140	120	201	50	54	25
27	205	230	300	300	78	145	1190	106	169	44	39	25
28	189	200	200	400	74	200	1210	95	301	46	34	28
29	171	180	170	350	---	250	1190	87	245	52	40	30
30	157	170	140	300	---	230	1080	85	218	53	42	25
31	146	---	120	260	---	220	---	89	---	47	38	---
TOTAL	15073	8663	5681	6786	3524	3410	23569	10874	10980	2213	1147	875
MEAN	486	289	183	219	126	110	786	351	366	71.4	37.0	29.2
MAX	1140	747	380	600	240	250	1310	843	1230	155	54	52
MIN	146	128	120	80	74	60	230	85	102	44	22	22
CFSM	3.98	2.37	1.50	1.80	1.03	.90	6.44	2.88	3.00	.59	.30	.24
IN.	4.60	2.64	1.73	2.07	1.07	1.04	7.19	3.32	3.35	.67	.35	.27

CAL YR 1977 TOTAL 84849 MEAN 232 MAX 1660 MIN 22 CFSM 1.90 IN 25.87
WTR YR 1978 TOTAL 92795 MEAN 254 MAX 1310 MIN 22 CFSM 2.08 IN 28.29

04296000 BLACK RIVER AT COVENTRY, VT.--Continued

(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to September 1978.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1977 to September 1978.
WATER TEMPERATURES: November 1977 to August 1978.

INSTRUMENTATION.--Water-quality monitor since November 1977.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 229 micromhos Aug. 8; minimum recorded, 62 micromhos Jan. 28, 29. Maximum and minimum may have been higher or lower during periods of missing record.
WATER TEMPERATURES: Maximum recorded, 28.0°C July 8, Aug. 9, but may have been higher during period of missing record in August; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, DAILY MEAN (CFS)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)
OCT												
20...	0800	--	698	108	7.0	7.0	7.5	3	--	11.1	600	K100
NOV												
09...	0825	--	194	163	7.1	8.5	8.0	2	--	--	--	--
DEC												
13...	0730	150	--	180	7.0	.0	.0	1	--	--	--	33
JAN												
20...	0830	165	--	155	6.8	-8.0	.0	1	--	13.0	--	K0
FEB												
28...	1200	74	--	200	7.2	-10.0	.5	2	--	12.5	--	K7
MAR												
23...	0900	125	--	165	6.8	.0	1.5	3	--	12.6	--	65
APR												
24...	1000	--	1130	84	6.8	5.0	4.5	7	--	12.3	--	K8
MAY												
22...	1000	--	277	150	--	20.0	14.0	3	--	9.8	--	--
JUN												
28...	1100	--	336	145	7.2	--	18.5	--	20	--	--	1900
AUG												
04...	1045	--	42	230	6.7	21.0	21.0	--	1.0	5.2	--	280
17...	1030	--	30	201	6.7	20.0	19.0	--	3.0	5.8	--	3100
SEP												
29...	1100	30	--	240	6.8	--	8.0	--	2.0	10.0	--	96

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
OCT											
20...	K20	57	20	19	2.2	2.0	1.1	44	0	36	7.0
NOV											
09...	31	78	13	24	4.4	2.8	1.0	79	0	65	10
DEC											
13...	--	88	15	29	3.8	3.0	1.0	89	0	73	14
JAN											
20...	K1	79	18	26	3.4	3.0	.8	74	0	61	19
FEB											
28...	K5	90	19	29	4.3	3.2	.8	87	0	71	8.8
MAR											
23...	K6	76	17	24	3.8	5.0	1.1	71	0	58	18
APR											
24...	K23	39	7	13	1.6	1.8	.8	39	0	32	9.9
MAY											
22...	K10	72	20	24	3.0	2.6	.8	64	--	53	--
JUN											
28...	K2700	72	9	24	3.0	3.2	1.1	--	--	63	--
AUG											
04...	43	110	14	33	5.8	4.2	1.0	--	--	92	--
17...	160	110	16	35	5.8	3.8	1.2	--	--	95	--
SEP											
29...	K2	130	28	38	7.6	4.2	6.6	--	--	98	--

K, NON-IDEAL COLONY COUNT.

04296000 BLACK RIVER AT COVENTRY, VT.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)
OCT											
20...	8.8	3.2	.0	4.6	72	63	5	75	.07	.00	--
NOV											
09...	10	4.6	.0	5.0	78	91	--	--	.19	.00	--
DEC											
13...	11	5.3	.0	6.2	104	103	--	--	.44	.01	--
JAN											
20...	11	4.2	.0	6.3	114	91	--	--	.45	.03	.18
FEB											
28...	14	5.1	.0	7.0	122	106	--	--	.47	.04	.31
MAR											
23...	11	6.8	.0	6.2	104	93	--	--	.50	.08	.20
APR											
24...	8.6	2.1	.0	3.2	68	50	17	59	.38	.01	.31
MAY											
22...	9.4	4.8	.1	3.2	86	79	--	--	.12	.09	.14
JUN											
28...	7.8	4.5	.1	4.9	101	86	--	--	.24	.04	.43
AUG											
04...	9.3	6.3	.1	5.5	134	121	--	--	.08	.01	.23
17...	14	5.7	.0	5.3	232	128	--	--	.13	.01	.23
SEP											
29...	17	7.0	.0	6.0	143	145	--	--	.09	.02	.00

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT											
20...	--	--	.36	--	.03	.01	7.3	6.6	--	--	--
NOV											
09...	--	--	.04	--	.02	.01	--	--	--	--	--
DEC											
13...	--	--	.34	--	.01	.00	13	--	--	--	--
JAN											
20...	.21	.00	.22	.66	.00	.00	9.8	--	8	3.6	100
FEB											
28...	.35	.20	.15	.82	.01	.00	1.4	--	3	.60	100
MAR											
23...	.28	.00	.36	.78	.01	.01	--	--	4	1.3	100
APR											
24...	.32	.13	.19	.70	.04	.01	--	5.0	7	21	100
MAY											
22...	.23	.00	.26	.35	.02	.00	--	--	8	6.0	100
JUN											
28...	.47	.15	.32	.71	.06	.01	--	--	59	54	100
AUG											
04...	.24	.00	.45	.32	.01	.01	--	3.9	3	.34	100
17...	.24	.00	.28	.37	.01	.01	--	--	16	1.3	100
SEP											
29...	.00	.00	.03	.09	.01	.00	1.6	--	4	.32	100

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT										
20...	2	0	2	0	0	0	2	2	0	<10
JAN										
20...	0	0	0	0	0	0	2	0	2	20
APR										
24...	2	--	--	0	0	0	11	7	4	--
AUG										
04...	2	2	0	0	0	--	10	6	4	30

04296000 BLACK RIVER AT COVENTRY, VT.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
OCT 20...	<9	1	0	0	0	2	2	0	390	--
JAN 20...	20	0	3	0	3	2	2	0	--	--
APR 24...	--	1	0	0	0	3	2	1	1000	--
AUG 04...	30	0	0	0	0	1	0	1	1400	1200

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
OCT 20...	100	55	44	11	20	0	20	<.5	.0	<.5
JAN 20...	90	23	0	27	30	10	20	<.5	.0	<.5
APR 24...	50	28	17	11	40	20	20	<.5	.0	<.5
AUG 04...	170	55	18	37	60	0	60	<.5	.0	<.5

DATE	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 20...	0	0	0	--	--	0	20	20	0
JAN 20...	0	0	0	0	0	0	10	0	10
APR 24...	0	0	0	0	0	0	20	10	10
AUG 04...	0	0	0	0	0	0	20	0	20

DATE	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)
OCT 20...	<1.2	<.4	3.4	.6	2.7	.6	.06	.07
APR 24...	<.4	.5	1.9	.6	1.7	.6	.05	.09

04296000 BLACK RIVER AT COVENTRY, VT.--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, NOVEMBER 1977 TO SEPTEMBER 1978

DATE	NOV 9,77		MAY 22,78		JUN 28,78		AUG 4,78		AUG 17,78		SEP 29,78	
TIME	0825		1000		1100		1045		1030		1100	
TOTAL CELLS/ML	240		130		1400		640		5000		230	
DIVERSITY: DIVISION	0.7		1.4		1.2		1.3		1.5		1.6	
.CLASS	0.7		1.4		1.2		1.3		1.5		1.6	
..ORDER	0.7		1.8		1.3		1.8		2.0		2.0	
...FAMILY	2.6		1.8		2.6		2.1		2.9		3.0	
....GENUS	2.6		1.8		2.6		2.5		3.0		3.1	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...MICRACTINIACEAE												
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-	4	2
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	18	3	200	4	11	5
....KIRCHNERIELLA	--	-	--	-	--	-	5	1	--	-	--	-
....OOCYSTIS	--	-	--	-	93	6	--	-	--	-	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-	--	-	2	1
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	57#	44	--	-	360#	55	1500#	30	--	-
....TETRASTRUM	--	-	--	-	--	-	4	1	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	260	5	21	9
....CHLOROGONIUM	--	-	--	-	--	-	11	2	--	-	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	14	11	23	2	18	3	200	4	11	5
....MELOSIRA	--	-	--	-	--	-	*	0	--	-	--	-
....STEPHANODISCUS	--	-	--	-	--	-	--	-	--	-	2	1
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	41#	17	--	-	160	11	8	1	380	8	2	1
....COCCONEIS	--	-	--	-	--	-	--	-	58	1	2	1
...CYMBELLACEAE												
....AMPHORA	41#	17	--	-	--	-	--	-	--	-	--	-
....CYMBELLA	--	-	--	-	140	10	9	1	870#	17	5	2
....EPITHEMIA	--	-	--	-	--	-	--	-	--	-	2	1
...DIATOMACEAE												
....DIATOMA	41#	17	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....FRAGILARIA	--	-	--	-	--	-	*	0	--	-	--	-
....SYNEDRA	--	-	--	-	--	-	--	-	58	1	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	46	3	--	-	140	3	--	-
...NAVICULACEAE												
....NAVICULA	--	-	--	-	320#	23	19	3	290	6	34	14
....NEIDIUM	41#	17	--	-	--	-	--	-	--	-	--	-
...NITZSCHIACEAE												
....NITZSCHIA	41#	17	42#	33	160	11	--	-	87	2	4	2
...SURIRELLACEAE												
....SURIRELLA	--	-	--	-	--	-	--	-	--	-	81#	35
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONIDALES												
...CRYPTOCHRYSIDACEAE												
....CHROOMONAS	--	-	--	-	--	-	--	-	--	-	11	5
...CRYPTOMONODACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	*	0	--	-	25	11
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....AGMENELLUM	--	-	--	-	--	-	70	11	--	-	18	8
....ANACYSTIS	--	-	--	-	--	-	22	3	930#	18	--	-
..HORMOGONALES												
...OSCILLATORIACEAE												
....LYNGBYA	--	-	--	-	--	-	61	9	--	-	--	-
....OSCILLATORIA	--	-	--	-	490#	34	14	2	--	-	--	-
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....DACTYLOCOCCOPSIS	--	-	--	-	--	-	20	3	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	41#	17	--	-	--	-	--	-	29	1	--	-
....TRACHELOMONAS	--	-	14	11	--	-	*	0	--	-	2	1

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

04296000 BLACK RIVER AT COVENTRY, VT.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), NOVEMBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	165	156	162	172	168	169
2	---	---	---	155	138	145	172	170	171
3	---	---	---	139	136	137	172	169	170
4	---	---	---	145	139	142	174	170	172
5	---	---	---	153	142	147	174	172	174
6	---	---	---	159	154	157	179	172	173
7	---	---	---	158	154	157	176	175	176
8	---	---	---	162	145	153	176	175	176
9	166	154	164	165	151	158	174	93	134
10	169	165	168	165	128	154	96	71	78
11	169	150	157	140	128	134	78	74	75
12	150	135	143	143	140	141	92	78	85
13	149	144	145	176	143	159	108	92	100
14	153	149	151	176	169	173	117	108	113
15	159	153	156	168	153	162	124	117	121
16	164	151	159	152	146	148	133	124	127
17	149	119	139	149	142	146	137	117	124
18	114	94	104	157	140	149	154	137	150
19	112	99	106	162	157	160	156	146	151
20	130	112	120	166	162	164	159	156	157
21	141	130	136	166	165	166	161	159	159
22	143	138	142	165	163	164	161	160	160
23	146	138	142	164	162	162	162	161	161
24	148	144	146	164	163	164	162	161	162
25	148	145	147	170	151	160	162	162	162
26	149	145	147	151	140	145	162	104	144
27	146	134	142	137	132	134	99	86	90
28	157	135	148	141	132	137	98	62	72
29	162	152	156	151	141	146	68	62	65
30	165	155	162	166	151	154	77	69	74
31	---	---	---	170	166	168	132	76	122
MONTH	---	---	---	176	128	153	179	62	134

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	142	132	137	---	---	---	133	129	131	101	86	95
2	146	138	142	---	---	---	128	110	121	114	103	108
3	149	146	147	---	---	---	112	103	108	125	116	121
4	151	150	151	---	---	---	123	111	117	130	126	128
5	151	151	151	---	---	---	124	109	116	130	117	125
6	---	---	---	---	---	---	114	108	110	117	99	107
7	---	---	---	---	---	---	119	69	105	105	97	101
8	---	---	---	---	---	---	130	119	124	103	94	98
9	---	---	---	---	---	---	137	131	134	103	92	97
10	---	---	---	---	---	---	139	136	138	91	87	89
11	---	---	---	---	---	---	139	117	131	104	90	98
12	---	---	---	---	---	---	114	79	95	116	105	110
13	---	---	---	---	---	---	90	69	86	130	117	124
14	---	---	---	---	---	---	79	71	76	139	131	135
15	---	---	---	---	---	---	77	71	74	145	140	142
16	---	---	---	---	---	---	95	74	82	150	146	148
17	---	---	---	---	---	---	100	91	95	153	151	151
18	---	---	---	---	---	---	96	81	87	155	152	153
19	---	---	---	---	---	---	87	74	82	158	156	157
20	---	---	---	---	---	---	80	76	78	164	159	160
21	---	---	---	---	---	---	78	71	75	165	156	160
22	---	---	---	---	---	---	85	79	82	159	135	139
23	---	---	---	173	152	159	84	78	81	149	143	144
24	---	---	---	151	140	144	85	79	82	157	150	152
25	---	---	---	147	140	144	84	78	81	164	158	159
26	---	---	---	155	144	150	86	79	82	169	164	165
27	---	---	---	154	144	152	84	76	80	173	168	170
28	---	---	---	143	131	139	83	76	79	177	173	175
29	---	---	---	130	114	120	82	78	80	181	178	179
30	---	---	---	120	117	117	85	81	83	185	181	183
31	---	---	---	128	120	125	---	---	---	187	180	185
MONTH	---	---	---	---	---	---	139	69	97	187	86	137

04296000 BLACK RIVER AT COVENTRY, VT.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), NOVEMBER 1977 TO SEPTEMBER 1978--Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	187	175	180	173	163	167	197	192	195	202	190	196
2	169	153	159	181	173	174	198	193	196	203	197	199
3	166	158	161	182	175	179	200	196	198	212	199	204
4	164	156	159	185	177	181	198	194	196	208	200	204
5	168	160	164	188	181	185	199	195	197	203	201	202
6	169	164	167	191	184	188	202	197	200	205	190	200
7	165	158	161	194	186	191	201	198	199	209	204	207
8	163	119	147	198	188	194	229	189	213	210	205	206
9	117	102	106	193	188	191	216	200	211	204	199	201
10	109	101	104	195	190	193	217	193	197	206	200	202
11	127	110	119	193	190	192	200	196	198	198	174	187
12	142	127	134	197	194	196	204	199	202	173	154	164
13	146	130	142	200	197	198	206	199	203	181	175	179
14	132	106	118	203	199	201	209	200	205	189	182	185
15	117	110	113	204	197	201	205	202	203	189	169	180
16	158	116	143	202	115	174	206	200	204	163	142	146
17	175	158	165	181	131	161	202	199	200	164	152	156
18	177	146	163	197	182	191	206	200	203	174	165	168
19	137	86	117	198	194	195	208	202	205	190	175	182
20	89	83	86	199	196	197	209	201	207	191	190	191
21	109	86	97	203	197	200	203	196	199	---	---	---
22	120	110	116	204	197	200	199	189	193	---	---	---
23	131	112	119	201	197	199	201	198	199	---	---	---
24	151	132	142	200	197	199	199	189	195	---	---	---
25	164	151	157	198	194	196	203	191	196	---	---	---
26	171	163	166	203	196	199	206	200	203	---	---	---
27	177	160	173	203	196	201	207	201	204	---	---	---
28	168	148	157	202	197	200	204	200	201	---	---	---
29	160	140	148	199	192	195	203	198	200	---	---	---
30	163	157	160	195	193	194	201	172	188	---	---	---
31	---	---	---	196	193	194	195	189	191	---	---	---
MONTH	187	83	141	204	115	191	229	172	200	---	---	---
PERIOD	229	62	153									

TEMPERATURE (DEG. C) OF WATER, NOVEMBER 1977 TO AUGUST 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
		NOVEMBER			DECEMBER	
1	---	---	---	.5	.0	.5
2	---	---	---	1.0	.0	.5
3	---	---	---	1.0	.5	.5
4	---	---	---	1.0	.0	.5
5	---	---	---	.0	.0	.0
6	---	---	---	.0	.0	.0
7	---	---	---	.0	.0	.0
8	---	---	---	.0	.0	.0
9	9.5	8.0	9.0	.0	.0	.0
10	10.0	9.0	9.5	.0	.0	.0
11	10.0	7.5	8.5	.0	.0	.0
12	7.0	6.0	6.5	.0	.0	.0
13	6.0	3.5	4.5	.0	.0	.0
14	3.5	2.0	3.0	.0	.0	.0
15	2.5	1.5	1.5	.0	.0	.0
16	4.0	1.5	2.5	.0	.0	.0
17	5.0	4.0	4.5	.0	.0	.0
18	5.0	4.5	4.5	.0	.0	.0
19	4.0	2.5	3.5	.0	.0	.0
20	2.5	2.0	2.0	.0	.0	.0
21	3.0	2.0	2.5	.0	.0	.0
22	3.0	2.5	2.5	.0	.0	.0
23	3.0	1.5	2.0	.0	.0	.0
24	2.5	2.0	2.5	.0	.0	.0
25	3.0	2.0	2.5	.0	.0	.0
26	2.5	1.0	2.0	.0	.0	.0
27	1.0	.0	.0	.0	.0	.0
28	.0	.0	.0	.0	.0	.0
29	.0	.0	.0	.0	.0	.0
30	.0	.0	.0	.0	.0	.0
31	---	---	---	---	---	---
MONTH	---	---	---	1.0	.0	.0

04296000 BLACK RIVER AT COVENTRY, VT.--Continued

TEMPERATURE (DEG. C) OF WATER, NOVEMBER 1977 TO AUGUST 1978--Continued

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST	
1	---	---	---	21.5	16.5	18.5	22.0	16.5	19.0
2	---	---	---	21.5	15.5	18.0	24.5	18.0	21.0
3	---	---	---	22.5	15.0	18.0	23.5	19.5	22.0
4	---	---	---	24.0	16.0	19.5	23.5	19.5	21.5
5	---	---	---	25.0	16.0	20.0	23.5	16.5	20.0
6	---	---	---	25.5	17.5	21.5	22.5	18.0	20.0
7	---	---	---	26.0	18.5	22.5	23.5	17.5	21.0
8	17.5	17.0	17.5	28.0	20.0	24.0	23.0	19.5	21.0
9	17.0	16.0	16.5	25.5	21.0	23.0	28.0	19.5	21.5
10	17.5	14.5	16.0	26.0	20.5	23.0	---	---	---
11	19.5	14.5	17.0	21.5	18.5	20.0	---	---	---
12	23.0	16.5	19.5	24.0	16.0	20.0	---	---	---
13	19.5	16.5	18.5	25.0	17.0	21.0	---	---	---
14	16.0	13.5	15.0	24.0	19.0	21.5	---	---	---
15	16.0	12.5	14.0	23.5	20.0	21.5	---	---	---
16	18.5	13.0	15.5	24.0	18.5	20.5	---	---	---
17	19.5	14.5	16.5	23.0	18.0	20.5	---	---	---
18	17.5	15.5	16.5	25.0	17.0	21.0	---	---	---
19	18.5	16.5	17.5	21.5	18.0	20.0	---	---	---
20	17.5	17.0	17.0	24.5	19.0	21.5	---	---	---
21	18.5	16.5	17.5	25.0	20.0	22.5	---	---	---
22	18.5	17.5	18.0	24.5	21.5	22.5	---	---	---
23	18.0	16.5	17.0	25.5	21.0	23.0	---	---	---
24	18.5	16.0	17.0	25.5	19.0	22.5	---	---	---
25	20.5	15.5	18.0	26.0	18.0	21.5	---	---	---
26	21.0	17.0	18.5	24.5	19.0	21.5	---	---	---
27	21.0	18.0	19.5	25.0	19.5	22.5	---	---	---
28	21.5	19.0	20.0	22.5	19.0	21.0	---	---	---
29	22.0	18.0	19.5	20.5	16.0	18.5	---	---	---
30	21.5	18.0	19.0	22.0	16.5	19.0	---	---	---
31	---	---	---	21.5	14.5	18.0	---	---	---
MONTH	---	---	---	28.0	14.5	21.0	---	---	---
PERIOD	28.0	.0	11.5						

04296500 CLYDE RIVER AT NEWPORT, VT

LOCATION.--Lat 44°56'22", long 72°11'23", Orleans County, Hydrologic Unit 01110000, on right bank in Newport, just downstream from small right-bank tributary, and 1 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--142 mi² (368 km²).

PERIOD OF RECORD.--Discharge: May 1909 to September 1919; May 1920 to August 1922, October 1922 to September 1924, November 1928 to May 1936, September 1938 to current year. Prior to November 1928, published as "at West Derby."
SPECIFIC CONDUCTANCE: October 1974 to October 1977 (discontinued).
WATER TEMPERATURES: October 1974 to October 1977 (discontinued).

REVISED RECORDS.--WSP 744: 1913(M), drainage area. WSP 924: 1940. WSP 1307: 1913-15(M).

GAGE.--Water-stage recorder and since Mar. 6, 1957, records of power generation. Datum of gage is 682.36 ft (207.983 m) National Geodetic Vertical Datum of 1929. May 25, 1909, to Sept. 20, 1915, nonrecording gage, and Sept. 21, 1915, to Sept. 30, 1924, Nov. 16, 1928, to May 4, 1936, water-stage recorder, at site 0.65 mi (1.05 km) upstream at different datum.

REMARKS.--Records fair except those for periods of no gage-height record, Nov. 29 to Jan. 12, Feb. 26 to Apr. 4, Apr. 12 to May 9, which are poor. Flow regulated by powerplant and reservoirs upstream and, since Mar. 6, 1957, by diversion around station through canal and penstock of Newport No. 11 powerplant. Diversion computed from relation of kilowatt-hour output and measured discharge, discharge computed by adding flow over control to flow diverted through powerplant.

AVERAGE DISCHARGE.--59 years (water years 1910-19, 1921, 1923-24, 1929-35, 1939-78), 259 ft³/s (7.335 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,900 ft³/s (110 m³/s) Mar. 20, 1936, gage height, 5.76 ft (1.756 m), site and datum then in use, from rating curve extended above 2,800 ft³/s (79.3 m³/s) on basis of computation of peak flow over dam; maximum daily, 2,680 ft³/s (75.9 m³/s) May 4, 1940; minimum daily, 2.6 ft³/s (0.074 m³/s) June 18, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge 1,290 ft³/s (36.5 m³/s) May 11; minimum daily, 25 ft³/s (0.71 m³/s) Mar. 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	442	329	467	224	415	172	208	1100	175	594	212	94
2	454	360	500	208	415	96	242	1050	175	550	174	63
3	455	313	478	269	414	87	237	950	216	523	175	51
4	602	315	439	265	285	208	187	880	145	504	65	73
5	640	321	433	253	266	93	334	800	318	490	85	43
6	601	370	337	241	281	106	366	760	322	478	34	51
7	547	349	430	133	283	64	354	700	353	469	128	35
8	493	392	428	82	283	40	346	660	436	323	136	36
9	506	360	330	384	282	40	282	790	475	362	64	34
10	493	460	329	701	284	25	453	1070	327	324	71	54
11	507	489	297	633	198	188	539	1290	304	332	40	50
12	506	482	286	586	160	114	600	1280	452	305	34	63
13	507	491	317	550	277	246	850	1130	485	172	33	65
14	510	603	317	442	283	262	1100	968	486	140	55	53
15	523	619	309	429	225	238	1100	812	496	178	64	65
16	520	598	315	426	256	264	1050	714	506	114	69	85
17	595	620	321	425	247	108	980	653	504	311	61	100
18	648	690	348	335	125	202	950	609	495	414	41	115
19	655	684	342	377	76	149	1050	567	625	327	41	120
20	647	662	338	362	251	83	1250	538	1090	331	123	103
21	633	647	315	347	159	52	1400	535	960	193	84	125
22	601	612	314	268	81	151	1400	536	952	83	51	108
23	554	577	318	311	34	241	1350	516	947	234	67	59
24	531	543	313	309	34	244	1250	497	897	230	54	54
25	502	513	281	313	146	163	1200	478	795	231	51	127
26	490	499	234	420	128	68	1200	463	695	256	129	105
27	480	488	307	401	267	261	1200	438	667	182	112	89
28	445	465	329	313	284	238	1200	395	727	123	212	143
29	419	429	301	414	---	222	1200	328	663	79	170	108
30	389	467	278	416	---	236	1150	330	660	152	127	55
31	163	---	187	415	---	233	---	320	---	221	144	---
TOTAL	16058	14747	10538	11252	6439	4894	25028	22157	16348	9225	2906	2326
MEAN	518	492	340	363	230	158	834	715	545	298	93.7	77.5
MAX	655	690	500	701	415	264	1400	1290	1090	594	212	143
MIN	163	313	187	82	34	25	187	320	145	79	33	34

CAL YR 1977 TOTAL 113491 MEAN 311 MAX 1140 MIN 22
WTR YR 1978 TOTAL 141918 MEAN 389 MAX 1400 MIN 25

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second, a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1978

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Piscataqua River basin				
*01073750	Mill Brook at Stratham, NH	Lat 43°01'24", long 70°56'04", Rockingham County, at culvert on southbound lane of State Highways 101 and 108, 0.3 mi west of Stratham.	2.30	1976,1978	8-23-78	0.38
		Merrimack River basin				
*01074250	Hancock Branch tributary near Lincoln, NH	Lat 44°03'45", long 71°35'15", Grafton County, at culvert on State Highway 112, 700 ft east of highway bridge over East Branch Pemigewasset River, and 4.5 mi east of Lincoln.	0.58	1976,1978	9-19-78	0.06
*01084290	Mud Pond tributary near Dublin, NH	Lat 42°54'08", long 72°01'52", Cheshire County, at culvert on secondary dead end road, 0.1 mi south of State Highway 101, and 0.3 mi west of Bonds Corner.	1.39	1976-78	9-19-78	0.10
*01090480	Rays Brook at Manchester, NH	Lat 43°01'08", long 71°27'02", Hillsborough County, at culvert on Cambell St., Manchester, and 0.1 mi upstream from Dorrs Pond.	1.74	1976,1978	9-15-78	0.19
*01094006	McQuade Brook near Bedford, NH	Lat 42°55'45", long 71°33'20", Hillsborough County, at culvert on North Amherst Rd. at junction with Hardy Rd., 2.3 mi southwest of Bedford.	4.13	1976,1978	8-16-78	0.30
		Connecticut River basin				
*01137850	Ammonoosuc River tributary near Littleton, NH	Lat 44°18'58", long 71°47'45", Grafton County, at culvert on State Highway 18, 1 mi west of Littleton.	2.42	1976-78	9-19-78	0.10

* Also a crest-stage partial-record station.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1978

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Androscoggin River basin					
01054120	Josh Brook near Gorham, NH	Lat 44°23'15", long 71°07'58", Coos County, at culvert on U.S. Highway 2, 2 mi east of Gorham.	0.67	1973-78	No data available		
		Saco River basin					
01064250	Albany Brook tributary near Bartlett, NH	Lat 44°04'23", long 71°18'10", Carroll County, at culvert on U.S. Highway 302, 1 mi west of Bartlett.	0.20	1973-78	10- 9-77	6.08	80
01064310	Ellis River tributary near Jackson, NH	Lat 44°09'42", long 71°12'57", Carroll County, at culvert on State Highway 16, 2 mi northwest of Jackson.	.78	1974-78	5-10-78	(a)	b40
01064750	Meadow Brook near Sandwich, NH	Lat 43°47'53", long 71°22'30", Carroll County, at culvert on Little Pond Rd., 0.3 mi west of State Highway 25 and 1.9 mi east of Sandwich.	.67	1973-78	10- 9-77	7.83	88
01064850	Square Brook near Freedom, NH	Lat 43°49'55", long 71°04'35", Carroll County, at culvert on State Highway 153, 2.4 mi northwest of Freedom and 2.7 mi north of Effingham Falls.	1.20	1973-78	10- 2-77	7.02	21
		Piscataqua River basin					
*01073750	Mill Brook at Stratham, NH	Lat 43°01'24", long 70°55'04", Rockingham County, at culvert on southbound lane of State Highways 101 and 108, 0.3 mi west of Stratham.	2.30	1973-78	11- 9-77	12.38	295
		Hampton River basin					
01073850	Hampton Falls River near Hampton Falls, NH	Lat 42°54'35", long 70°52'58", Rockingham County, at culvert on N.H. Highway 150, 0.3 mi west of Interstate Highway 95 and 1.1 mi southwest of Hampton Falls.	4.73	1973-78	11- 9-77	20.41	430
		Merrimack River basin					
*01074250	Hancock Branch tributary near Lincoln, NH	Lat 44°03'45", long 71°35'15", Grafton County, at culvert on State Highway 112, 4.5 mi east of Lincoln and 700 ft east of highway bridge over East Branch Pemigewasset River.	0.58	1975-78	10- 9-77	7.99	b50
‡01075000	Pemigewasset River at Woodstock, NH	Lat 43°58'34", long 71°40'48", Grafton County, 0.2 mi east of Woodstock and 0.7 mi upstream from Eastman Brook.	193	1940-77[, 1978	10- 9-77	10.08	13,500
01079550	West Alton Brook near Alton, NH	Lat 43°32'10", long 71°19'22", Belknap County, at culvert on State Highway 11A, 1.2 mi west of junction with State Highway 11, and 1.3 mi south of West Alton.	2.39	1973-78	10- 9-77	5.19	90
01081900	Town Line Brook tributary near Peterborough, NH	Lat 42°51'09", long 71°54'14", Hillsborough County, at culvert on State Highway 101, 2.8 mi east of Peterborough, and 5 mi west of West Wilton.	.75	1972-78	No data available		

* Also a low-flow partial-record station.
‡ Also a miscellaneous measurement site.
[Operated as a continuous-record gaging station.
a Not determined.
b Estimated.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Merrimack River basin--Continued					
*01082490	Mud Pond tributary near Dublin, NH	Lat 42°54'08", long 72°01'52", Cheshire County, at culvert on secondary dead-end road, 0.1 mi south of State Highway 101, and 0.3 mi west of Bonds Corner.	1.39	1972-78	10-17-77	16.59	57
01089750	Marden Brook near Epsom, NH	Lat 43°12'13", long 71°23'16", Merrimack County, at culvert on State Highway 28, 2 mi south of Epsom.	1.16	1973-78	No data available		
*01090480	Rays Brook at Manchester, NH	Lat 43°01'08", long 71°27'02", Hillsborough County, at culvert on Cambell Street, Manchester, and 0.1 mi upstream from Dorrs Pond.	1.74	1973-78	No data available		
*01094006	McQuade Brook near Bedford, NH	Lat 42°55'45", long 71°33'20", Hillsborough County, at culvert on North Amherst Rd. at junction with Hardy Rd., 2.3 mi southwest of Bedford.	4.13	1972-78	1- 9-78	15.36	68
		Connecticut River basin					
01129210	Ad Chase Brook near Pittsburg, NH	Lat 45°02'20", long 71°27'10", Coos County, at culvert on U.S. Highway 3, 100 ft above mouth, 1 mi below Indian Stream, and 3 mi southwest of Pittsburg.	1.62	1973-77	5- 9-78	(a)	b75
01129400	Black Brook at Averill, VT	Lat 45°00'14", long 71°41'34", Essex County, at culvert on State Highway 114, 1 mi northeast of Averill.	.58	1964-78	5-10-78	(a)	b25
01129700	Paul Stream tributary near Brunswick, VT	Lat 44°41'06", long 71°37'18", Essex County, at culvert on macadam road leading to Maidstone Lake, 3.5 mi south of Brunswick.	1.29	1966-78	5-10-78	7.27	37
01129950	Upper Ammonoosuc River tributary near Stark, NH	Lat 44°35'48", long 71°25'30", Coos County, at culvert on State Highway 110, 1.1 mi west of Stark.	.58	1973-78	5-10-78	16.01	16
01131250	Cherry Mountain Brook tributary near Twin Mountain, NH	Lat 44°18'40", long 71°31'40", Coos County, at culvert on State Highway 115, 1.1 mi north of junction with U.S. Highway 3, and 2.8 mi north of Twin Mountain.	1.31	1973-78	5-17-78	16.46	106
01133300	Cold Hill Brook near Lyndon, VT	Lat 44°31'47", long 72°03'01", Caledonia County, at culvert on dirt road, 2 mi northwest of Lyndon.	1.52	1964-78	10- 2-77	10.92	37
*01137850	Ammonoosuc River tributary near Littleton, NH	Lat 44°18'58", long 71°47'45", Grafton County, at culvert on State Highway 18, 1 mi west of Littleton.	2.42	1974-78	6-19-78	4.05	(a)
01153300	Middle Branch Williams River tributary at Chester, VT	Lat 43°16'13", long 72°36'32", Windsor County, at culvert on macadam road at Chester.	3.16	1964-78	10-17-77	19.24	150
01155350	West River trib-tributary near Jamaica, VT	Lat 43°07'32", long 72°48'47", Windham County, at culvert on State Highway 100, 2.5 mi northwest of Jamaica.	.90	1964-78	10-17-77	8.68	40
		Hudson River basin					
01333900	Paran Creek near South Shaftsbury, VT	Lat 42°58'13", long 73°11'19", Bennington County, at culvert on dirt road, 2 mi northeast of South Shaftsbury.	2.38	1964-78	5-20-78	9.23	112

* Also a low-flow partial-record station.
a Not determined.
b Estimated.

Annual maximum discharge at crest-stage partial-record stations during water year 1978--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		St. Lawrence River basin					
04279400	Poultney River tributary at East Poultney, VT	Lat 43°32'17", long 73°12'36", Rutland County, at culvert 1.0 mi north of East Poultney.	1.13	1964-78	b10-17-77	11.81	84
04280900	Moon Brook at Rutland, VT	Lat 43°36'33", long 72°57'25", Rutland County, at culvert on macadam road, 1.0 mi northeast of Rutland.	2.12	1964-78	10- 2-77	11.18	88
04282200	Neshobe River at Brandon, VT	Lat 43°48'37", long 73°04'36", Rutland County, at bridge on dirt road, 1.0 mi northeast of Brandon.	20.1	1968-78	b10-17-77	8.24	740
04282300	Brandy Brook at Bread Loaf, VT	Lat 43°57'19", long 72°59'49", Addison County, at culvert on State Highway 125, at Bread Loaf, and 2 mi east of Ripton.	2.24	1963-78	10- 2-77	10.52	45
04282600	Little Otter Creek tributary near Bristol, VT	Lat 44°08'44", long 73°07'05", Addison County, at culvert on dirt road, 2 mi northwest of Bristol.	1.48	1964-78	10- 2-77	11.40	26
04282750	Lewis Creek tributary No. 2 near Rockville, VT	Lat 44°15'54", long 73°04'02", Addison County, at culvert on State Highway 116, 1.3 mi north of Rockville.	1.07	1964-78	10-17-77	12.47	53
04288400	Bryant Brook at Waterbury Center, VT	Lat 44°22'41", long 72°43'29", Washington County, at culvert on State Highway 100, at Waterbury Center.	2.64	1964-78	10-17-77	12.30	166
04290700	Bailey Brook at East Hardwick, VT	Lat 44°31'41", long 72°18'16", Caledonia County, at culvert on macadam road, 0.5 mi northeast of East Hardwick.	2.52	1964-78	10- 2-77	11.23	70
04293400	Whittaker Brook at Richford, VT	Lat 44°59'14", long 72°39'13", Franklin County, at culvert on State Highway 105, 1 mi east of Richford.	.64	1963-78	6-20-78	8.99	38
04293800	Missisquoi River tributary at Sheldon Junction, VT	Lat 44°54'01", long 72°57'35", Franklin County, at culvert on State Highway 105, at Sheldon Junction.	1.69	1963-78	6-20-78	10.84	16
04296150	Lord Brook near Evansville, VT	Lat 44°46'59", long 72°07'08", Orleans County, at culvert on State Highway 16, 1.5 mi south of Evansville.	4.76	1964-78	10- 2-77	11.92	140
04296300	Pherrins River tributary near Island Pond, VT	Lat 44°50'33", long 71°54'32", Essex County, at culvert on State Highway 114, 2.3 mi northwest of Island Pond.	1.05	1964-78	10- 2-77	9.88	27

b Estimated.

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table.

Discharge measurements made at miscellaneous sites during water year 1978

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
Piscataqua River basin						
01073200 Lamprey River	Piscataqua River	Lat 43°06'24", long 71°14'34", Rockingham County, at culvert on State Highway 107A, 1.8 mi south of Deerfield Center, NH.	-	1976-77	9- 7-78	0.94
01073210 Lamprey River tributary	Lamprey River	Lat 43°06'11", long 71°14'49", Rockingham County, on culvert on State Highway 107A, near Deerfield Fairgrounds, 2 mi south of Deerfield Center, NH.	-	1976-77	9- 7-78	0
01073220 Lamprey River tributary	do	Lat 43°06'15", long 71°14'14", Rockingham County, at culvert on State Highway 107, 2.0 mi south of Deerfield Center, NH.	-	1976	9- 7-78	0
01073300 Lamprey River	Piscataqua River	Lat 43°03'46", long 71°13'42", Rockingham County, at culvert on State Highway 101, 3.0 mi northeast of Raymond, NH.	-	1976-77	9- 7-78	1.34
01073340 Lamprey River tributary	Lamprey River	Lat 43°01'58", long 71°09'00", Rockingham County, near railroad crossing, 1.5 mi east of Raymond, NH.	-	-	9- 8-78	0
01073350 Mountain Brook	do	Lat 43°06'01", long 71°11'30", Rockingham County, at culvert on Pawtuckaway Mountain, 4.5 mi north of Raymond, NH.	-	1976	9- 7-78	0
01073430 Lamprey River	Piscataqua River	Lat 43°02'58", long 71°02'02", Rockingham County, near Camp Hedding, on town road, 2.2 mi northeast of Epping, NH.	-	1976-77	9- 8-78	9.66
01073431 Lamprey River tributary	Lamprey River	Lat 43°03'09", long 71°02'01", Rockingham County, at culvert on abandoned road near Camp Hedding, 2.5 mi northeast of Epping, NH.	-	1976-77	9- 8-78	.10
01073452 North River	do	Lat 42°11'11", long 71°08'20", Strafford County, at culvert on U.S. Highway 4, 0.8 mi east of Northwood, NH.	-	1976-77	9- 7-78	0
01073453 North River	do	Lat 43°10'49", long 71°08'25", Strafford County, at culvert on State Highway 152, 0.8 mi southeast of Northwood, NH.	-	1976-77	9- 7-78	.01
01073454 North River	do	Lat 43°08'57", long 71°06'49", Rockingham County, beneath power lines on State Highway 152, 3 mi north of Nottingham, NH.	-	-	9- 7-78	0
01073455 North River	do	Lat 43°08'42", long 71°06'55", Strafford County, at culvert on abandoned road near State Highway 152, 3.0 mi southeast of Northwood, NH.	-	1976-77	9- 7-78	.05
01073460 North River	do	Lat 43°04'43", long 71°02'09", Rockingham County, at culvert on State Highway 125, 3.5 mi northeast of Epping, NH.	-	1976-77	9-28-78	0
01073470 Lamprey River	Piscataqua River	Lat 43°05'31", long 71°00'29", Strafford County, at bridge on State Highway 152, near Wadley Falls, 4 mi east of Newmarket, NH.	-	1976-77	9-28-78	5.16
01073475 Little River	Lamprey River	Lat 43°08'47", long 71°03'40", Rockingham County, at culvert on town road, 0.6 mi south of U.S. Highway 4, 5.5 mi southwest of Northwood, NH.	-	1976-77	9- 7-78	0

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Piscataqua River basin--Continued				
01073480 Little River	Lamprey River	Lat 43°06'49", long 71°03'04", Rockingham County, on town road, 0.7 mi southeast of Mill Pond Rd., 2.5 mi east of Nottingham, NH.	-	1977	9- 7-78	0
01073482 Little River	do	Lat 43°07'08", long 71°02'07", Rockingham County, at culvert on State Highway 125, 8 mi southeast of Northwood, NH.	-	1976-77	9- 7-78	.93
01073483 Little River tributary	Little River	Lat 43°07'12", long 71°01'50", Strafford County, Mill Pond Rd., 0.2 mi east of State Highway 125, 3.5 mi east of Nottingham, NH.	-	1977	9- 7-78	0
01073484 Little River	Lamprey River	Lat 43°06'40", long 71°00'45", Strafford County, at bridge on Tuttle Rd., 4.5 mi northeast of Newmarket, NH.	-	1976-77	9- 7-78	5.14
01073538 Picassic River	do	Lat 43°00'55", long 71°06'44", Rockingham County, on gravel road, 0.3 mi south of Shirking Rd., 2.4 mi southwest of Epping, NH.	-	1977	9- 8-78	0
01073539 Piscassic River	do	Lat 43°01'09", long 71°06'37", Rockingham County, Center Crossing of Shirking Road Intersection, 2.4 mi southwest of Epping, NH.	-	1977	9- 8-78	0
01073540 Piscassic River	do	Lat 43°01'04", long 71°06'26", Rockingham County, southeast corner of Intersection at Shirking Rd., 2.3 mi southwest of Epping, NH.	-	1977	9- 8-78	0
01073541 Piscassic River	do	Lat 43°01'02", long 71°05'10", Rockingham County, at culvert 0.2 mi south of Martin Crossing, and 1.5 mi southwest of Epping, NH.	-	1976-77	9- 8-78	.13
Piscassic River	do	Lat 43°01'18", long 71°04'29", Rockingham County, on State Highway 125, 1.5 mi south of Epping, NH.	-	-	9- 8-78	0
Piscassic River	do	Lat 43°01'40", long 71°02'41", Rockingham County, on State Highway 101, 1.5 mi southeast of Epping, NH.	-	-	9- 8-78	0
01073542 Piscassic River	do	Lat 43°01'31", long 71°03'38", Rockingham County, at culvert on State Highway 101, 1 mi south of Epping, NH.	-	1976	9- 8-78	0
01073543 Piscassic River	do	Lat 43°01'57", long 71°01'04", Rockingham County, at culvert on Birch Rd., 2.9 mi east of Epping, NH.	-	1976-77	9- 8-78	0
Piscassic River	do	Lat 43°02'04", long 70°59'51", Rockingham County, at culvert 0.2 mi south of Littlefield, NH.	-	-	9- 6-78	0
01073544 Fresh River	Piscassic River	Lat 43°01'19", long 71°00'49", Rockingham County, on Birch Rd., 0.6 mi northwest of U.S. Highway 101, 3.2 mi southeast of Epping, NH.	-	1977	9- 8-78	.26
01073545 Piscassic River	Lamprey River	Lat 43°02'03", long 70°58'07", Rockingham County, below dam at outlet of Piscassic Ice Pond, near Piscassic Rd., 1.5 mi west of Newfields, NH.	-	1976-77	9- 6-78	.47
01073546 Piscassic River	do	Lat 43°03'37", long 70°58'00", Rockingham County, 0.3 mi southeast of Four Corners, 1.8 mi southwest of Newmarket, NH.	-	1977	9- 6-78	.05

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
Piscataqua River basin--Continued						
01073547 Piscassic River tributary	Piscassic River	Lat 43°03'52", long 70°58'02", Rockingham County, on Newmarket Rd., 1 mi southwest of intersection with Lee Hook Rd., 1.6 mi southwest of Newmarket, NH.	-	1977	9- 6-78	0
01073548 Piscassic River	Lamprey River	Lat 43°04'08", long 70°57'44", Rockingham County, at culvert on Newmarket Rd., 1.5 mi southwest of Newmarket, NH.	-	1976-77	9- 6-78	.16
01073549 Piscassic River	do	Lat 43°04'31", long 70°57'14", Rockingham County, 0.1 mi north on Lee Hook Rd. from intersection with Newmarket Rd., 0.8 mi west of Newmarket, NH.	-	1977	9- 6-78	0
01073550 Piscassic River	do	Lat 43°04'56", long 70°56'56", Rockingham County, near Pigeon Hill on Packers Falls Rd., 0.5 mi north of intersection with Newmarket Rd., 0.6 mi west of Newmarket, NH.	-	1977	9- 6-78	0
Merrimack River basin						
*01075000 Pemigewasset River	Merrimack River	Lat 43°58'34", long 71°40'48", Grafton County, 0.2 mi east of Woodstock, NH, and 0.7 mi upstream from Eastman Brook.	193	1940-77‡	4-27-78 5-10-78 6-22-78 8-11-78 8-11-78 9-25-78	1,570 4,940 746 104 94 64.2
01076000 Baker River	Pemigewasset River	Lat 43°47'46", long 71°50'42", Grafton County, 0.3 mi upstream from Halls Brook, and 1.8 mi southwest of Rumney, NH.	143	1929-77‡	10- 4-77 4-26-78 5- 4-78 6-16-78 8-10-78	385 985 522 324 37.5
01082000 Contoocook River	Merrimack River	Lat 42°51'45", long 71°57'35", Hillsborough County, 1,100 ft downstream from milldam, 1 mi south of Peterborough, NH, and 1.5 mi upstream from Nubanusit Brook.	68.1	1945-77‡	10- 5-77	107
01085000 Contoocook River	do	Lat 43°09'10", long 71°51'24", Merrimack County, 1.6 mi downstream from Sand Brook, and 2.5 mi southwest of Henniker, NH.	368	1940-77‡	7- 5-78	83.4
01088000 Contoocook River	do	Lat 43°17'12", long 71°35'56", Merrimack County, at Penacook, NH, 0.5 mi upstream from mouth.	766	1929-77‡	6-27-78 8-24-78	483 140

* Also a crest-stage partial-record station.
‡ Operated as a continuous-record gaging station.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)

SACO RIVER BASIN

01064300 - ELLIS RIVER NEAR JACKSON, NH (LAT 44 13 12 LONG 071 15 00)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
NOV , 1977				
30...	1415	.0	20	--
JAN , 1978				
11...	1315	.0	41	--
FEB				
27...	1200	.0	9.9	68
APR				
03...	1210	.0	12	62
MAY , 1978				
12...	1205	7.0	115	27
JUL				
07...	1145	15.0	16	33
AUG				
17...	1015	18.0	6.2	41

01064400 - LUCY BROOK NEAR NORTH CONWAY, NH (LAT 44 04 10 LONG 071 10 30)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
OCT , 1977				
06...	1500	9.0	9.4	--
NOV				
30...	1600	.0	6.7	--
JAN , 1978				
11...	1545	.0	22	--
FEB				
27...	1540	.0	3.8	--
APR , 1978				
03...	1500	.0	6.9	--
MAY				
12...	1525	8.0	41	17
JUL				
07...	1415	17.0	2.0	26
AUG				
17...	1150	19.0	.56	27

01065000 - OSSIPEE RIVER AT EFFINGHAM FALLS, NH (LAT 43 47 44 LONG 071 03 36)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
MAR , 1978				
31...	1225	1.0	949	--
JUL , 1978				
14...	1400	25.0	131	--

PISCATAQUA RIVER BASIN

01073000 - OYSTER RIVER NEAR DURHAM, NH (LAT 43 08 55 LONG 070 57 56)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
JUL , 1978				
06...	1300	--	1.4	153
31...	1150	18.5	.91	--
SEP , 1978				
26...	1505	16.0	.94	--

01073200 - LAMPREY RIVER NEAR DEERFIELD CENTER, NH (LAT 43 06 24 LONG 071 14 34)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
07...	--	.94	14.0	57

01073210 - LAMPREY RIVER TRIBUTARY AT RT 107A, DEERFIELD CENTER, NH (LAT 43 06 11 LONG 071 14 49)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
07...	--	*0	14.5	51

01073300 - LAMPREY RIVER NEAR RAYMOND, NH (LAT 43 03 46 LONG 071 13 42)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
07...	--	1.34	16.5	600

01073430 - LAMPREY RIVER NEAR EPPING, NH (LAT 43 02 58 LONG 071 02 02)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
08...	--	9.66	19.0	110

01073431 - LAMPREY RIVER TRIBUTARY NEAR EPPING, NH (LAT 43 03 09 LONG 071 02 01)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
08...	--	.10	14.5	195

01073453 - NORTH RIVER, RT 152, AT NORTHWOOD, NH (LAT 43 10 49 LONG 071 08 25)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
07...	--	.01	17.0	275

01073454 - NORTH RIVER, RT 152, NEAR NOTTINGHAM, NH (LAT 43 08 57 LONG 071 06 49)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
07...	--	*0	16.0	65

*PONDED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PISCATAQUA RIVER BASIN--CONTINUED

01073455 - NORTH RIVER NEAR NORTHWOOD, NH (LAT 43 08 42 LONG 071 06 55)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
07...	--	.05	19.0	80

01073475 - LITTLE RIVER, RT 4, NEAR NORTHWOOD, NH (LAT 43 08 47 LONG 071 03 40)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
07...	--	*0	17.0	85

01073480 - LITTLE RIVER NEAR NOTTINGHAM, NH (LAT 43 06 49 LONG 071 03 04)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
07...	--	*0	20.0	45

01073482 - LITTLE RIVER, RT 125, NEAR NORTHWOOD, NH (LAT 43 07 08 LONG 071 02 07)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
07...	--	.93	18.5	52

01073483 - LITTLE RIVER TRIBUTARY NEAR NOTTINGHAM, NH (LAT 43 07 12 LONG 071 01 50)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
07...	--	*0	16.0	80

01073484 - LITTLE RIVER, TUTTLE RD, NEAR NEWMARKET, NH (LAT 43 06 40 LONG 071 00 45)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
07	--	5.14	18.0	75

01073500 - LAMPREY RIVER NEAR NEWMARKET, NH (LAT 43 06 09 LONG 070 57 11)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
APR , 1978					AUG , 1978				
20...	1220	7.0	804	--	23...	0920	20.0	11	103
JUN					SEP				
21...	1055	19.0	129	--	21...	1010	17.0	6.7	--
JUL									
13...	1120	23.0	20	72					

01073540 - PISCASSIC RIVER, SE INTERSECTION SHIRKING RD, NEAR EPPING, NH (LAT 43 01 04 LONG 071 06 26)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
08...	--	*0	13.5	102

01073541 - PISCASSIC RIVER AT MARTIN CROSSING, NEAR EPPING, NH (LAT 43 01 02 LONG 071 05 10)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
08...	--	.13	18.5	100

PISCASSIC RIVER, RT 125, NEAR EPPING, NH (LAT 43 01 18 LONG 071 04 29)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
08...	--	*0	18.0	85

PISCASSIC RIVER, RT 101, NEAR EPPING, NH (LAT 43 01 40 LONG 071 02 41)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
08...	--	*0	18.5	102

01073542 - PISCASSIC RIVER, RT 101, AT EPPING, NH (LAT 43 01 31 LONG 071 03 38)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
08...	--	*0	18.5	130

01073543 - PISCASSIC RIVER AT BIRCH RD, NEAR EPPING, NH (LAT 43 01 57 LONG 071 01 04)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
08...	--	*0	16.5	110

PISCASSIC RIVER AT LITTLEFIELD, NH (LAT 43 02 04 LONG 070 59 51)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
06...	--	*0	16.0	105

*PONDED

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
PISCATAQUA RIVER BASIN--CONTINUED				
01073544 - FRESH RIVER NEAR EPPING, NH (LAT 43 01 19 LONG 071 00 49)				
SEP , 1978				
08...	--	.26	21.0	160
01073545 - PISCASSIC RIVER NEAR NEWFIELDS, NH (LAT 43 02 03 LONG 070 58 07)				
SEP , 1978				
06	--	.47	16.0	102
01073546 - PISCASSIC RIVER, 0.3 MI SE FOUR CORNERS, NEAR NEWMARKET, NH (LAT 43 03 37 LONG 070 58 00)				
SEP , 1978				
06	--	.05	17.0	90
01073547 - PISCASSIC RIVER TRIBUTARY, NEWMARKET RD, NEAR NEWMARKET, NH (LAT 43 03 52 LONG 070 58 02)				
SEP , 1978				
06...	--	*0	17.5	95
01073548 - PISCASSIC RIVER NEAR NEWMARKET, NH (LAT 43 04 08 LONG 070 57 44)				
SEP , 1978				
06...	--	.16	18.0	105
01073549 - PISCASSIC RIVER, LEE HOOK RD, NEAR NEWMARKET, NH (LAT 43 04 31 LONG 070 57 14)				
SEP , 1978				
06	--	*0	21.5	137
01073550 - PISCASSIC RIVER, PACKERS FALLS RD, AT NEWMARKET, NH (LAT 43 04 56 LONG 070 56 56)				
SEP , 1978				
06...	--	*0	18.0	150
01073600 - DUDLEY BROOK NEAR EXETER, NH (LAT 42 59 37 LONG 071 01 24)				
JUN , 1978				
19...	1200	21.0	.59	178
JUL				
06...	--	19.0	.19	--
31...	1250	19.0	.09	--
SEP , 1978				
25...	1215	13.0	.04	--
MERRIMACK RIVER BASIN				
01075000 - PEMIGEWASSET RIVER AT WOODSTOCK, NH (LAT 43 58 34 LONG 071 40 48)				
APR , 1978				
27...	1000	7.0	1570	--
MAY				
10...	1115	4.5	4940	22
JUN				
22...	1015	14.0	746	35
AUG , 1978				
11...	1220	21.0	104	57
SEP				
25...	0925	13.0	64	68
01075800 - STEVENS BROOK NEAR WENTWORTH, NH (LAT 43 50 12 LONG 071 53 07)				
OCT , 1977				
03...	1120	10.5	7.0	--
NOV				
14...	1120	3.0	2.8	--
DEC				
20...	0955	1.0	3.2	--
FEB , 1978				
08...	1115	1.0	3.8	--
MAR				
20...	1040	1.0	2.3	--
MAY , 1978				
04...	1035	3.5	5.4	22
JUN				
16...	1000	10.0	3.4	25
AUG				
02...	1130	16.0	.10	45
SEP				
20...	0945	13.0	.04	58
01076000 - BAKER RIVER NEAR RUMNEY, NH (LAT 43 47 46 LONG 071 50 42)				
OCT , 1977				
04...	1230	11.0	385	--
APR , 1978				
26...	1045	7.5	985	--
MAY				
04...	1130	6.0	522	35
JUN , 1978				
16...	1130	12.0	324	40
AUG				
10...	1420	24.0	37	52

*PONDED

MISCELLANEOUS TEMPERATURE AND SPECIFIC CONDUCTANCE MEASUREMENTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

MERRIMACK RIVER BASIN--CONTINUED

01076500 - PEMIGEWASSET RIVER AT PLYMOUTH, NH (LAT 43 45 33 LONG 071 41 10)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	
OCT , 1977					
19...	1150	10.5	3470	--	
APR , 1978					
26...	1150	5.0	5210	--	
MAY					
22...	1110	10.0	3620	--	
JUN					
05...	0915	16.0	2500	34	
JUN , 1978					
21...	1110	18.5	1900	45	
AUG					
23...	1110	20.0	123	75	
SEP					
21...	1050	16.5	142	70	

01077000 - SQUAM RIVER AT ASHLAND, NH (LAT 43 42 19 LONG 071 37 49)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	
NOV , 1977					
21...	1305	6.0	113	--	
MAR , 1978					
22...	1200	2.0	58	--	
JUN					
22...	1240	21.0	107	40	
JUL , 1978					
10...	1410	26.0	3.1	40	
SEP					
20...	1400	18.0	58	40	

01078000 - SMITH RIVER NEAR BRISTOL, NH (LAT 43 34 04 LONG 071 44 54)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	
OCT , 1977					
04...	1040	11.5	173	--	
DEC					
20...	1330	.0	128	--	
FEB , 1978					
08...	1315	1.0	114	--	
MAR					
20...	1245	.5	93	--	
JUN , 1978					
05...	1115	16.0	346	32	
16...	1300	16.0	115	45	
AUG					
10...	1115	21.0	25	21	
SEP					
20...	1200	13.5	12	62	

01081000 - WINNIPESAUKEE RIVER AT TILTON, NH (LAT 43 26 31 LONG 071 35 20)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	
OCT , 1977					
11...	0930	12.5	789	--	
NOV					
15...	1015	5.5	520	--	
JAN , 1978					
05...	1025	1.0	1470	--	
MAR					
24...	1000	25.0	452	--	
MAY , 1978					
10...	1450	12.0	649	54	
JUN					
19...	0910	19.0	450	60	
AUG					
15...	1015	24.0	314	60	
SEP					
25...	1220	18.0	297	72	

01081500 - MERRIMACK RIVER AT FRANKLIN JUNCTION, NH (LAT 43 25 26 LONG 071 39 12)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	
JUN , 1978					
19...	1155	18.0	2040	48	
SEP , 1978					
26...	0840	16.0	586	72	

01083000 - NUBANUSIT BROOK NEAR PETERBOROUGH, NH (LAT 42 53 10 LONG 071 58 24)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	
OCT , 1977					
05...	1120	12.0	137	--	
APR , 1978					
27...	1045	10.5	145	39	
JUN , 1978					
07...	1040	19.0	43	--	
AUG					
16...	1100	25.0	12	45	

01085500 - CONTOOCOOK R BL HOPKINTON DAM AT W HOPKINTON, NH (LAT 43 11 31 LONG 071 44 51)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	
OCT , 1977					
05...	1340	12.0	797	--	
JAN , 1978					
09...	1410	.0	1200	--	
FEB					
15...	1440	.0	726	--	
MAR					
29...	1450	1.0	2200	--	
JUN , 1978					
19...	1315	20.0	336	56	
JUL					
11...	0840	25.0	47	93	
AUG					
10...	1005	24.0	158	71	
SEP					
19...	1025	16.0	122	--	

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

MERRIMACK RIVER BASIN--CONTINUED

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
01085800 - WEST BRANCH WARNER RIVER NEAR BRADFORD, NH (LAT 43 15 33 LONG 072 01 35)									
OCT , 1977					MAY , 1978				
05...	1100	10.0	6.6	--	05...	0930	7.5	11	24
NOV					JUN				
16...	1100	10.0	8.6	--	15...	0900	12.0	3.6	35
DEC					JUL				
19...	0905	1.0	8.9	--	12...	1145	12.0	.20	--
FEB , 1978					AUG				
06...	0910	1.0	9.0	--	24...	1145	17.0	.30	40
MAR					SEP				
21...	0920	1.0	6.9	--	15...	0900	13.0	.40	42
01086000 - WARNER RIVER AT DAVISVILLE, NH (LAT 43 15 06 LONG 071 43 54)									
DEC , 1977					AUG , 1978				
01...	1340	1.0	484	--	07...	1430	21.0	50	77
MAR , 1978					SEP				
28...	1345	.0	685	--	18...	1405	15.0	8.4	--
JUN									
27...	1245	20.0	74	81					
01087000 - BLACKWATER RIVER NEAR WEBSTER, NH (LAT 43 17 45 LONG 071 41 46)									
OCT , 1977					JUN , 1978				
05...	0940	--	248	--	27...	1040	20.0	128	45
MAR , 1978					SEP				
28...	1045	1.0	321	53	18...	1200	15.0	716	38
01088000 - CONTOOCOOK RIVER AT PENACOOK, NH (LAT 43 17 12 LONG 071 35 56)									
AUG , 1978									
24...	1345	22.0	140	67					
01089000 - SOUCOOK RIVER NEAR CONCORD, NH (LAT 43 14 22 LONG 071 27 44)									
AUG , 1978									
01...	1345	17.0	8.7	--					
01090800 - PISCATAQUOG RIVER BL EVERETT DAM, NR E WEARE, NH (LAT 43 05 29 LONG 071 39 36)									
OCT , 1977					JUN , 1978				
05...	1430	15.0	71	--	15...	1355	20.0	50	42
DEC					AUG				
19...	1255	3.0	167	--	09...	1115	25.0	12	50
MAR , 1978					SEP				
21...	1500	.5	93	--	15...	1110	17.0	3.9	50
01091000 - S BRANCH PISCATAQUOG RIVER NEAR GOFFSTOWN, NH (LAT 43 00 49 LONG 071 38 31)									
OCT , 1977					JUN , 1978				
04...	0935	13.0	170	--	20...	1205	19.0	391	42
MAR , 1978					AUG				
29...	1035	1.0	779	40	10...	1230	24.0	21	55
01091500 - PISCATAQUOG RIVER NEAR GOFFSTOWN, NH (LAT 43 00 58 LONG 071 33 03)									
OCT , 1977					JUL , 1978				
04...	1250	13.0	307	--	11...	1400	25.0	42	60
01093800 - STONY BROOK TRIBUTARY NEAR TEMPLE, NH (LAT 42 51 36 LONG 071 50 00)									
OCT , 1977					MAY , 1978				
07...	1130	10.0	1.5	--	05...	1235	6.0	5.7	24
NOV					JUN				
16...	1240	4.0	6.0	--	15...	1040	12.0	1.9	22
DEC					JUL				
19...	1200	2.0	9.1	--	10...	1325	17.0	.70	--
FEB , 1978					AUG				
06...	1245	1.0	4.9	--	16...	1015	23.0	.30	30
MAR					SEP				
21...	1230	2.0	4.3	--	15...	1330	14.0	.30	30

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
CONNECTICUT RIVER BASIN									
01127880 - BIG BROOK NEAR PITTSBURG, NH (LAT 45 08 06 LONG 071 12 23)									
JAN , 1978					MAY , 1978				
04...	1600	.0	2.9	--	16...	1010	7.0	69	26
FEB					JUN				
22...	1620	.0	3.6	--	29...	0900	13.5	9.2	40
APR					AUG				
04...	1535	9.5	5.5	--	14...	1550	18.0	1.7	53
01128500 - CONNECTICUT R AT FIRST CONN LK NR PITTSBURG, NH (LAT 45 05 14 LONG 071 17 34)									
JUN , 1978									
29...	1000	14.0	101	32					
01129200 - CONNECTICUT BL INDIAN STREAM NR PITTSBURG, NH (LAT 45 02 25 LONG 071 26 37)									
APR , 1978					AUG , 1978				
05...	0845	.0	150	--	15...	1030	14.0	271	37
01129300 - HALLS STREAM NEAR EAST HEREFORD, QUEBEC (LAT 45 02 41 LONG 071 29 54)									
NOV , 1977					AUG , 1978				
15...	1320	.0	103	--	14...	1340	17.0	8.9	180
APR , 1978									
05...	1045	.0	155	--					
01129500 - CONNECTICUT RIVER AT NORTH STRATFORD, NH (LAT 44 44 56 LONG 071 37 50)									
MAY , 1978					AUG , 1978				
15...	1630	9.5	3430	43	14...	1050	18.0	389	64
01130000 - UPPER AMMONOOSUC RIVER NEAR GROVETON, NH (LAT 44 37 30 LONG 071 28 10)									
FEB , 1978					AUG , 1978				
22...	1035	.0	77	--	14...	0900	19.0	121	46
APR					SEP				
04...	1155	.0	409	30	29...	0815	7.0	72	57
MAY									
15...	1320	8.0	2630	21					
01131500 - CONNECTICUT RIVER NEAR DALTON, NH (LAT 44 24 36 LONG 071 43 16)									
NOV , 1977					AUG , 1978				
17...	1115	5.0	3780	--	01...	1320	21.0	1020	--
MAY , 1978									
08...	1115	7.0	10000	34					
01133000 - EAST BRANCH PASSUMPSIC RIVER NEAR EAST HAVEN, VT (LAT 44 38 02 LONG 071 53 53)									
OCT , 1977					JUN , 1978				
19...	1345	8.5	199	--	14...	1415	11.5	264	70
JAN , 1978									
12...	1045	.0	190	--					
01134500 - MOOSE RIVER AT VICTORY, VT (LAT 44 30 42 LONG 072 50 13)									
NOV , 1977					JUN , 1978				
15...	--	--	190	--	26...	1630	17.5	76	35
01135000 - MOOSE RIVER AT ST. JOHNSBURY, VT (LAT 44 25 22 LONG 072 00 02)									
DEC , 1977					JUN , 1978				
12...	1305	.0	101	--	27...	0930	19.0	100	--
JAN , 1978					SEP				
12...	1515	.0	347	--	01...	1235	19.5	26	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

CONNECTICUT RIVER BASIN--CONTINUED

01135500 - PASSUMPSIC RIVER AT PASSUMPSIC, VT (LAT 44 21 56 LONG 072 02 23)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
SEP , 1978				
21...	1130	15.0	102	--

01137500 - AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, NH (LAT 44 16 08 LONG 071 37 52)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
OCT , 1977				
12...	1235	8.0	331	--
JAN , 1978				
04...	1240	1.0	71	--
FEB				
10...	1250	2.0	124	--
MAR , 1978				
23...	1215	1.0	164	--
JUN				
20...	1210	14.0	454	30
SEP				
19...	1220	13.5	35	55

01139000 - WELLS RIVER AT WELLS RIVER, VT (LAT 44 09 03 LONG 072 03 55)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
JUL , 1978				
24...	1700	--	46	120
AUG				
02...	1145	17.0	37	--
AUG , 1978				
31...	1325	18.0	26	--

01139800 - EAST ORANGE BRANCH AT EAST ORANGE, VT (LAT 44 05 34 LONG 072 20 10)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
OCT , 1977				
14...	0800	--	10	20
NOV				
23...	0900	4.5	14	75
FEB , 1978				
16...	1400	--	12	--
APR				
03...	1100	.5	16	100
JUN , 1978				
08...	1100	22.0	54	--
JUL				
11...	1300	16.0	4.5	80
AUG				
17...	1000	17.0	3.9	--
SEP				
21...	1400	16.0	1.2	90

01141500 - OMPOMPANOOSUC RIVER AT UNION VILLAGE, VT (LAT 43 47 23 LONG 072 15 19)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
NOV , 1977				
25...	1100	--	261	110
JAN , 1978				
06...	1000	.0	158	90
APR				
03...	0900	.5	375	50
JUL , 1978				
11...	1100	19.0	36	--
SEP				
21...	1600	16.0	15	--
22...	1400	16.0	15	--

01141800 - MINK BROOK NEAR ETNA, NH (LAT 43 42 08 LONG 072 11 15)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
OCT , 1977				
17...	1100	9.5	74	50
APR , 1978				
07...	1100	.5	14	40
JUL				
11...	1500	25.0	.14	80
AUG , 1978				
25...	0800	13.0	.60	40
SEP				
22...	1000	14.0	.16	50

01142500 - AYERS BROOK AT RANDOLPH, VT (LAT 43 56 04 LONG 072 39 30)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
NOV , 1977				
23...	1400	4.5	50	75
APR , 1978				
03...	1400	.5	106	85
JUN				
09...	1100	20.0	49	110
JUL , 1978				
12...	1000	16.5	9.8	--
AUG				
25...	1455	17.0	19	90
SEP				
20...	1500	13.5	7.4	--

01144000 - WHITE RIVER AT WEST HARTFORD, VT (LAT 43 42 51 LONG 072 25 07)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
OCT , 1977				
22...	1000	8.5	591	135
NOV				
27...	1500	.0	353	100
DEC				
27...	1200	.0	444	100
JAN , 1978				
26...	1000	.0	896	100
APR , 1978				
26...	1100	6.0	4150	120
JUL				
17...	0900	23.0	254	130
AUG				
28...	1230	19.0	530	125

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

CONNECTICUT RIVER BASIN--CONTINUED

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
01145000 - MASCOMA RIVER AT WEST CANAAN, NH (LAT 43 39 00 LONG 072 04 50)				
JUL , 1978				
24...	1300	--	20	58
01150500 - MASCOMA RIVER AT MASCOMA, NH (LAT 43 39 01 LONG 072 11 05)				
AUG , 1978				
02...	1430	23.5	24	--
01151500 - OTTAUQUECHEE RIVER AT NORTH HARTLAND, VT (LAT 43 36 09 LONG 072 21 17)				
OCT , 1977				
14...	1600	--	469	50
DEC				
05...	1100	1.0	397	60
FEB , 1978				
13...	1600	.0	356	--
APR , 1978				
07...	1345	1.5	1190	100
JUL				
21...	1300	23.0	78	--
SEP				
22...	1300	16.0	60	--
01152500 - SUGAR RIVER AT WEST CLAREMONT, NH (LAT 43 23 15 LONG 072 21 45)				
JUN , 1978				
23...	1040	19.0	164	--
AUG , 1978				
15...	1125	24.5	85	172
01152800 - BLACK R AT COVERED BRIDGE, AT WEATHERSFIELD, VT (LAT 43 23 55 LONG 072 31 14)				
OCT , 1977				
17...	1530	--	4040	--
27...	1315	14.0	--	100
NOV				
30...	1500	2.0	223	--
FEB , 1978				
01...	1215	.0	277	--
MAR				
20...	1300	--	.50	--
MAY				
23...	1340	16.0	--	125
30...	1120	19.0	281	63
JUN , 1978				
27...	1310	24.0	--	130
JUL				
18...	1205	21.0	182	85
19...	1345	28.0	--	105
AUG				
15...	1300	25.5	85	100
29...	1255	19.0	--	120
SEP				
25...	1220	13.5	39	151
26...	1255	10.0	--	125
01153000 - BLACK RIVER AT NORTH SPRINGFIELD, VT (LAT 43 20 00 LONG 072 30 55)				
OCT , 1977				
27...	1105	12.0	--	75
FEB , 1978				
06...	1210	.0	284	--
MAR				
20...	1430	8.0	229	--
MAY				
23...	1220	19.0	--	80
JUN				
27...	1130	23.0	--	130
JUL , 1978				
19...	1100	25.0	--	130
AUG				
01...	1425	20.0	74	117
11...	1200	25.0	55	--
29...	1100	20.0	--	140
SEP				
26...	1100	13.0	--	145
01153500 - WILLIAMS RIVER AT BROCKWAYS MILLS, VT (LAT 43 12 31 LONG 072 31 05)				
JAN , 1978				
03...	1535	.5	159	--
MAR				
20...	1700	1.5	141	--
MAY				
30...	1445	24.0	90	70
AUG , 1978				
01...	1540	18.0	36	114
SEP				
25...	1430	16.5	15	132
01154000 - SAXTONS RIVER AT SAXTONS RIVER, VT (LAT 43 08 14 LONG 072 29 17)				
NOV , 1977				
30...	1030	1.5	143	--
JAN , 1978				
04...	1015	.0	81	--
MAR				
21...	1400	2.0	96	--
APR				
25...	0945	4.5	412	41
MAY				
31...	0925	19.0	55	72
JUN , 1978				
20...	1200	18.0	80	--
JUL				
21...	1220	27.0	14	100
AUG				
01...	1340	18.0	17	107
29...	1450	22.0	22	94
SEP				
25...	1530	14.5	12	88

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
CONNECTICUT RIVER BASIN--CONTINUED				
01155000 - COLD RIVER AT DREWSVILLE, NH (LAT 43 07 54 LONG 072 23 23)				
NOV , 1977				
29...	1530	2.5	158	--
MAR , 1978				
21...	0930	.5	85	--
MAY				
31...	0745	18.0	43	--
JUN				
20...	0830	17.0	75	60
JUL , 1978				
21...	1415	28.0	12	--
AUG				
29...	1545	19.0	12	82
SEP				
27...	0910	10.0	11	78
01155500 - WEST RIVER AT JAMAICA, VT (LAT 43 06 32 LONG 072 46 33)				
MAR , 1978				
22...	1000	.5	495	--
JUN				
21...	0830	17.0	111	--
AUG , 1978				
02...	0935	19.0	79	68
SEP				
26...	1010	11.0	38	58
01156000 - WEST RIVER AT NEWFANE, VT (LAT 42 59 43 LONG 072 38 13)				
JAN , 1978				
05...	1310	.0	472	--
MAR				
22...	1200	1.0	618	--
JUN				
01...	0940	19.5	303	48
21...	1300	20.0	198	--
AUG , 1978				
30...	1100	19.0	113	61
SEP				
26...	1220	14.5	61	67
01157000 - ASHUELOT RIVER NEAR GILSUM, NH (LAT 43 02 21 LONG 072 16 14)				
NOV , 1977				
29...	1100	2.0	243	--
APR , 1978				
26...	1440	9.0	420	28
JUN				
02...	1325	22.5	55	34
JUN , 1978				
22...	1000	21.0	37	--
SEP				
07...	1130	20.0	7.3	--
01158000 - ASHUELOT RIVER BL SURRY MT DAM, NR KEENE, NH (LAT 42 59 40 LONG 072 18 40)				
FEB , 1978				
08...	1100	1.0	131	--
JUN				
01...	1205	25.5	75	--
AUG , 1978				
03...	1300	18.5	9.0	47
SEP				
27...	1240	16.5	9.7	52
01158600 - OTTER BROOK BELOW OTTER BROOK DAM, NR KEENE, NH (LAT 42 56 45 LONG 072 14 14)				
JAN , 1978				
06...	0945	1.0	60	--
FEB				
08...	1430	.5	71	--
MAR				
23...	1000	1.0	103	--
JUN , 1978				
02...	1155	21.0	27	38
AUG				
03...	1050	21.0	5.7	50
SEP				
07...	1005	21.0	4.0	48
01160000 - S BR ASHUELOT RIVER AT WEBB, NR MARLBOROUGH, NH (LAT 42 52 20 LONG 072 12 51)				
OCT , 1977				
11...	1230	10.5	110	49
MAR , 1978				
23...	1400	1.5	100	--
MAY				
31...	1515	25.0	21	58
AUG , 1978				
02...	1330	19.5	4.5	86
30...	1530	22.0	3.5	83
SEP				
27...	1100	10.0	4.1	108
01161000 - ASHUELOT RIVER AT HINSDALE, NH (LAT 42 47 07 LONG 072 29 12)				
JAN , 1978				
04...	1345	1.0	621	--
FEB				
09...	1400	.0	758	--
MAR				
22...	1500	1.5	947	--
MAY				
31...	1235	24.0	326	86
AUG , 1978				
02...	1220	19.0	78	300
30...	1300	21.0	71	280
SEP				
26...	1405	15.5	67	152

MISCELLANEOUS TEMPERATURE AND SPECIFIC CONDUCTANCE MEASUREMENTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
HUDSON RIVER BASIN									
01329000 - BATTEN KILL AT ARLINGTON, VT (LAT 43 04 38 LONG 073 09 26)									
OCT , 1977					JUN , 1978				
19...	1200	7.5	1160	148	21...	1500	21.0	208	225
DEC					JUL				
20...	1400	2.5	440	--	20...	1200	21.0	108	250
MAR , 1978					AUG				
21...	1435	6.0	212	--	23...	0945	15.0	84	280
APR					SEP				
20...	0915	5.0	815	--	20...	1515	16.0	143	--
MAY									
22...	1630	15.0	427	155					
30...	1410	19.0	228	200					
01334000 - WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT (LAT 42 54 47 LONG 073 15 25)									
FEB , 1978					MAY , 1978				
01...	1100	.0	273	--	30...	1630	20.0	114	170
MAR					JUL				
13...	1620	5.0	130	--	10...	1430	22.0	56	245
APR					AUG				
17...	1530	6.0	364	--	21...	1500	22.0	42	289
ST. LAWRENCE RIVER BASIN									
04280000 - POULTNEY RIVER BELOW FAIR HAVEN, VT (LAT 43 37 40 LONG 073 18 50)									
NOV , 1977					AUG , 1978				
22...	1000	5.0	545	80	15...	1100	23.0	49	--
APR , 1978					SEP				
06...	1300	1.5	1200	65	25...	1100	16.0	17	50
04282000 - OTTER CREEK AT CENTER RUTLAND, VT (LAT 43 36 13 LONG 073 00 49)									
NOV , 1977					JUL , 1978				
22...	0900	5.0	557	90	13...	1000	17.5	150	--
APR , 1978					SEP				
06...	1000	1.5	1700	75	25...	0900	15.0	114	80
04282500 - OTTER CREEK AT MIDDLEBURY, VT (LAT 44 00 47 LONG 073 10 06)									
NOV , 1977					AUG , 1978				
22...	1300	5.5	1510	50	23...	1200	21.0	303	--
APR , 1978					SEP				
06...	1500	2.5	2960	70	25...	1300	15.0	145	100
JUL									
13...	1200	23.5	349	60					
04284000 - JAIL BRANCH AT EAST BARRE, VT (LAT 44 09 30 LONG 072 26 44)									
NOV , 1977					JUN , 1978				
23...	1100	4.5	40	100	12...	1200	20.0	34	90
JAN , 1978					AUG				
05...	1400	.0	26	85	17...	1300	22.0	4.9	--
FEB					SEP				
16...	1200	.0	39	90	20...	1000	12.0	5.1	90
APR					21...	1300	13.0	4.6	--
03...	1300	.5	76	100					
04285500 - NORTH BRANCH WINOOSKI RIVER AT WRIGHTSVILLE, VT (LAT 44 17 58 LONG 072 34 45)									
JAN , 1978					JUN , 1978				
05...	0800	.0	66	20	09...	1300	16.0	140	--
FEB					AUG				
14...	1300	.0	66	40	21...	1300	22.0	7.0	--
APR					SEP				
04...	1300	10.0	215	60	21...	0900	15.0	7.8	50

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

ST. LAWRENCE RIVER BASIN--CONTINUED

04286000 - WINOOSKI RIVER AT MONTPELIER, VT (LAT 44 15 23 LONG 072 35 36)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
OCT , 1977				
04...	1400	10.0	1290	110
NOV				
16...	1400	--	562	90
JAN , 1978				
05...	1200	.0	316	--
FEB				
16...	0900	.0	413	--
APR , 1978				
04...	1100	1.0	828	80
JUN				
12...	1300	22.0	325	--
JUL				
19...	1500	26.0	150	70
SEP				
21...	1000	16.0	98	--

04287000 - DOG RIVER AT NORTHFIELD FALLS, VT (LAT 44 10 58 LONG 072 38 27)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
DEC , 1977				
22...	1300	.5	97	50
FEB , 1978				
14...	0900	.0	100	75
APR				
14...	1000	.5	207	110
AUG , 1978				
25...	1200	14.0	33	--
SEP				
21...	1100	16.0	10	60

04288000 - MAD RIVER NEAR MORETOWN, VT (LAT 44 16 42 LONG 072 44 37)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
OCT , 1977				
05...	1200	10.0	450	45
NOV				
17...	1500	6.5	419	60
DEC				
22...	1200	.0	211	100
APR , 1978				
04...	1400	1.0	428	50
JUN , 1978				
12...	1500	15.0	139	--
AUG				
01...	1200	19.0	54	70
SEP				
19...	1500	16.0	35	--

04289000 - LITTLE RIVER NEAR WATERBURY, VT (LAT 44 22 12 LONG 072 46 11)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
JUL , 1978				
12...	1400	26.0	13	70

04290500 - WINOOSKI RIVER NEAR ESSEX JUNCTION, VT (LAT 44 28 44 LONG 073 08 21)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
MAY , 1978				
24...	1100	18.0	1990	92
JUL				
31...	1500	25.0	156	100
SEP , 1978				
27...	1230	15.0	140	--
27...	1330	15.0	89	--
27...	1400	15.0	77	--

04292000 - LAMOILLE RIVER AT JOHNSON, VT (LAT 44 37 22 LONG 072 40 50)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
JAN , 1978				
03...	1300	.0	354	50
FEB				
15...	1200	.0	513	100
JUL , 1978				
17...	1600	24.0	337	--
SEP				
19...	1000	16.0	90	90

04292500 - LAMOILLE RIVER AT EAST GEORGIA, VT (LAT 44 40 45 LONG 073 04 23)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
NOV , 1977				
21...	1500	6.0	1860	50
JUL , 1978				
18...	1030	25.0	594	90
SEP , 1978				
18...	1500	16.0	275	100

04293000 - MISSISQUOI RIVER NEAR NORTH TROY, VT (LAT 44 58 22 LONG 072 23 15)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
OCT , 1977				
19...	1715	8.5	656	--
DEC				
22...	0905	.0	181	--
JUN , 1978				
27...	1635	19.0	169	--
AUG				
23...	1500	20.0	25	--

04293500 - MISSISQUOI RIVER NEAR EAST BERKSHIRE, VT (LAT 44 57 30 LONG 072 41 55)

DATE	TIME	TEMPERATURE (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)
DEC , 1977				
21...	1600	.0	623	--
JUN , 1978				
13...	1200	18.5	441	80
14...	0955	12.5	2400	--
JUN , 1978				
16...	0820	13.0	1430	--
AUG				
23...	1130	20.0	75	--

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CHESHIRE COUNTY

425543072175801. Local number, KEW 2 (Formerly published as Keene 2).
LOCATION.--Lat 42°55'43", long 72°17'58", Hydrologic Unit 01080201, east side of State Highway 12, about 0.5 mi (0.8 km) north of State Highway 9, and 1.1 mi (1.8 km) southwest of the center of Keene.
Owner: New Hampshire Department of Public Works and Highways.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 2 in (0.05 m), depth 18 ft (5.5 m).
DATUM.--Altitude of land-surface datum is 475 ft (145 m). Measuring point: Top of casing, 4.5 ft (1.37 m) above land-surface datum.
PERIOD OF RECORD.--August 1963 to current year. Prior to January 1973, published in New Hampshire Hydrologic-Data Report No. 3.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.5 ft (0.15 m) below land-surface datum, Nov. 28, 1963; lowest measured, 6.23 ft (1.90 m) below land-surface datum, Sept. 27, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, JANUARY 1973 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 22, 1973	1.90	JUN 25, 1974	4.49	DEC 23, 1975	3.53	MAY 23, 1977	3.14
FEB 21	3.20	JUL 22	4.89	JAN 24, 1976	3.63	JUN 21	4.44
MAR 22	1.51	AUG 23	5.50	FEB 21	1.54	JUL 23	4.90
APR 24	3.25	SEP 25	4.06	MAR 23	1.89	AUG 22	5.00
MAY 22	1.86	OCT 21	3.51	APR 24	2.77	SEP 17	5.02
JUN 21	3.33	NOV 23	2.15	MAY 23	2.20	OCT 22	1.74
JUL 08	2.77	DEC 23	2.99	JUN 22	4.41	NOV 21	2.91
23	3.80	JAN 24, 1975	3.25	JUL 23	4.19	DEC 23	1.72
AUG 25	4.02	FEB 22	3.13	AUG 24	4.20	JAN 20, 1978	3.07
SEP 24	4.00	MAR 23	1.21	SEP 20	4.60	FEB 21	3.83
OCT 29	3.75	APR 22	2.58	OCT 22	3.18	MAR 22	1.39
NOV 26	3.52	MAY 26	3.94	NOV 21	3.82	APR 20	2.35
DEC 28	1.45	JUN 23	3.46	DEC 20	3.98	MAY 21	3.61
JAN 24, 1974	2.11	JUL 26	2.84	JAN 20, 1977	4.57	JUN 21	4.24
FEB 23	1.98	AUG 25	4.35	FEB 21	4.27	JUL 23	5.20
MAR 25	1.61	SEP 24	3.33	MAR 17	1.20	AUG 25	5.22
APR 24	2.57	OCT 20	0.57	23	1.18	SEP 21	5.22
MAY 23	3.32	NOV 26	1.85	APR 21	3.34		

425502072161001. Local number, KEW 35 (Formerly published as Keene 35).
LOCATION.--Lat 42°55'02", long 72°16'10", Hydrologic Unit 01080201, north side of State Highway 101, about 0.25 mi (0.40 km) east of Main Street, and 1.2 mi (1.9 km) southeast of the center of Keene.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 1.25 in (0.03 m), depth 40 ft (12.2 m).
DATUM.--Altitude of land-surface datum is 480 ft (146 m). Measuring point: Top of casing, 4.85 ft (1.48 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to April 1975 (discontinued). Prior to January 1973, published in New Hampshire Hydrologic-Data Report No. 3.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.94 ft (1.20 m) below land-surface datum, Apr. 26, 1972; lowest measured, 6.89 ft (2.10 m) below land-surface datum, Aug. 25, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, NOVEMBER 1966 TO APRIL 1975

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 17,1966	5.75	JUN 25,1968	5.17	MAR 25,1970	4.51	DEC 27,1971	5.37
25	5.65	JUL 25	5.88	APR 24	4.38	JAN 27,1972	5.43
DEC 28	6.18	AUG 26	6.33	MAY 25	4.64	FEB 25	5.64
JAN 27,1967	5.85	SEP 24	6.62	JUN 24	5.70	MAR 28	4.39
FEB 27	5.83	OCT 28	6.42	JUL 27	6.43	APR 26	3.94
MAR 14	6.09	NOV 22	6.00	AUG 27	6.57	MAY 25	4.60
30	4.54	DEC 29	5.65	SEP 25	6.16	JUN 28	5.25
APR 27	4.31	JAN 24,1969	5.62	OCT 27	6.06	JUL 26	5.50
MAY 23	4.87	FEB 28	5.64	NOV 24	5.86	OCT 23	6.35
JUN 26	5.06	MAR 25	5.23	DEC 28	6.03	JAN 22,1973	4.69
JUL 31	5.27	APR 24	4.80	JAN 25,1971	6.18	APR 24	4.90
AUG 28	5.53	MAY 23	4.57	FEB 24	5.63	JUL 28	4.84
SEP 28	6.18	JUN 24	4.65	MAR 25	4.54	AUG 23	5.57
OCT 25	6.08	JUL 28	4.92	APR 27	4.67	OCT 23	6.71
NOV 27	5.71	AUG 25	5.94	MAY 24	5.00	JAN 24,1974	4.80
DEC 27	5.23	SEP 25	5.99	JUN 25	6.10	APR 24	4.57
JAN 26,1968	5.68	OCT 27	6.05	JUL 27	6.50	JUL 22	6.46
FEB 26	5.87	NOV 24	4.92	AUG 25	6.89	OCT 21	5.80
MAR 26	4.30	DEC 31	5.32	SEP 27	6.59	APR 22,1975	4.39
APR 26	5.15	JAN 26,1970	5.69	OCT 27	6.33		
MAY 24	5.09	FEB 20	4.17	NOV 26	6.28		

COOS COUNTY

444733071094901. Local number, ETW 1.
LOCATION.--Lat 44°47'33", long 71°09'49", Hydrologic Unit 01040001, southwest side of State Highway 26, 1.8 mi (2.9 km) northwest of the center of Errol.
Owner: U.S. Geological Survey.
AQUIFER.--Very fine sand and silt of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 1.25 in (0.03 m), depth 30 ft (9.14 m).
DATUM.--Altitude of land-surface datum is 1,245 ft (379 m). Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.4 ft (2.87 m) below land-surface datum, May 22, 1969; lowest measured, 14.1 ft (4.30 m) below land-surface datum, Feb. 22, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, NOVEMBER 1966 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 29,1966	12.75	JUN 23,1970	11.3	FEB 19,1973	12.2	NOV 24,1975	12.3
MAY 02,1967	11.34	JUL 22	11.5	MAR 27	11.4	DEC 26	13.2
AUG 07	12.13	AUG 24	12.1	APR 23	10.3	JAN 28,1976	13.3
NOV 24	13.31	SEP 23	12.1	JUN 23	11.3	FEB 21	13.5
DEC 25	12.7	OCT 24	12.4	JUL 22	12.2	MAR 22	12.6
JAN 26,1968	12.4	NOV 22	12.4	AUG 24	11.7	APR 22	10.6
FEB 25	12.6	DEC 26	12.6	SEP 24	12.0	MAY 29	11.0
MAR 24	11.4	JAN 24,1971	13.0	OCT 22	12.0	JUN 25	11.7
MAY 01	11.1	FEB 22	12.7	NOV 24	12.4	JUL 24	11.7
26	11.4	MAR 22	12.6	DEC 24	11.1	AUG 23	12.1
JUN 23	12.0	APR 22	11.5	JAN 26,1974	12.1	SEP 21	11.9
JUL 26	11.8	MAY 21	10.2	FEB 23	12.6	OCT 21	12.2
AUG 25	11.9	JUN 23	11.5	MAR 02	11.3	NOV 20	11.6
SEP 27	12.5	JUL 24	11.9	APR 25	10.5	DEC 18	12.6
OCT 27	12.6	AUG 21	12.3	MAY 22	11.1	JAN 21,1977	13.1
NOV 22	12.7	SEP 21	12.4	JUN 22	11.6	FEB 25	13.3
JAN 21,1969	12.7	OCT 23	12.5	JUL 20	11.8	MAR 19	13.2
FEB 22	12.8	NOV 24	13.0	AUG 26	12.1	APR 22	11.3
MAR 24	12.6	DEC 21	12.7	SEP 26	12.4	MAY 23	11.9
APR 23	11.4	JAN 22,1972	12.7	OCT 19	12.8	JUN 25	12.1
MAY 22	9.4	FEB 21	12.7	NOV 23	13.5	JUL 23	12.3
JUN 26	10.4	MAR 20	12.7	DEC 23	13.6	AUG 22	12.2
JUL 28	11.0	APR 22	11.8	JAN 20,1975	13.8	SEP 22	12.4
AUG 25	11.4	JUN 20	10.8	FEB 22	14.1	OCT 25	11.1
SEP 23	11.9	JUL 24	11.3	MAR 24	14.0	JAN 20,1978	12.7
OCT 23	12.1	AUG 22	11.7	APR 25	12.7	FEB 20	12.8
NOV 26	11.6	SEP 22	12.25	MAY 26	11.6	MAR 20	12.6
DEC 22	11.8	23	12.2	JUN 23	11.8	APR 19	12.5
JAN 24,1970	11.9	OCT 21	12.5	JUL 23	12.1	JUN 22	10.3
MAR 23	11.9	NOV 24	12.6	AUG 25	12.6	JUL 21	11.0
APR 21	10.8	DEC 24	12.5	SEP 22	12.5	AUG 25	11.8
MAY 19	10.4	JAN 20,1973	12.6	OCT 22	12.3	SEP 23	12.4

442830071321001. Local number, LCW 1.
LOCATION.--Lat 44°28'30", long 71°32'10", Hydrologic Unit 01080101, in gravel pit about 1,100 ft (335 m) southwest of Middle Street, 2.2 mi (3.5 km) southeast of U.S. Highway 3, and 2.0 mi (3.2 km) southeast of the center of Lancaster.
Owner: Town of Lancaster.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Driven, unused water-table well, diameter 2.5 in (0.06 m), depth 30 ft (9 m).
DATUM.--Altitude of land-surface datum is 940 ft (287 m). Measuring point: Top of casing, 1.0 ft (0.30 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, flowing at 1.0 ft (0.30 m) above land-surface datum, April 1970, Apr. 28, 1972; lowest measured, 6.93 ft (2.11 m) below land-surface datum, July 24, 1970.

WATER LEVEL, IN FEET ABOVE OR BELOW(-) LAND-SURFACE DATUM, NOVEMBER 1966 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 28,1966	-2.28	JUL 24,1970	-6.93	FEB 23,1973	-1.47	JAN 24,1976	-1.51
AUG 08,1967	-2.61	AUG 21	-2.57	MAR 25	-0.68	MAR 25	-0.49
DEC 15	-0.91	SEP 26	-2.58	APR 21	-0.96	APR 22	-0.86
JAN 28,1968	-1.94	OCT 25	-1.97	MAY 24	-0.33	MAY 24	-0.98
FEB 24	-1.92	NOV 24	-2.05	JUN 19	-0.55	JUN 28	-1.48
MAR 25	0.46	JAN 03,1971	-1.77	AUG 24	-2.33	JUL 25	-1.90
APR 25	0.00	22	-1.68	SEP 25	-2.19	AUG 24	-1.90
MAY 27	-1.66	FEB 22	-1.48	OCT 24	-2.24	SEP 23	-1.95
JUN 23	-1.44	MAR 20	-0.76	NOV 24	-1.50	OCT 24	-1.77
JUL 26	-2.32	APR 22	0.41	JAN 25,1974	-1.96	NOV 23	-1.70
AUG 21	-2.23	MAY 21	-0.76	FEB 23	-1.48	DEC 16	-1.45
SEP 23	-2.65	JUN 28	-2.21	APR 22	-0.29	FEB 22,1977	-1.80
OCT 24	-2.49	JUL 22	-2.24	MAY 27	-0.13	MAR 23	-0.16
NOV 20	-2.05	AUG 25	-0.19	JUN 25	-1.94	APR 18	-0.50
DEC 26	-2.32	SEP 22	-2.06	JUL 21	-1.60	MAY 24	-1.79
JAN 23,1969	-1.30	OCT 23	-2.40	AUG 27	-2.22	JUN 23	-1.88
FEB 22	-1.39	NOV 20	-2.21	OCT 24	-1.82	JUL 27	-1.88
MAR 24	-0.80	DEC 24	-1.20	NOV 26	-2.52	AUG 25	-1.80
APR 25	0.70	JAN 24,1972	-1.40	DEC 27	-1.23	SEP 22	-1.44
MAY 21	0.73	FEB 24	-2.40	JAN 27,1975	-1.97	OCT 19	-1.37
JUN 26	-1.79	MAR 19	-1.58	FEB 23	-2.49	NOV 22	-0.98
JUL 28	-2.30	APR 28	F	MAR 24	-0.71	DEC 26	-0.99
AUG 23	-1.98	MAY 20	-0.26	APR 26	-0.64	JAN 25,1978	-0.70
SEP 24	-2.37	JUN 20	-1.74	MAY 25	-0.62	FEB 21	-0.95
OCT 26	-0.80	JUL 24	-2.04	JUN 25	-2.12	APR 06	-0.69
NOV 27	-1.50	AUG 23	-2.50	JUL 19	-2.12	21	-0.48
DEC 26	-2.48	SEP 24	-2.67	AUG 28	-2.12	MAY 26	-1.90
JAN 25,1970	-1.55	OCT 21	-2.57	SEP 24	-2.05	JUN 30	-0.69
APR a	F	NOV 27	-0.89	OCT 25	-1.06	JUL 22	-1.40
MAY 21	-0.69	DEC 23	-0.96	NOV a	-1.45	AUG 27	-2.20
JUN 26	-2.37	JAN 21,1973	-0.97	DEC 22	-1.11	SEP 25	-2.34

a, UNKNOWN.
F, FLOWING.

443423071114401. Local number, MNW 1.
LOCATION.--Lat 44°34'23", long 71°11'44", Hydrologic Unit 01040001, north side of State Highway 108, about 0.5 mi (0.8 km) west of State Highway 16, and 0.5 mi (0.8 km) west of Milan.
Owner: Mr. Wendell Sias.
AQUIFER.--Sandy till.
WELL CHARACTERISTICS.--Dug, unused well, dimensions 60 in (1.52 m) x 72 in (1.83 m), depth 12 ft (3.66 m), lined with concrete to 7 ft (2.13 m) and stone below 7 ft (2.13 m).
DATUM.--Altitude of land-surface datum is 1,230 ft (375 m). Measuring point: Top of concrete curb, 1 ft (0.30 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to July 1978 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.20 ft (0.37 m) below land-surface datum, Apr. 23, 1971; lowest measured, 7.30 ft (2.23 m) below land-surface datum, Sept. 24, 1968.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, NOVEMBER 1966 TO JULY 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 28,1966	3.70	MAY 25,1970	3.75	FEB 22,1973	5.50	SEP 24,1975	4.2
MAY 02,1967	3.28	JUN 30	4.00	MAR 24	5.50	OCT 22	3.9
AUG 07	4.11	JUL 24	5.80	APR 21	3.50	NOV 26	4.9
DEC 26	4.12	AUG a	7.00	MAY 26	3.49	JAN 24,1976	4.8
JAN 26,1968	4.66	SEP 24	7.00	JUN 21	3.90	FEB 23	4.1
FEB 25	4.71	OCT 25	4.35	JUL 07	3.90	MAR 24	4.7
MAR 28	3.49	NOV 24	4.35	24	5.50	APR 22	4.1
APR 26	3.05	DEC 23	4.71	AUG 28	5.45	MAY 26	4.9
MAY 27	4.12	JAN 24,1971	5.00	SEP 26	5.85	JUL 02	4.8
JUN 22	3.75	FEB 20	4.83	OCT 24	4.90	26	4.4
JUL 26	4.03	MAR 22	4.29	NOV 27	5.50	AUG 22	4.8
AUG 20	4.83	APR 23	1.20	DEC 26	4.60	SEP 22	4.6
SEP 24	7.30 R	MAY 23	3.90	JAN 28,1974	4.65	OCT 22	3.4
OCT 23	5.53	JUN 26	5.26	FEB 25	4.49	NOV 21	3.9
NOV 21	4.70	JUL a	7.00	MAR 29	4.65	DEC 27	4.4
DEC 26	4.31	AUG 23	5.70	APR 24	3.39	JAN 22,1977	4.7
JAN 27,1969	4.45	SEP 22	5.10	MAY 29	2.18	FEB 26	3.9
FEB 22	4.59	OCT 24	4.90	JUN 25	4.58	MAR 16	3.8
MAR 24	4.31	NOV 25	4.90	JUL 15	4.6	APR 24	3.9
APR 25	2.55	DEC 21	4.90	AUG 28	5.2	MAY 25	4.8
MAY 24	3.60	JAN 23,1972	4.85	SEP 26	4.8	JUN 24	4.4
JUN 25	4.02	MAR 21	4.36	OCT 24	4.3	AUG 24	4.0
JUL 29	4.75	APR 22	3.49	NOV 27	4.25	SEP 21	4.6
AUG 25	4.28	MAY 24	4.30	DEC 28	4.2	OCT 19	3.9
SEP 24	4.65	JUN 25	4.50	JAN 24,1975	4.1	NOV 20	4.5
OCT 27	4.20	JUL 25	5.20	FEB 25	4.2	DEC 27	4.6
NOV 27	3.55	AUG 30	6.35	MAR 31	3.8	JAN 21,1978	3.9
DEC 26	3.90	SEP 23	7.10	APR 30	4.1	MAR 22	4.1
JAN 26,1970	3.90	OCT 30	6.50	MAY 23	4.5	APR 20	2.9
FEB 21	3.94	NOV 26	5.55	JUN 21	4.7	MAY 18	3.6
MAR 25	3.80	DEC 26	5.11	JUL 18	3.9	JUN 20	3.6
APR 27	2.65	JAN 22,1973	4.59	AUG 26	4.9	JUL 25	4.7

a, UNKNOWN.
R, PUMPED RECENTLY.

HILLSBOROUGH COUNTY

(Formerly published as Hillsboro County)

425811071304001. Local number, BIW 1.
LOCATION.--Lat 42°58'11", long 71°30'40", Hydrologic Unit 01070002, 24 ft (7.3 m) southwest of edge of pavement of State Highway 114, about 0.85 mi (1.37 km) northwest of intersection of State Highway 101, and 1.7 mi (2.7 km) north of the center of Bedford.
Owner: New Hampshire Department of Public Works and Highways.
AQUIFER.--Fine sand of Pleistocene age.
WELL CHARACTERISTICS.--Driven, unused water-table well, diameter 2 in (0.05 m), depth 8.9 ft (2.71 m).
DATUM.--Altitude of land-surface datum is 255 ft (78 m). Measuring point: Top of casing, 3.1 ft (0.94 m) above land-surface datum.
PERIOD OF RECORD.--December 1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.68 ft (0.51 m) below land-surface datum, Mar. 21, 1969, Mar. 23, 1971; lowest measured, 7.73 ft (2.36 m) below land-surface datum, Feb. 25, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, DECEMBER 1965 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 22,1965	4.84	MAR 21,1969	1.68	DEC 02,1971	2.65	FEB 25,1975	6.99
30	4.70	APR 01	2.42	JAN 05,1972	3.35	MAR 31	6.58
JAN 07,1966	4.58	MAY 05	3.64	FEB 02	4.18	APR 28	6.85
FEB 11	4.57	23	3.83	MAR 01	4.21	MAY 28	6.93
15	3.67	28	3.87	MAY 02	3.15	JUN 25	6.88
MAR 04	3.15	JUN 20	3.92	31	3.51	JUL 29	6.53
10	3.10	JUL 22	4.25	JUL 07	3.45	AUG 27	7.01
16	3.35	AUG 01	3.00	AUG 17	4.05	SEP 30	6.80
22	2.85	08	2.68	SEP 11	4.29	OCT 28	6.89
APR 05	3.22	18	3.93	OCT 11	3.65	NOV 25	6.91
MAY 06	3.64	SEP 10	2.80	26	3.86	JAN 08,1976	6.76
JUN 02	3.70	11	2.99	NOV 28	2.25	FEB 11	6.93
JUL 12	5.00	22	3.98	DEC 26	3.05	MAR 24	6.85
AUG 09	5.42	OCT 09	4.13	JAN 26,1973	2.47	APR 29	7.02
SEP 21	5.09	NOV 06	2.78	FEB 26	3.19	MAY 26	7.43
FEB 16,1967	3.92	DEC 12	2.26	MAR 27	2.86	JUN 25	7.66
MAY 04	3.00	FEB 12,1970	2.03	APR 26	3.20	JUL 27	7.50
19	2.77	MAR 19	3.36	JUN 18	3.52	SEP 15	6.91
SEP 11	3.80	APR 20	3.46	JUL 26	4.65	OCT 27	7.00
25	4.36	MAY 05	3.52	AUG 27	4.14	DEC 17	6.94
NOV 01	4.01	20	2.19	SEP 27	4.93	JAN 24,1977	7.59
17	3.88	JUN 26	4.49	OCT 29	5.17	FEB 25	7.73
DEC 13	2.52	JUL 17	4.44	NOV 26	5.21	MAR 29	6.82
JAN 15,1968	4.08	AUG 10	4.85	DEC 26	4.07	MAY 26	6.78
MAR 19	2.51	24	4.73	JAN 28,1974	3.69	JUL 11	6.98
APR 17	3.14	SEP 21	4.15	FEB 26	4.09	AUG 25	7.15
MAY 01	3.15	30	4.20	MAR 27	5.37	OCT 03	6.61
28	3.43	NOV 18	2.98	APR 25	5.81	NOV 03	6.57
JUN 02	2.70	FEB 18,1971	3.00	MAY 28	5.88	DEC 05	6.72
SEP 12	4.45	MAR 23	1.68	JUN 26	6.24	JAN 09,1978	7.48
OCT 02	4.01	APR 29	3.15	JUL 29	6.50	FEB 13	7.57
DEC 05	1.78	JUN 02	3.90	AUG 26	6.89	MAR 14	6.23
JAN 21,1969	3.76	JUL 02	4.50	SEP 25	6.45	APR 25	6.78
30	3.36	AUG 02	3.99	OCT 29	6.11	MAY 26	7.02
FEB 11	3.63	31	4.80	NOV 25	6.42	JUL 17	5.77
MAR 03	3.25	OCT 05	4.61	DEC 23	6.39	AUG 28	6.84
14	3.10	30	3.83	JAN 31,1975	6.33	SEP 26	6.84

425811071304002. Local number, BIW 2.
LOCATION.--Lat 42°58'11", long 71°30'40", Hydrologic Unit 01070002, 49 ft (14.9 m) southwest of edge of pavement of State Highway 114, about 0.85 mi (1.37 km) northwest of intersection of State Highway 101, and 1.7 mi (2.7 km) north of the center of Bedford.
Owner: New Hampshire Department of Public Works and Highways.
AQUIFER.--Fine sand of Pleistocene age.
WELL CHARACTERISTICS.--Driven, unused water-table well, diameter 2 in (0.05 m), depth 9 ft (2.7 m).
DATUM.--Altitude of land-surface datum is 255 ft (78 m). Measuring point: Top of casing, 3.1 ft (0.94 m) above land-surface datum.
PERIOD OF RECORD.--December 1965 to May 1968; February 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.38 ft (0.42 m) below land-surface datum, Mar. 25, 1971; lowest measured, dry many times 1971-78.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, DECEMBER 1965 TO MAY 1968, FEBRUARY 1970 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 22,1965	5.37	MAR 19,1970	4.72	JUL 06,1973	3.90	NOV 25,1975	3.99
30	5.24	APR 20	4.73	26	5.35	JAN 08,1976	DRY
JAN 04,1966	5.11	MAY 05	4.70	AUG 27	DRY	FEB 11	DRY
FEB 11	5.08	20	3.36	SEP 27	DRY	MAR 24	3.96
15	4.39	JUN 26	5.68	OCT 29	DRY	APR 29	DRY
MAR 04	4.06	JUL 17	5.68	NOV 26	DRY	MAY 26	DRY
10	3.75	AUG 10	5.92	DEC 26	3.99	JUN 25	DRY
16	4.01	24	6.10	JAN 28,1974	3.81	JUL 27	DRY
22	3.40	FEB 23,1971	1.40	FEB 26	DRY	SEP 15	DRY
APR 05	3.80	MAR 25	1.38	MAR 27	3.48	OCT 27	DRY
MAY 06	4.05	JUN 02	3.90	APR 25	4.63	DEC 17	DRY
JUN 02	4.31	JUL 02	DRY	MAY 28	4.49	JAN 24,1977	DRY
JUL 12	5.70	AUG 02	4.60	JUN 28	DRY	FEB 25	DRY
AUG 09	6.15	31	DRY	JUL 29	DRY	MAR 29	3.56
SEP 21	5.70	OCT 05	4.80	AUG 26	DRY	MAY 26	DRY
FEB 15,1967	4.70	30	3.92	SEP 25	DRY	JUL 11	DRY
MAY 04	3.72	DEC 02	3.69	OCT 29	DRY	AUG 25	DRY
19	3.50	JAN 05,1972	4.33	NOV 25	DRY	OCT 03	DRY
SEP 14	4.45	MAR 01	DRY	DEC 23	3.90	NOV 03	DRY
25	5.12	MAY 02	4.60	JAN 31,1975	4.19	DEC 05	DRY
NOV 01	5.59	JUL 07	DRY	FEB 25	DRY	JAN 09,1978	DRY
17	4.61	AUG 17	DRY	MAR 31	3.93	FEB 13	DRY
DEC 13	3.33	SEP 11	DRY	APR 28	DRY	MAR 14	DRY
JAN 15,1968	4.48	DEC 26	4.30	MAY 28	DRY	APR 25	DRY
MAR 19	2.30	JAN 26,1973	3.08	JUN 25	DRY	MAY 26	DRY
APR 17	4.06	FEB 26	4.33	JUL 29	DRY	JUL 17	DRY
MAY 01	4.12	MAR 27	3.77	AUG 27	DRY	AUG 28	DRY
28	4.08	APR 27	4.78	SEP 30	4.02	SEP 26	DRY
FEB 12,1970	2.26	JUN 18	5.00	OCT 28	3.96		

425811071304003. Local number, BIW 3.
LOCATION.--Lat 42°58'11", long 70°30'40", Hydrologic Unit 01070002, 100 ft (30 m) southwest of edge of pavement of State Highway 114, about 0.85 m (1.37 km) northwest of intersection of State Highway 101, and 1.7 mi (2.7 km) north of the center of Bedford.
Owner: New Hampshire Department of Public Works and Highways.
AQUIFER.--Fine sand of Pleistocene age.
WELL CHARACTERISTICS.--Driven, unused water-table well, diameter 2 in (0.05 m), depth 9 ft (2.7 m).
DATUM.--Altitude of land-surface datum is 255 ft (78 m). Measuring point: Top of casing, 3.1 ft (0.94 m) above land-surface datum.
PERIOD OF RECORD.--December 1965 to May 1968; February 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.50 ft (0.76 m) below land-surface datum, Mar. 23, 1971; lowest measured, 8.73 ft (2.66 m) July 27, 1976, Jan. 24, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, DECEMBER 1965 TO MAY 1968, FEBRUARY 1970 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 22,1965	5.28	MAY 05,1970	4.23	FEB 26,1973	6.79	SEP 30,1975	8.23
30	5.06	20	2.84	MAR 27	5.92	OCT 28	8.45
JAN 04,1966	4.95	JUN 26	5.39	APR 26	6.43	NOV 25	8.52
FEB 11	4.69	JUL 17	5.33	JUN 18	6.18	JAN 08,1976	8.48
15	4.33	AUG 10	5.79	JUL 06	7.87	FEB 11	8.56
MAR 04	3.87	24	5.93	26	7.95	MAR 24	8.31
10	3.35	SEP 21	4.99	AUG 27	7.60	APR 29	8.52
16	3.62	30	5.07	SEP 27	7.81	MAY 26	8.63
22	3.23	NOV 18	3.41	OCT 29	7.97	JUN 25	8.60
APR 05	3.41	FEB 18,1971	4.10	NOV 26	7.90	JUL 27	8.73
MAY 06	3.65	MAR 23	2.50	DEC 26	7.49	SEP 15	8.64
JUN 02	3.95	JUN 02	4.69	JAN 28,1974	7.66	OCT 27	8.59
JUL 12	5.48	JUL 02	5.43	FEB 26	8.07	DEC 17	8.56
AUG 09	5.99	AUG 02	4.88	MAR 27	8.15	JAN 24,1977	8.73
SEP 21	5.63	31	5.79	APR 25	7.98	FEB 25	8.72
FEB 15,1967	4.30	OCT 05	5.67	MAY 28	7.95	MAR 29	8.54
MAY 04	3.22	30	4.55	JUN 26	8.35	MAY 26	8.53
19	3.00	DEC 02	3.27	JUL 29	8.30	JUL 11	8.43
SEP 11	4.22	JAN 05,1972	3.95	AUG 26	8.59	AUG 25	8.39
25	4.77	FEB 02	5.04	SEP 25	8.47	OCT 03	8.56
NOV 01	4.46	MAR 01	5.08	OCT 29	8.39	NOV 03	8.25
17	4.09	MAY 02	3.33	NOV 25	8.20	DEC 05	8.42
DEC 13	2.91	31	4.62	DEC 23	8.35	JAN 09,1978	8.23
JAN 15,1968	4.08	JUL 07	4.40	JAN 31,1975	8.15	FEB 13	8.58
MAR 19	3.29	AUG 17	4.57	FEB 25	8.55	MAR 14	8.19
APR 17	3.59	SEP 11	5.56	MAR 31	8.44	APR 25	8.27
MAY 01	3.69	OCT 11	5.90	APR 28	8.43	MAY 26	8.39
28	3.98	26	6.72	MAY 28	8.67	JUL 17	8.28
FEB 12,1970	2.61	NOV 28	5.52	JUN 25	8.57	AUG 28	8.51
MAR 19	4.27	DEC 26	5.90	JUL 29	8.57	SEP 26	8.56
APR 20	4.20	JAN 26,1973	6.18	AUG 27	8.60		

425303071283701. Local number, MKW 22 (Formerly published as Merrimack 22).
LOCATION.--Lat 42°53'03", long 71°28'37", Hydrologic Unit 01070002, north side of Damon Clinic on west side of U.S. Highway 3, about 400 ft (122 m) south of Bedford Road, in Reeds Ferry in Merrimack.
Owner: H. A. Damon.
AQUIFER.--Gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug, unused water-table well, diameter 36 in (0.91 m), depth 16.9 ft (5.15 m).
DATUM.--Altitude of land-surface datum is about 195 ft (59 m). Measuring point: Bottom rim of hand pump, 0.80 ft (0.24 m) above land-surface datum.
PERIOD OF RECORD.--November 1958 to current year. Prior to May 1966, published in New Hampshire Basic-Data Report No. 2, Ground-Water Series.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.96 ft (1.21 m) below land-surface datum, Mar. 30, 1962; lowest measured, 12.57 ft (3.83 m) below land-surface datum, Nov. 20, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MAY 1966 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 26,1966	7.13	MAY 23,1969	7.19	AUG 28,1972	9.66	SEP 26,1975	7.82
31	7.36	JUN 24	8.93	SEP 26	10.07	OCT 28	5.87
JUN 29	9.05	JUL 28	10.45	OCT 26	9.08	NOV 25	5.96
JUL 13	9.99	AUG 25	9.72	NOV 28	5.69	DEC 23	6.69
28	10.57	SEP a	9.66	DEC 26	6.67	JAN 26,1976	7.70
AUG 25	11.41	OCT 28	10.86	JAN 26,1973	5.95	FEB 24	5.47
SEP 28	9.68	NOV 25	6.84	FEB 26	6.81	MAR 24	5.57
OCT 25	7.97	DEC 29	5.44	MAR 27	5.88	APR 28	6.80
NOV 25	7.73	JAN 23,1970	7.05	APR 26	6.11	MAY 26	7.60
DEC 29	8.48	FEB 23	6.19	MAY 29	6.29	JUN 25	9.82
JAN 27,1967	7.87	MAR 26	6.32	JUN 26	7.85	JUL 26	10.39
FEB 07	8.45	APR 23	6.04	JUL 06	6.54	AUG 30	10.13
27	9.27	MAY 22	6.03	26	7.80	SEP 28	11.08
MAR 30	6.20	JUN 25	6.34	AUG 27	9.36	OCT 26	8.02
APR 28	5.17	JUL 28	10.11	SEP 27	10.55	NOV 26	8.99
MAY 24	5.78	AUG 25	10.45	OCT 29	11.33	DEC 22	9.01
JUN 26	5.83	SEP 24	10.49	NOV 26	10.71	JAN 21,1977	10.51
AUG 01	6.96	OCT 26	8.56	DEC 21	6.24	FEB 24	10.77
28	7.87	NOV 23	7.79	26	6.05	MAR 17	5.03
SEP 28	9.12	DEC 28	8.52	JAN 28,1974	5.72	29	4.62
OCT 26	8.50	JAN 25,1971	9.73	FEB 26	6.76	APR 26	5.15
NOV 24	7.87	FEB 23	8.04	MAR 27	5.63	MAY 26	6.36
DEC 27	6.31	MAR 25	5.52	APR 25	6.18	JUN 27	7.26
JAN 24,1968	7.62	APR 27	6.22	MAY 28	6.78	JUL 27	9.08
FEB 27	7.40	MAY 25	6.52	JUN 26	8.15	AUG 25	9.57
MAR 25	5.19	JUN 24	8.49	JUL 29	10.03	SEP 27	8.01
APR 25	5.96	JUL 27	10.14	AUG 26	11.30	OCT 25	6.26
MAY 27	6.10	AUG 26	11.28	SEP 25	8.98	NOV 25	6.76
JUN 25	7.02	SEP 27	11.24	OCT 29	8.77	DEC 27	5.94
JUL 24	7.95	OCT 27	10.14	NOV 25	7.86	JAN 23,1978	6.78
AUG 24	9.74	NOV 26	10.22	DEC 23	6.37	FEB 27	7.60
SEP 25	10.55	DEC 27	7.14	JAN 27,1975	6.32	MAR 24	6.08
OCT 28	10.90	JAN 27,1972	7.57	FEB 25	5.97	APR 25	5.88
NOV 21	6.67	FEB 28	8.08	MAR 27	5.45	MAY 26	7.00
DEC 29	5.92	MAR 28	6.23	APR 28	6.28	JUN 28	7.92
JAN 27,1969	6.85	APR 26	5.46	MAY 28	7.94	JUL 26	10.22
FEB 24	7.78	MAY 26	5.85	JUN 25	7.48	AUG 28	11.03
MAR 25	5.98	JUN 28	7.29	JUL 29	9.65	SEP 26	11.89
APR 24	5.39	JUL 27	8.46	AUG 27	9.98		

a, UNKNOWN.

425339071281501. Local number, MKW 85 (Formerly published as Merrimack 85).
LOCATION.--Lat 42°53'39", long 71°28'15", Hydrologic Unit 01070002, 260 ft (79 m) west of U.S. Highway 3, about 0.65 mi (1.05 km) northeast of intersection of Bedford Road, near Reeds Ferry in Merrimack.
Owner: New Hampshire Department of Fish and Game.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 1.00 in (0.03 m), depth 23 ft (7.0 m).
DATUM.--Altitude of land-surface datum is 180 ft (55 m). Measuring point: Top of casing is at land-surface datum.
PERIOD OF RECORD.--August 1964 to current year. Prior to June 1966, published in New Hampshire Basic-Data Report No. 2, Ground-Water Series.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.92 ft (2.41 m) below land-surface datum, Mar. 29, 1977; lowest measured, 11.23 ft (3.42 m) below land-surface datum, Nov. 18, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, AUGUST 1964 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 26,1964	10.68	MAR 19,1968	8.39	NOV 18,1970	10.11	OCT 29,1974	10.18
SEP 24	10.92	APR 17	8.69	FEB 18,1971	10.37	NOV 25	10.09
OCT 04	11.00	MAY 01	8.85	MAR 23	8.90	DEC 23	9.47
NOV 04	11.01	28	8.87	APR 29	8.90	JAN 27,1975	9.20
18	11.23	JUN 02	8.94	JUN 02	9.26	FEB 25	8.88
23	11.20	JUL 18	9.26	JUL 02	9.98	MAR 31	8.69
25	11.19	SEP 12	9.94	AUG 02	10.39	APR 28	8.71
DEC 02	10.95	OCT 02	10.16	31	10.74	MAY 28	9.33
23	11.05	11	10.13	OCT 05	10.83	JUN 25	9.45
JAN 06,1965	10.50	DEC 05	9.17	30	10.57	JUL 29	9.28
FEB 08	10.69	JAN 21,1969	9.13	DEC 02	10.36	AUG 27	10.21
MAR 03	10.29	30	9.66	JAN 05,1972	9.90	SEP 30	9.33
05	10.26	FEB 11	9.58	FEB 29	10.09	OCT 28	8.33
JUN 25	10.68	MAR 04	9.71	MAY 02	8.76	NOV 25	8.60
JUL 14	10.88	14	9.73	31	8.60	JAN 08,1976	9.05
30	11.00	21	9.34	JUL 07	9.17	FEB 10	8.82
SEP 08	11.15	APR 01	8.03	AUG 17	9.60	MAR 24	8.27
NOV 08	11.09	MAY 05	8.20	SEP 11	10.10	APR 28	8.89
30	10.90	22	9.17	OCT 11	9.90	MAY 26	9.27
DEC 29	10.82	28	9.24	26	10.02	JUN 25	9.96
FEB a 1966	10.17	JUN 20	9.58	NOV 28	9.04	JUL 26	10.17
FEB 00	11.04	JUL 22	9.22	DEC 26	9.22	SEP 15	10.29
MAR 15	9.67	AUG 01	9.79	JAN 26,1973	8.62	OCT 27	9.83
22	9.45	08	9.79	FEB 26	8.90	NOV 26	10.20
29	9.46	18	9.82	MAR 27	8.21	JAN 21,1977	10.46
APR 06	9.58	SEP 11	9.90	APR 26	8.31	FEB 24	10.60
MAY 06	10.10	22	10.05	JUN 18	9.02	MAR 29	7.92
JUN 02	10.20	OCT 09	9.89	JUL 06	8.90	MAY 26	8.89
16	10.37	NOV 06	10.07	26	9.43	JUL 11	9.71
JUL 19	10.88	27	9.55	AUG 27	9.75	AUG 25	9.98
AUG 11	10.68	DEC 12	9.52	SEP 27	10.11	OCT 03	9.52
NOV 30	10.80	FEB 12,1970	7.98	OCT 29	10.31	NOV 01	9.57
DEC 13	9.88	13	8.06	NOV 26	10.29	DEC 05	9.49
APR 21,1967	8.22	MAR 19	8.91	JAN 28,1974	9.12	JAN 09,1978	9.16
MAY 10	8.57	APR 20	8.38	FEB 26	9.23	FEB 13	9.20
AUG 09	8.67	MAY 05	8.62	MAR 27	8.62	MAR 13	9.42
SEP 11	8.72	20	8.54	APR 25	8.95	APR 25	8.71
25	9.78	JUN 26	9.32	MAY 28	9.13	MAY 26	8.22
NOV 01	10.23	JUL 17	9.73	JUN 26	9.51	JUL 17	9.81
17	10.19	AUG 10	10.10	JUL 29	9.77	AUG 28	10.05
DEC 13	9.10	24	10.14	AUG 26	10.27	SEP 26	10.23
JAN 15,1968	8.34	SEP 21	10.22	SEP 25	10.07		

a, UNKNOWN.

425343071281701. Local number, MKW 86 (Formerly published as Merrimack 86).
LOCATION.--Lat 42°53'43", long 71°28'17", Hydrologic Unit 01070002, 100 ft (30 m) west of edge of pavement of southbound lane of Everett Turnpike, about 0.72 mi (1.16 km) north of Bedford Road overpass, near Reeds Ferry in Merrimack.
Owner: New Hampshire Department of Public Works and Highways.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 1.25 in (0.03 m), depth 13 ft (3.96 m).
DATUM.--Altitude of land-surface datum is 175 ft (53 m). Measuring point: Top of casing, 0.2 ft (0.06 m) above land-surface datum.
PERIOD OF RECORD.--September 1964 to current year. Prior to June 1966, published in New Hampshire Basic-Data Report No. 2, Ground-Water Series.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.34 ft (0.10 m) below land-surface datum, Apr. 26, 1973; lowest measured, 3.60 ft (1.10 m) below land-surface datum, Nov. 8, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, SEPTEMBER 1964 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 24,1964	3.20	JAN 15,1968	2.00	FEB 18,1971	2.82	OCT 29,1974	2.62
OCT 14	3.30	APR 17	1.45	MAR 23	2.98	NOV 23	2.24
NOV 04	3.28	MAY 01	1.46	JUN 02	1.61	25	2.57
18	3.38	28	1.53	JUL 02	2.06	JAN 27,1975	2.02
23	3.29	JUN 02	1.60	AUG 02	2.42	FEB 25	1.62
25	3.31	JUL 18	1.98	31	2.88	MAR 31	1.27
DEC 02	3.11	SEP 12	2.51	OCT 05	3.09	APR 28	1.10
14	3.34	OCT 02	2.86	30	2.79	MAY 28	1.50
23	3.42	DEC 05	1.70	DEC 02	2.38	JUN 25	2.12
JAN 06,1965	2.86	JAN 21,1969	2.22	JAN 05,1972	2.37	JUL 29	2.55
18	3.12	30	2.25	FEB 02	2.45	AUG 27	2.75
FEB 08	3.13	FEB 11	2.28	29	2.36	SEP 26	2.21
09	3.05	MAR 04	2.28	MAY 02	0.83	OCT 28	1.67
MAR 01	2.94	14	2.28	31	0.96	NOV 25	1.36
03	2.90	21	1.95	JUL 07	1.29	DEC 23	1.59
05	2.87	APR 01	1.07	AUG 17	1.70	FEB 10,1976	1.37
APR 16	2.82	MAY 05	1.26	SEP 11	2.19	MAR 24	0.55
30	2.79	22	1.57	OCT 26	2.15	APR 28	0.71
JUN 25	3.14	28	1.61	NOV 28	1.43	MAY 26	1.54
JUL 14	3.44	JUN 20	1.94	DEC 26	1.67	JUN 25	2.45
SEP 30	3.57	JUL 22	2.26	JAN 26,1973	1.67	JUL 26	2.62
NOV 08	3.60	AUG 01	2.08	FEB 26	1.38	SEP 15	2.88
30	3.28	08	1.93	MAR 27	0.54	OCT 26	2.50
DEC 29	3.32	18	2.43	APR 26	0.34	NOV 26	2.89
MAR 01,1966	2.86	SEP 11	2.30	JUN 18	1.07	JAN 21,1977	3.10
15	2.66	22	2.71	JUL 06	1.02	FEB 24	3.18
22	2.33	OCT 09	2.69	26	1.69	MAR 17	1.36
APR 06	2.58	NOV 06	2.55	AUG 27	1.93	MAY 26	1.25
MAY 06	2.68	27	2.34	SEP 27	2.32	JUL 11	2.22
JUN 02	2.89	DEC 12	2.26	OCT 29	2.52	AUG 25	2.49
16	2.99	FEB 12,1970	1.04	NOV 26	2.54	OCT 03	1.37
JUL 13	3.33	MAR 19	1.62	DEC 21	1.79	NOV 01	2.44
AUG 11	3.59	APR 20	1.10	JAN 28,1974	1.82	DEC 05	2.09
SEP 22	2.93	MAY 05	1.17	FEB 26	1.80	JAN 09,1978	2.05
NOV 30	2.75	20	0.77	MAR 27	1.35	FEB 13	2.13
DEC 13	2.88	JUN 26	1.78	APR 25	1.47	MAR 13	1.90
APR 20,1967	1.51	JUL 17	2.03	MAY 28	1.42	APR 25	1.41
AUG 09	1.75	AUG 10	2.44	JUN 26	1.62	MAY 26	1.59
SEP 25	2.37	24	2.36	JUL 29	1.82	JUL 17	2.23
NOV 01	2.62	SEP 21	2.48	AUG 26	2.51	AUG 28	2.58
DEC 13	1.78	NOV 18	2.49	SEP 25	2.18	SEP 26	2.91

425024071413001. Local number, MOW 36 (Formerly published as Milford 36).
LOCATION.--Lat 42°50'24", long 71°41'30", Hydrologic Unit 01070002, 85 ft (26 m) from north side of Old Wilton Road, about 550 ft (108 m) west of the intersection of State Highway 101, and 2.2 mi (3.5 km) west of the center of Milford.
Owner: Leonard Cushing.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Dug, unused water-table well, diameter 36 in (0.91 m), depth 14.6 ft (4.55 m), lined with concrete.
DATUM.--Altitude of land-surface datum is about 265 ft (81 m). Measuring point: Top of concrete casing on south side of well, 1.60 ft (0.49 m) above land-surface datum.
PERIOD OF RECORD.--January 1962 to current year. Prior to May 1966, published in New Hampshire Basic-Data Report No. 2, Ground-Water Series.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.68 ft (1.73 m) below land-surface datum, Mar. 29, 1963; lowest measured, 11.98 ft (3.65 m) below land-surface datum, Oct. 28, 1968.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MAY 1966 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 26,1966	8.58	APR 07,1969	7.64	JUN 28,1972	8.14	JUL 29,1975	8.85
JUN 29	9.24	23	7.74	JUL 27	8.58	AUG 27	9.30
JUL 28	10.33	MAY 08	8.74	AUG 29	9.57	SEP 26	8.25
AUG 25	11.06	23	9.41	SEP 26	10.13	OCT 28	7.11
SEP 28	10.82	JUN 24	9.96	OCT 26	9.67	NOV 25	6.94
OCT 25	9.82	JUL 28	10.90	NOV 28	7.12	DEC 23	7.51
NOV 25	9.00	AUG 25	10.18	DEC 26	7.64	JAN 26,1976	7.82
DEC 01	8.91	SEP [a]	10.31	JAN 26,1973	6.90	FEB 24	6.33
27	9.36	NOV 25	8.44	FEB 26	7.75	MAR 24	7.10
JAN 26,1967	9.03	JAN 08,1970	8.30	MAR 27	6.95	APR 28	7.74
FEB 27	9.25	23	8.98	APR 26	7.67	MAY 26	8.22
MAR 30	7.33	FEB 23	8.27	MAY 29	7.47	JUN 25	9.57
APR 26	6.80	MAR 26	8.16	JUN 26	8.68	JUL 27	9.82
28	6.93	APR 23	8.58	JUL 06	8.19	AUG 30	9.69
MAY 24	8.68	MAY 22	8.87	26	8.84	SEP 28	10.50
JUN 26	8.50	JUN 25	9.92	AUG 27	9.18	OCT 26	9.72
AUG 01	6.44	JUL 28	10.78	SEP 27	9.83	NOV 26	9.77
28	9.26	AUG 25	11.28	OCT 29	10.57	DEC 22	9.50
SEP 28	11.52	SEP 24	11.74	NOV 26	9.22	JAN 24,1977	9.84
OCT 26	11.36	OCT 26	11.15	DEC 21	6.98	FEB 24	9.87
NOV 24	10.71	NOV 23	9.41	26	6.80	MAR 29	6.30
DEC 26	9.42	DEC 28	8.96	JAN 28,1974	6.75	APR 26	6.50
JAN 24,1968	9.39	JAN 25,1971	9.23	FEB 26	7.43	MAY 26	8.30
FEB 27	9.78	FEB 23	8.12	MAR 27	7.05	JUN 27	9.05
MAR 25	7.59	MAR 25	7.45	APR 25	7.56	JUL 27	9.82
APR 25	8.82	APR 27	8.40	MAY 28	7.95	AUG 25	10.39
MAY 23	8.88	MAY 25	7.77	JUN 26	8.58	SEP 27	10.10
JUN 24	8.44	JUN 24	8.71	JUL 29	9.42	OCT 25	7.96
JUL 24	9.61	JUL 27	9.00	AUG 26	10.17	NOV 25	7.96
AUG 24	10.54	AUG 26	11.44	SEP 25	9.05	DEC 27	7.09
SEP 25	11.24	SEP 27	9.39	OCT 29	8.85	JAN 23,1978	7.22
OCT 28	11.98	OCT 27	9.79	NOV 25	8.27	FEB 27	7.76
NOV 21	9.79	NOV 26	9.30	DEC 23	7.49	MAR 24	6.31
DEC 29	8.84	DEC 27	8.08	JAN 27,1975	7.28	APR 25	7.10
JAN 27,1969	9.19	JAN 27,1972	7.82	FEB 25	7.03	MAY 26	7.47
MAR 04	9.43	FEB 28	7.83	MAR 27	6.91	JUN 28	8.08
21	9.05	MAR 28	6.72	APR 28	7.60	JUL 26	8.98
24	8.45	APR 26	7.03	MAY 28	8.35	AUG 28	9.65
APR 02	7.53	MAY 25	7.39	JUN 25	8.33	SEP 26	10.79

a, UNKNOWN.

424752071315201. Local number, NAW 143 (Formerly published as Nashua 143).
LOCATION.--Lat 42°47'52", long 71°31'52", Hydrologic Unit 01070002, north side of State Highway 101-A, about 3.0 mi (4.8 km) west of U.S. Highway 3 opposite Round Pond, and 3.9 mi (6.3 km) west-northwest of the center of Nashua.
Owner: Roland Cadorette.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Driven, unused water-table well, diameter 1.25 in (0.03 m), depth 13.0 ft (3.96 m).
DATUM.--Altitude of land-surface datum is 200 ft (61 m). Measuring point: Top of casing, 1.5 ft (0.46 m) above land-surface datum.
PERIOD OF RECORD.--December 1958 to August 1959; January 1962 to current year. Prior to May 1966, published in New Hampshire Basic-Data Report No. 2, Ground-Water Series.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.20 ft (1.89 m) below land-surface datum, May 29, 1973; lowest measured, 11.65 ft (3.55 m) below land-surface datum, June 25, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MAY 1966 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 20,1966	9.94	JUL 28,1969	9.02	SEP 26,1972	8.43	SEP 26,1975	7.83
JUN 29	10.35	AUG 25	9.23	OCT 26	8.64	OCT 28	6.84
JUL 28	10.62	SEP a	9.61	NOV 28	7.88	NOV 25	6.73
AUG 26	11.11	OCT 28	9.92	DEC 26	7.65	DEC 23	6.91
SEP 28	10.91	NOV 25	8.92	JAN 26,1973	7.40	JAN 26,1976	7.34
OCT 25	10.68	DEC 29	8.12	FEB 26	7.48	FEB 24	6.66
NOV 25	10.38	JAN 23,1970	8.45	MAR 27	6.61	MAR 24	6.65
DEC 27	10.54	FEB 23	7.73	APR 26	6.31	APR 28	6.99
JAN 26,1967	10.30	MAR 26	7.66	MAY 29	6.20	MAY 26	7.34
FEB 27	10.49	APR 23	7.23	JUN 26	6.82	JUN 25	7.96
MAR 30	9.71	MAY 22	7.12	JUL 06	6.73	JUL 27	7.64
APR 28	8.36	JUN 25	7.79	26	7.21	AUG 30	7.55
MAY 23	8.28	JUL 28	8.50	AUG 27	7.80	SEP 28	8.17
JUN 26	8.29	AUG 25	8.94	SEP 27	8.43	OCT 26	8.06
AUG 01	8.68	SEP 24	9.47	OCT 29	9.01	NOV 26	8.55
28	9.05	OCT 26	9.19	NOV 26	9.13	DEC 22	8.64
SEP 28	9.52	NOV 23	9.25	DEC 21	8.21	JAN 24,1977	9.10
OCT 26	9.55	DEC 28	9.36	26	7.94	FEB 24	9.19
NOV 24	9.50	JAN 25,1971	9.64	JAN 28,1974	7.34	MAR 29	7.20
DEC 27	8.79	FEB 23	9.30	FEB 26	7.45	APR 26	6.94
JAN 24,1968	8.91	MAR 25	8.24	MAR 27	7.02	MAY 26	7.38
FEB 26	9.01	APR 27	7.88	APR 25	7.02	JUN 27	7.85
MAR 25	7.77	MAY 24	7.68	MAY 28	7.23	JUL 27	8.39
APR 25	7.80	JUN 24	8.25	JUN 26	7.64	AUG 25	8.84
MAY 23	7.94	JUL 27	8.81	JUL 29	8.45	SEP 27	8.71
JUN 24	7.96	AUG 26	9.48	AUG 26	8.88	OCT 25	8.16
JUL 24	8.12	SEP 27	9.83	SEP 25	8.24	NOV 25	8.29
AUG 24	8.84	OCT 27	9.66	OCT 29	8.44	DEC 27	7.61
SEP 25	9.40	NOV 26	9.88	NOV 25	8.46	JAN 23,1978	7.08
OCT 28	9.84	DEC 27	9.12	DEC 23	7.73	FEB 27	7.74
NOV 21	9.10	JAN 27,1972	8.94	JAN 27,1975	7.58	MAR 24	7.15
DEC 29	8.50	FEB 28	8.99	FEB 25	7.40	APR 25	7.22
JAN 27,1969	8.58	MAR 28	7.65	MAR 27	7.07	MAY 26	7.30
MAR 04	9.00	APR 26	7.06	APR 28	7.04	JUN 28	7.65
26	7.73	MAY 25	6.75	MAY 28	7.68	JUL 26	7.87
APR 23	7.25	JUN 28	6.90	JUN 25	11.65	AUG 28	8.04
MAY 23	7.72	JUL 27	7.23	JUL 29	8.16	SEP 26	8.82
JUN 24	8.30	AUG 29	7.90	AUG 27	8.37		

a, UNKNOWN.

424800071295001. Local number, NAW 216 (Formerly published as Nashua 216).
LOCATION.--Lat 42°48'00", long 71°29'50", Hydrologic Unit 01070002, 222 ft (68 m) east of edge of pavement of northbound lane of Everett Turnpike, about 0.63 mi (1.01 km) north of Tinker Road overpass, and 2.8 mi (4.5 km) northwest of the center of Nashua.
Owner: Pennichuck Water Works.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 2 in (0.05 m), depth 37.0 ft (11.28 m).
DATUM.--Altitude of land-surface datum is 205 ft (62 m). Measuring point: Top of casing, 3.08 ft (0.94 m) above land-surface datum.
PERIOD OF RECORD.--October 1964 to December 1968; February 1970 to current year. Prior to June 1966, published in New Hampshire Basic-Data Report No. 2, Ground-Water Series.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.73 ft (8.76 m) below land-surface datum, July 17, 1978; lowest measured, 35.42 ft (10.80 m) below land-surface datum, Nov. 18, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1964 TO DECEMBER 1968, FEBRUARY 1970 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14,1964	34.48	MAY 01,1968	29.73	NOV 28,1972	30.77	AUG 27,1975	29.99
NOV 05	35.11	28	29.97	DEC 26	30.33	SEP 30	29.95
18	35.42	DEC 12	31.35	JAN 26,1973	30.57	OCT 28	29.49
MAR 12,1965	30.74	FEB 12,1970	30.63	FEB 26	30.40	NOV 25	29.11
JUN 25	30.32	MAR 19	30.37	MAR 27	29.73	JAN 08,1976	29.99
SEP 02	33.06	APR 20	29.48	APR 26	29.32	FEB 10	31.12
29	33.11	MAY 05	29.59	JUN 18	30.11	MAR 24	31.24
NOV 08	32.62	20	29.84	JUL 06	29.83	APR 28	29.25
30	31.90	JUN 20	30.08	26	30.20	MAY 26	29.18
DEC 28	31.20	JUL 17	30.48	AUG 27	30.66	JUN 25	29.96
29	31.18	AUG 10	31.33	SEP 27	31.82	JUL 27	30.52
FEB a 1966	31.04	24	31.98	OCT 29	32.46	SEP 15	30.82
FEB 11	31.00	SEP 21	32.13	NOV 26	31.73	OCT 27	30.58
MAR 15	30.86	NOV 18	31.10	DEC 21	30.84	NOV 26	29.54
APR 06	30.31	FEB 18,1971	31.19	JAN 28,1974	30.17	JAN 21,1977	30.46
MAY 06	30.10	MAR 23	31.65	FEB 26	30.15	FEB 24	30.84
JUN 02	30.34	JUN 02	29.94	MAR 27	29.87	MAR 29	29.30
JUL 13	30.92	JUL 02	30.25	APR 25	29.71	MAY 26	29.08
AUG 11	32.64	AUG 02	30.91	MAY 28	29.95	JUL 11	29.38
SEP 22	33.77	31	31.44	JUN 26	30.26	AUG 25	32.15
NOV 30	30.69	OCT 05	31.95	JUL 29	31.12	OCT 03	31.42
DEC 13	30.65	30	31.75	AUG 26	32.24	NOV 01	30.35
FEB 15,1967	30.70	DEC 02	31.09	SEP 25	31.38	DEC 05	30.43
MAY 11	29.25	JAN 05,1972	30.32	OCT 29	30.82	JAN 09,1978	30.76
AUG 09	30.37	FEB 02	29.57	NOV 25	30.22	FEB 13	30.79
SEP 14	30.91	29	30.82	DEC 23	30.07	MAR 13	30.59
25	31.27	MAY 02	29.65	JAN 27,1975	30.26	APR 25	29.59
NOV 10	31.16	31	30.12	FEB 25	30.39	MAY 26	29.19
17	29.72	JUL 07	30.22	MAR 31	29.67	JUL 17	28.73
DEC 13	31.40	AUG 17	30.63	APR 28	28.94	AUG 28	29.73
JAN 15,1968	31.49	SEP 11	30.90	MAY 28	28.78	SEP 26	30.63
MAR 19	31.83	OCT 11	31.54	JUN 25	29.09		
APR 17	29.95	26	31.13	JUL 29	29.17		

a, UNKNOWN.

424801071294801. Local number, NAW 217 (Formerly published as Nashua 217).
LOCATION.--Lat 42°48'01", long 71°29'48", Hydrologic Unit 01070002, 410 ft (125 m) east of edge of pavement of northbound lane of Everett Turnpike, about 0.63 mi (1.01 km) north of Tinker Road overpass, and 2.8 mi (4.51 km) northwest of the center of Nashua.
Owner: Pennichuck Water Works.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 2 in (0.05 m), depth 41.65 ft (12.69 m).
DATUM.--Altitude of land-surface datum is 205 ft (62 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--October 1964 to May 1968; December 1969 to current year. Prior to June 1966, published in New Hampshire Basic-Data Report No. 2, Ground-Water Series.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.49 ft (8.38 m) below land-surface datum, July 17, 1978; lowest measured, 34.07 ft (10.38 m) below land-surface datum, Nov. 18, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1964 TO MAY 1968, DECEMBER 1968 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14,1964	33.15	APR 17,1968	28.73	NOV 28,1972	29.30	AUG 27,1975	28.71
NOV 05	33.77	MAY 01	28.54	DEC 26	28.96	SEP 30	28.57
18	34.07	28	28.70	JAN 26,1973	29.20	OCT 28	28.44
MAR 12,1965	29.22	DEC 12,1969	28.72	FEB 26	29.10	NOV 25	27.93
JUN 25	28.91	FEB 12,1970	29.15	MAR 27	28.44	JAN 08,1976	28.87
SEP 02	31.65	MAR 19	29.19	APR 26	28.21	FEB 10	29.90
29	31.62	APR 20	28.43	JUN 18	28.82	MAR 24	30.03
NOV 08	31.07	MAY 05	28.46	JUL 06	28.44	APR 28	27.92
30	30.18	20	28.67	26	28.82	MAY 26	27.95
DEC 28	29.69	JUL 17	29.16	AUG 27	29.28	JUN 25	28.75
29	29.65	AUG 10	30.14	SEP 27	30.43	JUL 27	29.02
FEB 10,1966	29.86	24	30.77	OCT 29	30.98	SEP 15	29.42
MAR 02	29.64	SEP 21	30.62	NOV 26	30.18	OCT 27	29.00
15	29.45	NOV 18	29.58	DEC 21	30.84	NOV 26	28.27
APR 06	28.97	FEB 18,1971	29.77	JAN 28,1974	28.82	JAN 21,1977	29.07
MAY 06	28.76	MAR 23	30.47	FEB 26	28.83	FEB 24	29.58
JUN 02	28.95	JUN 02	28.79	MAR 27	28.54	MAR 29	28.11
JUL 13	29.87	JUL 02	29.00	APR 25	28.50	MAY 26	27.93
AUG 11	31.31	AUG 02	29.57	MAY 28	28.66	JUL 11	28.23
SEP 22	32.41	31	30.15	JUN 26	28.93	AUG 25	30.82
NOV 30	29.23	OCT 05	30.67	JUL 29	29.82	OCT 03	30.11
DEC 13	29.23	30	30.28	AUG 26	30.85	NOV 01	28.74
FEB 15,1967	29.32	DEC 02	29.66	SEP 25	29.79	DEC 05	28.83
APR 21	28.50	JAN 05,1972	29.37	OCT 29	29.29	JAN 09,1978	29.14
MAY 11	28.10	FEB 02	28.83	NOV 25	28.17	FEB 13	29.19
AUG 09	29.12	29	29.47	DEC 23	28.75	MAR 13	29.30
SEP 14	29.58	MAY 02	28.65	JAN 27,1975	28.94	APR 25	28.37
25	30.02	31	29.03	FEB 25	29.05	MAY 26	28.02
NOV 01	29.74	JUL 07	29.00	MAR 31	28.38	JUL 17	27.49
17	29.72	AUG 17	29.39	APR 28	27.68	AUG 28	28.39
DEC 13	30.04	SEP 11	29.68	MAY 28	27.60	SEP 26	29.19
JAN 15,1968	30.23	OCT 11	30.14	JUN 25	27.93		
MAR 19	30.43	26	29.65	JUL 29	27.93		

424800071795301. Local number, NAW 218 (Formerly published as Nashua 218).
LOCATION.--Lat 42°48'00", long 71°29'53", Hydrologic Unit 01070002, 57 ft (17.4 m) east of edge of pavement of northbound lane of Everett Turnpike, about 0.63 mi (1.01 km) north of Tinker Road overpass, and 2.8 mi (4.5 km) northwest of the center of Nashua.
Owner: New Hampshire Department of Public Works and Highways.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 2 in (0.05 m), depth 42.5 ft (12.95 m).
DATUM.--Altitude of land-surface datum is 205 ft (62 m). Measuring point: Top of casing, 3.1 ft (0.94 m) above land-surface datum.
PERIOD OF RECORD.--October 1964 to current year. Prior to June 1966, published in New Hampshire Basic-Data Report No. 2, Ground-Water Series.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.39 ft (8.04 m) below land-surface datum, July 17, 1978; lowest measured, 33.10 ft (10.09 m) below land-surface datum, Nov. 25, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1964 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14,1964	32.04	JAN 15,1968	29.06	NOV 18,1970	28.77	OCT 29,1974	28.70
NOV 05	32.68	MAR 19	29.36	FEB 18,1971	28.84	NOV 25	28.14
18	33.00	APR 17	27.47	MAR 23	29.26	DEC 23	27.82
25	33.10	MAY 01	27.26	APR 24	27.64	JAN 27,1975	28.00
DEC 11	32.68	28	27.56	JUN 02	27.53	FEB 25	28.16
18	32.44	JUN 02	27.80	JUL 02	27.89	MAR 31	27.37
23	32.28	JUL 18	27.90	AUG 02	28.43	APR 28	26.64
JAN 18,1965	30.40	SEP 12	29.23	31	29.20	MAY 28	26.46
FEB 03	29.58	OCT 02	30.10	OCT 05	29.59	JUN 25	26.76
26	28.78	DEC 05	29.17	30	29.53	JUL 29	26.85
MAR 01	28.67	JAN 21,1969	28.48	DEC 02	28.76	AUG 27	27.74
08	28.46	30	28.33	JAN 05,1972	28.48	SEP 30	27.70
12	28.34	FEB 11	28.44	FEB 29	28.44	OCT 28	27.02
22	28.19	MAR 03	28.83	MAY 02	27.32	NOV 25	26.74
31	28.14	14	29.28	31	27.66	JAN 08,1976	27.65
MAY 28	27.58	21	29.53	JUL 07	27.74	FEB 10	28.81
JUN 25	27.94	APR 01	29.02	AUG 17	28.40	MAR 24	28.94
JUL 30	29.04	MAY 05	27.39	SEP 11	28.43	APR 28	27.00
SEP 02	30.69	22	27.63	OCT 11	29.33	MAY 26	26.88
29	30.76	28	27.54	26	28.95	JUN 25	27.72
NOV 08	30.30	JUN 20	27.92	NOV 28	28.55	JUL 27	28.39
DEC 28	28.80	JUL 22	28.80	DEC 26	28.05	SEP 15	28.66
29	28.86	AUG 01	28.99	JAN 26,1973	28.29	OCT 27	28.47
30	29.66	08	28.06	FEB 26	28.09	NOV 26	27.23
FEB 09,1966	28.67	18	28.40	MAR 27	27.35	JAN 21,1977	28.28
MAR 02	28.67	SEP 11	29.30	APR 26	26.93	FEB 24	28.53
15	28.45	22	29.18	JUN 18	27.80	MAR 29	26.94
APR 06	27.83	OCT 09	29.48	JUL 06	27.56	MAY 26	26.73
MAY 06	27.65	NOV 06	29.47	26	27.94	JUL 11	27.04
JUN 02	27.96	27	28.59	AUG 27	28.42	AUG 25	29.94
JUL 13	28.68	DEC 12	28.36	SEP 27	29.59	OCT 03	29.15
AUG 11	30.27	FEB 12,1970	28.19	OCT 29	30.27	NOV 01	28.23
SEP 22	31.40	13	28.11	NOV 26	29.60	DEC 05	28.30
DEC 13	28.31	MAR 19	27.80	DEC 21	28.74	JAN 09,1978	28.67
FEB 16,1967	28.22	APR 20	26.99	JAN 28,1974	27.90	FEB 13	28.74
APR 21	27.26	MAY 05	27.13	FEB 26	27.88	MAR 13	28.38
MAY 11	26.74	11	27.32	MAR 27	27.59	APR 25	27.28
AUG 09	27.92	20	27.39	APR 25	27.39	MAY 26	26.76
SEP 14	28.52	JUN 26	27.66	MAY 28	27.68	JUL 17	26.39
25	28.85	JUL 17	28.08	JUN 26	28.05	AUG 28	27.49
NOV 01	27.22	AUG 10	28.96	JUL 29	28.90	SEP 26	28.50
17	29.72	24	29.61	AUG 26	30.04		
DEC 13	29.02	SEP 21	29.87	SEP 25	29.26		

MERRIMACK COUNTY

431526071345501. Local number, CVW 1.
LOCATION.--Lat 43°15'26", long 71°34'55", Hydrologic Unit 01070002, at south side of Bog Road, about 750 ft (230 m) west of intersection of U.S. Highways 3 and 4 and Bog Road, and 1.9 mi (3.1 km) southeast of Penacook.
Owner: U.S. Geological Survey.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Driven observation water-table well, diameter 3/4 in (0.02 m), depth 10.8 ft (3.3 m), screened 8.8 ft (2.7 m) to 10.8 ft (3.3 m).
DATUM.--Altitude of land-surface datum is 345 ft (105 m). Measuring point: Top of casing, 2.80 ft (0.85 m) above land-surface datum.
PERIOD OF RECORD.--September 1955 to current year. Prior to January 1973, published in Ground-Water Levels in United States, Northeastern States, Geological Survey Water-Supply Paper Series.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.09 ft (0.03 m) below land-surface datum, Apr. 9, 1960; lowest measured, 7.32 ft (2.23 m) below land-surface datum, Nov. 1, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25, 1977	3.10	JAN 23, 1978	2.19	APR 25, 1978	1.44	JUL 26, 1978	4.22
NOV 23	2.97	FEB 24	2.14	MAY 26	2.23	AUG 29	5.04
DEC 28	1.95	MAR 24	0.61	JUN 28	2.95	SEP 27	5.97

431224071303601. Local number, CVW 2.
LOCATION.--Lat 43°12'24", long 71°30'36", Hydrologic Unit 01070002, about 100 ft (30 m) north of the Federal Aeronautics Administration Building at Concord Municipal Airport.
Owner: U.S. Geological Survey.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 2 in (0.05 m), depth 60 ft (18.3 m).
DATUM.--Altitude of land-surface datum is 340 ft (104 m). Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--August 1963 to May 1965, August 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.85 ft (11.23 m) below land-surface datum, Aug. 27, 1973; lowest measured, 44.62 ft (13.60 m) below land-surface datum, Aug. 1, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, AUGUST 1963 TO MAY 1965, AUGUST 1967 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 23,1963	41.82	JUL 25,1968	43.83	FEB 28,1972	39.66	MAY 28,1975	38.07
30	41.86	AUG 24	43.58	MAR 29	39.48	JUN 25	38.18
SEP 05	41.90	SEP 25	43.39	APR 27	39.30	JUL 29	38.43
09	41.93	OCT 28	43.28	MAY 26	39.22	AUG 27	38.68
OCT 18	42.22	NOV 22	43.34	JUN 28	38.84	SEP 26	38.89
24	42.27	DEC 30	43.23	JUL 28	38.78	OCT 28	38.98
30	42.30	JAN 29,1969	43.96	AUG 29	38.69	NOV 26	38.89
JAN 18,1964	43.78	FEB 24	42.94	SEP 26	38.76	DEC 22	38.59
FEB 14	42.75	MAR 24	42.92	OCT 26	38.99	JAN 26,1976	38.63
AUG 13	42.84	APR 23	42.01	NOV 28	39.18	FEB 24	38.53
MAR 03,1965	44.00	MAY 23	41.85	DEC 27	38.93	MAR 25	38.15
05	44.00	JUN 25	41.58	JAN 26,1973	38.89	APR 29	38.01
08	43.94	JUL 29	41.44	FEB 26	38.64	MAY 27	38.11
11	43.98	AUG 26	41.39	MAR 27	38.12	JUN 25	38.19
29	44.10	SEP 26	41.25	APR 26	37.72	JUL 26	38.42
MAY 21	44.43	OCT 29	41.40	MAY 29	37.33	AUG 30	38.62
29	44.48	NOV 25	41.35	JUN 26	37.11	SEP 28	38.82
AUG 01,1967	44.62	DEC 28	41.19	JUL 06	37.06	OCT 26	39.04
SEP 26	44.13	JAN 26,1970	40.87	11	37.02	NOV 29	39.27
OCT 27	44.07	FEB 24	40.49	16	37.01	DEC 23	39.48
NOV 28	43.91	MAR 27	40.26	23	37.00	JAN 25,1977	39.71
DEC 27	44.20	APR 23	39.79	26	36.93	FEB 24	40.01
JAN 25,1968	44.24	MAY 26	39.59	AUG 09	36.88	MAR 17	39.61
FEB 27	44.49	JUN 24	39.48	27	36.85	28	39.57
MAR 26	44.35	26	39.48	SEP 27	36.89	APR 26	39.40
APR 24	44.22	JUL 27	39.38	OCT 29	37.15	MAY 26	39.23
29	44.25	AUG 25	39.35	NOV 27	37.49	JUN 28	39.05
30	44.24	SEP 28	39.54	DEC 26	37.65	JUL 27	39.08
MAY 01	44.25	OCT 29	39.76	JAN 28,1974	37.40	AUG 26	39.29
02	44.27	DEC 04	39.78	FEB 26	37.14	SEP 26	39.46
03	44.24	28	39.89	MAR 27	37.05	OCT 25	39.49
08	44.29	JAN 27,1971	39.92	APR 25	37.07	NOV 23	39.14
09	44.25	FEB 23	40.09	MAY 28	37.08	DEC 27	39.05
10	44.26	MAR 25	40.25	JUN 26	37.09	JAN 23,1978	38.68
13	44.26	APR 28	39.28	JUL 29	37.27	FEB 24	38.58
14	44.26	MAY 25	38.82	AUG 26	37.54	MAR 24	38.52
20	44.28	JUN 24	38.52	SEP 25	37.80	APR 25	38.31
27	44.27	JUL 28	38.37	OCT 30	38.14	MAY 26	38.44
JUN 04	44.27	AUG 26	38.55	NOV 26	38.32	JUN 28	38.51
06	44.21	SEP 28	38.75	DEC 23	38.59	JUL 26	38.64
07	44.21	OCT 28	38.98	JAN 27,1975	38.85	AUG 29	38.81
10	44.24	NOV 29	39.18	FEB 25	38.98	SEP 26	39.08
14	44.22	DEC 28	39.38	MAR 27	38.71		
26	44.09	JAN 28,1972	39.64	APR 28	38.25		

431248071290201. Local number, CVW 3.
LOCATION.--Lat 43°12'48", long 71°29'02", Hydrologic Unit 01070002, at northwest corner of intersection of State Highway 106 and Pembroke Road, and 2.8 mi (4.5 km) east of Concord.
Owner: U.S. Geological Survey.
AQUIFER.--Very fine sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 1.25 in (0.03 m), depth 72.7 ft (22.15 m).
DATUM.--Altitude of land-surface datum is 350 ft (107 m). Measuring point: Top of casing, 2.30 ft (0.70 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 55.56 ft (16.93 m) below land-surface datum, Sept. 27, 1973; lowest measured, 59.96 ft (18.28 m) below land-surface datum, Jan. 30, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, NOVEMBER 1966 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15,1966	59.92	JUL 27,1968	58.30	DEC 28,1971	57.37	MAY 28,1975	56.62
21	59.89	AUG 24	58.05	JAN 28,1972	57.67	JUN 25	56.48
29	59.88	SEP 25	57.80	FEB 28	57.61	JUL 29	56.64
DEC 28	59.82	OCT 28	57.95	MAR 29	57.90	AUG 27	56.81
JAN 30,1967	59.96	NOV 22	57.87	APR 27	57.69	SEP 26	56.62
FEB 28	59.39	DEC 30	58.27	MAY 26	57.14	OCT 28	56.70
MAR 30	59.92	JAN 29,1969	57.98	JUN 28	56.95	NOV 26	57.03
APR 28	59.70	MAR 07	57.71	JUL 27	56.68	DEC 22	56.24
MAY 25	59.09	24	58.12	AUG 29	56.69	JAN 26,1976	56.85
31	59.28	APR 23	57.82	SEP 26	56.49	FEB 24	56.55
JUN 28	58.89	MAY 26	57.55	OCT 26	56.68	MAR 25	56.22
AUG 01	58.58	JUN 25	57.26	NOV 28	56.79	APR 29	56.26
29	58.47	JUL 29	57.99	DEC 27	56.86	MAY 27	56.00
SEP 26	58.27	AUG 26	57.05	JAN 26,1973	56.70	JUN 25	55.79
OCT 27	58.15	SEP a	57.15	FEB 26	56.57	JUL 26	55.96
NOV 28	58.20	OCT 28	57.08	MAR 27	56.98	AUG 30	56.28
DEC 27	58.26	NOV 25	57.38	APR 26	56.56	SEP 28	56.45
JAN 25,1968	58.41	DEC 28	57.61	MAY 29	56.15	OCT 26	56.55
FEB 27	59.22	JAN 26,1970	57.27	JUN 26	55.80	NOV 29	56.53
MAR 26	58.44	FEB 24	57.18	JUL 06	55.90	DEC 23	56.89
APR 24	58.52	MAR 27	56.98	26	55.63	JAN 25,1977	56.64
29	58.51	APR 23	56.82	AUG 27	55.67	FEB 24	57.16
30	58.31	MAY 26	56.24	SEP 27	55.56	MAR 17	57.25
MAY 01	58.54	JUN 24	56.34	OCT 29	55.80	28	57.13
02	58.58	26	56.53	NOV 27	56.30	APR 26	56.98
03	58.61	JUL 27	56.29	DEC 26	56.08	MAY 26	56.60
08	58.80	AUG 25	56.45	JAN 28,1974	56.45	JUN 28	56.49
09	58.39	SEP 28	56.65	FEB 26	56.42	JUL 27	56.53
10	58.43	OCT 29	56.90	MAR 27	56.20	AUG 26	56.66
13	58.75	DEC 04	57.09	APR 25	56.14	SEP 26	56.51
14	58.47	28	57.28	MAY 28	55.91	OCT 25	56.72
17	58.48	JAN 27,1971	57.56	JUN 26	55.95	NOV 23	56.70
20	58.46	FEB 23	57.36	JUL 29	55.85	DEC 27	56.76
22	58.62	MAR 25	57.68	AUG 26	56.23	JAN 23,1978	56.46
27	58.56	APR 28	57.68	SEP 25	56.02	FEB 24	56.26
29	58.35	MAY 25	57.23	OCT 30	56.63	MAR 24	56.29
JUN 04	58.36	JUN 24	56.94	NOV 26	56.68	APR 25	56.14
06	58.40	JUL 28	57.25	DEC 23	56.77	MAY 26	56.10
07	58.38	AUG 26	57.40	JAN 27,1975	57.35	JUN 28	55.87
10	58.59	SEP 28	56.96	FEB 25	56.82	JUL 26	55.99
13	58.28	OCT 28	57.17	MAR 27	57.23	AUG 29	56.09
26	58.28	NOV 29	57.31	APR 28	56.79	SEP 26	56.54

a, UNKNOWN.

431049071324301. Local number, CVW 4.
LOCATION.--Lat 43°10'49", long 71°32'43", Hydrologic Unit 01070002, north side of Iron Works Road, about 700 ft (213 m) west of South Street, and 1.8 mi (2.9 km) southwest of the State House in Concord.
Owner: U.S. Geological Survey.
AQUIFER.--Lacustrine silty fine sands and clays of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 1.25 in (0.03 m), depth 40.71 ft (12.41 m).
DATUM.--Altitude of land-surface datum is 285 ft (87 m). Measuring point: Top of casing, 3.8 ft (1.16 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.93 ft (4.25 m) below land-surface datum, Apr. 23, 1969; lowest measured, 19.35 ft (5.90 m) below land-surface datum, Nov. 17, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, NOVEMBER 1966 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 17,1966	19.35	SEP 25,1969	17.52	OCT 26,1972	16.55	OCT 28,1975	17.09
21	19.26	OCT 29	18.03	NOV 28	16.18	NOV 25	16.25
30	19.04	NOV 25	16.58	DEC 27	15.95	DEC 22	15.85
DEC 28	18.52	DEC 28	15.94	JAN 26,1973	15.49	JAN 26,1976	16.38
JAN 10,1967	18.89	JAN 26,1970	16.12	FEB 26	15.29	FEB 24	15.43
30	19.04	FEB 24	15.48	MAR 27	14.99	MAR 25	14.58
FEB 28	19.00	MAR 27	15.41	APR 26	14.57	APR 29	15.13
MAR 30	18.91	APR 23	14.43	MAY 29	14.84	MAY 27	15.31
APR 28	17.27	MAY 26	14.87	JUN 26	15.04	JUN 25	16.68
MAY 25	16.37	JUN 24	16.39	JUL 06	15.17	JUL 26	17.40
31	16.31	JUL 27	17.34	26	15.45	AUG 30	17.93
JUN 28	16.60	AUG 25	18.04	AUG 27	15.80	SEP 28	18.43
AUG 01	16.68	SEP 29	18.44	SEP 27	16.08	OCT 26	18.42
29	17.47	OCT 26	18.37	OCT 29	16.54	NOV 26	18.41
OCT 27	18.52	NOV 23	18.16	NOV 27	17.58	DEC 23	18.63
NOV 28	18.56	DEC 28	18.22	DEC 26	15.89	JAN 25,1977	18.93
DEC 27	18.08	JAN 27,1971	18.26	JAN 28,1974	15.53	FEB 25	19.15
JAN 25,1968	18.22	FEB 25	17.98	FEB 26	15.72	MAR 17	18.21
FEB 27	18.51	MAR 25	17.47	MAR 27	14.88	APR 26	16.14
MAR 26	17.59	APR 28	15.67	APR 25	14.81	MAY 26	16.29
APR 24	16.80	MAY 25	15.21	MAY 28	15.15	JUN 28	17.08
MAY 27	16.41	JUN 28	16.82	JUN 26	16.40	JUL 27	17.92
JUN 26	16.02	JUL 28	17.53	JUL 29	17.47	AUG 25	18.40
JUL 26	16.61	AUG 26	17.81	AUG 26	18.18	SEP 26	18.58
AUG 24	17.50	SEP 27	18.46	SEP 25	18.37	OCT 25	17.39
SEP 25	18.00	OCT 28	18.19	OCT 30	18.73	NOV 23	17.14
OCT 28	18.35	NOV 29	18.76	NOV 26	18.63	DEC 27	16.31
NOV 22	17.68	DEC 28	18.55	DEC 23	18.07	JAN 23,1978	16.15
DEC 30	16.54	JAN 28,1972	18.68	JAN 27,1975	18.02	FEB 24	16.25
JAN 29,1969	16.83	FEB 28	18.39	FEB 25	17.73	MAR 24	16.39
MAR 07	17.10	MAR 29	17.42	MAR 27	16.34	APR 25	14.98
24	17.14	APR 27	15.66	APR 28	15.60	MAY 26	15.67
APR 23	13.93	MAY 26	15.56	MAY 28	16.44	JUN 28	16.62
MAY 26	15.52	JUN 28	16.00	JUN 25	16.93	JUL 26	17.55
JUN 25	16.30	JUL 27	15.60	JUL 29	17.79	AUG 28	18.25
JUL 29	17.22	AUG 28	16.03	AUG 27	18.36	SEP 27	18.93
AUG 26	17.42	SEP 26	16.32	SEP 26	18.47		

432428071390701. Local number, FKW 1.
LOCATION.--Lat 43°24'28", long 71°39'07", Hydrologic Unit 01070002, about 1,500 ft (457 m) northeast of U.S. Highway 3, north of Holy Cross Convent, and 2.6 mi (4.2 km) south of Franklin.
Owner: Holy Cross Convent.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Unused water-table well, diameter 2.5 in (0.06 m), depth 52.3 ft (15.9 m).
DATUM.--Altitude of land-surface datum is 290 ft (88 m). Measuring point: Top of casing, 1.80 ft (0.55 m) above land-surface datum.
PERIOD OF RECORD.--October 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.98 ft (2.13 m) below land-surface datum, Apr. 24, 1973; lowest measured, 15.75 ft (4.80 m) below land-surface datum, Oct. 27, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1966 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27,1966	15.75	JUL 29,1970	10.78	AUG 27,1973	9.33	FEB 24,1976	11.08
APR 28,1967	12.78	AUG 25	12.10	SEP 27	10.56	MAR 25	10.04
AUG 08	12.19	SEP 25	14.12	OCT 29	11.70	APR 29	8.55
OCT 27	14.12	OCT 26	13.41	NOV 26	12.44	MAY 27	8.35
NOV 28	14.85	NOV 30	13.31	DEC 21	12.16	JUN 25	9.42
JAN 30,1968	15.43	DEC 24	13.95	26	11.34	JUL 27	10.60
FEB 26	15.71	JAN 24,1971	14.08	JAN 28,1974	10.76	AUG 30	11.36
MAR 26	14.04	MAR 30	13.67	FEB 25	10.46	SEP 28	12.30
APR 24	13.65	APR 22	10.83	MAR 27	9.97	OCT 26	12.85
MAY 27	12.73	MAY 24	9.45	APR 24	9.02	NOV 29	13.44
JUN 26	11.99	JUN 24	9.87	MAY 28	8.74	DEC 23	13.81
JUL 26	11.05	JUL 26	9.95	JUN 26	9.63	JAN 26,1977	14.18
AUG 24	12.36	SEP 22	10.35	JUL 29	10.80	FEB 24	14.68
SEP 25	13.07	MAR 27,1972	15.06	AUG 26	11.83	MAR 28	12.37
OCT 28	13.70	APR 24	11.54	SEP 25	12.62	APR 26	10.78
NOV 22	13.94	MAY 24	10.61	OCT 29	13.53	MAY 26	10.92
DEC 30	14.58	JUN 26	10.75	NOV 26	14.04	JUN 28	11.76
MAR 24,1969	15.12	JUL 24	10.94	DEC 24	14.30	JUL 27	12.62
APR 23	8.02	AUG 28	11.34	JAN 27,1975	14.57	AUG 26	13.44
MAY 23	7.90	SEP 25	12.09	FEB 25	14.40	SEP 27	14.10
JUN 25	9.00	OCT 26	12.87	MAR 27	13.12	NOV 25	12.52
JUL 29	11.73	NOV 27	12.96	APR 28	10.86	DEC 28	12.09
AUG 26	14.45	DEC 26	11.99	MAY 28	11.15	JAN 23,1978	11.45
OCT 29	12.21	JAN 24,1973	11.58	JUN 25	11.65	FEB 25	11.05
DEC 31	11.20	FEB 23	10.85	JUL 29	12.38	MAR 24	11.25
JAN 23,1970	11.38	MAR 26	8.59	AUG 27	13.11	APR 25	9.04
FEB 20	10.07	APR 24	6.98	SEP 26	13.70	MAY 25	9.15
MAR 26	10.16	MAY 25	7.19	OCT 28	13.12	JUN 27	9.50
APR 23	8.26	JUN 25	8.09	NOV 26	12.35	JUL 26	10.62
MAY 25	8.29	JUL 06	7.28	DEC 23	11.74	AUG 29	11.74
JUN 24	9.56	27	8.09	JAN 25,1976	11.92	SEP 26	12.75

430235071275501. Local number, HTW 5.
LOCATION.--Lat 43°02'35", long 71°27'55", Hydrologic Unit 01070002, within southeastern cloverleaf of intersection of U.S. Highway 3A and Interstate Highway 93, 3.7 mi (6.0 km) south of the center of Hooksett.
Owner: New Hampshire Department of Public Works and Highways.
AQUIFER.--Crystalline rock of Devonian age.
WELL CHARACTERISTICS.--Drilled, unused bedrock well, diameter 6 in (0.15 m), depth 102.73 ft (31.31 m) above land-surface datum.
DATUM.--Land-surface datum is 258.93 ft (78.922 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--April 1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.69 ft (12.40 m) below land-surface datum, Apr. 28, 1967; lowest measured, 51.96 ft (15.84 m) below land-surface datum, Feb. 10, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, APRIL 1965 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 27,1965	46.44	APR 25,1968	43.49	NOV 29,1971	50.97	MAY 28,1975	46.94
MAY 04	45.77	MAY 23	44.32	DEC 27	50.60	JUN 25	46.75
07	45.62	JUN 24	43.40	JAN 28,1972	47.76	JUL 29	47.17
11	46.44	JUL 24	43.74	FEB 28	46.33	AUG 27	47.56
21	45.63	AUG 24	47.20	MAR 28	42.08	SEP 26	47.88
24	45.74	SEP 25	48.70	APR 26	41.20	OCT 28	45.35
29	45.93	OCT 28	50.15	MAY 25	41.64	NOV 25	45.00
JUN 30	47.42	NOV 21	50.80	JUN 28	43.67	DEC 23	45.76
JUL 13	47.93	DEC 29	45.01	JUL 27	45.77	FEB 24,1976	46.72
AUG 02	48.72	JAN 27,1969	45.36	AUG 28	47.40	MAR 24	46.55
SEP 07	49.84	MAR 06	46.44	SEP 26	48.85	APR 29	47.33
22	50.25	26	46.04	OCT 26	49.92	MAY 26	47.57
30	50.45	APR 23	40.91	NOV 28	50.10	JUN 25	48.11
NOV 01	51.12	MAY 23	43.42	DEC 26	45.45	JUL 26	48.93
DEC 31	51.81	JUN 24	45.90	JAN 26,1973	44.81	AUG 30	49.25
FEB 10,1966	51.96	JUL 28	47.42	FEB 26	43.25	SEP 28	49.56
MAR 01	51.26	SEP a	48.59	MAR 27	40.77	OCT 26	49.69
APR 01	43.52	NOV 25	48.06	APR 26	41.22	NOV 26	49.06
28	44.20	DEC 30	44.53	MAY 29	42.89	DEC 22	49.30
29	44.26	JAN 23,1970	43.73	JUN 26	44.83	JAN 24,1977	49.86
MAY 27	45.38	FEB 23	41.72	JUL 06	45.31	MAR 29	46.28
JUN 30	46.67	MAR 26	44.11	26	46.06	APR 26	46.11
AUG 25	49.20	APR 23	41.91	AUG 27	45.00	MAY 26	46.11
SEP 01	49.42	MAY 22	44.09	SEP 27	47.49	JUN 27	47.30
28	49.96	JUN 25	45.63	OCT 29	49.15	JUL 27	48.35
OCT 24	50.31	JUL 27	47.82	NOV 26	50.03	AUG 25	49.19
NOV 28	48.72	AUG 25	49.23	DEC 21	50.30	SEP 27	49.89
DEC 27	48.23	SEP 24	50.24	26	48.73	OCT 25	47.45
FEB 07,1967	48.13	OCT 26	50.92	JAN 28,1974	44.35	NOV 25	47.21
27	47.97	NOV 23	51.20	MAR 27	43.10	DEC 27	46.52
MAR 30	47.55	DEC 28	50.39	APR 25	42.60	JAN 23,1978	46.48
APR 28	40.69	JAN 26,1971	49.56	MAY 28	43.91	FEB 27	47.27
MAY 25	42.16	FEB 23	49.34	JUN 26	45.35	MAR 24	47.64
AUG 01	45.82	MAR 25	45.63	JUL 29	47.65	APR 25	47.44
28	46.45	APR 27	41.46	AUG 26	49.15	MAY 26	47.85
SEP 28	47.37	MAY 25	42.85	SEP 25	50.23	JUN 28	48.14
OCT 26	48.36	JUN 24	44.91	DEC 23	47.52	JUL 26	48.82
NOV 24	49.29	JUL 28	47.34	JAN 27,1975	47.07	AUG 28	49.81
DEC 27	45.71	AUG 26	48.55	FEB 25	47.19	SEP 26	50.44
JAN 24,1968	45.74	SEP 27	49.71	MAR 27	46.14		
MAR 25	44.51	OCT 27	50.45	APR 28	45.85		

a, UNKNOWN.

432343071570901. Local number, NLW 1.
LOCATION.--Lat 43°23'43", long 71°57'09", Hydrologic Unit 01070003, at north side of Golf Course Road, about 500 ft (150 m) east of intersection of State Highway 114 and Golf Course Road, and 2.1 mi (3.4 km) southeast of New London.
Owner: W. S. Mariner.
AQUIFER.--Sandy till of Pleistocene age.
WELL CHARACTERISTICS.--Dug observation water-table well, diameter 36 in (0.91 m), depth 21 ft (6.4 m), lined with stone to 21 ft (6.4 m), open end.
DATUM.--Altitude of land-surface datum is 1,020 ft (310 m). Measuring point: Top of 2-in (0.05 m) casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--October 1947 to current year. Prior to January 1956, published in Water Levels and Artesian Pressures in Observation Wells in the United States: Part 1. Northeastern States; Geological Survey Water-Supply Paper Series. January 1956 to November 1972, published in Ground-Water Levels in the United States, Northeastern States; Geological Survey Water-Supply Paper Series.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.80 ft (0.24 m) below land-surface datum, Apr. 2, 1963; lowest measured, 16.90 ft (5.15 m) below land-surface datum, Dec. 28, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21, 1977	8.42	FEB 25, 1978	7.93	MAY 19, 1978	4.19	AUG 21, 1978	12.56
NOV 20	6.89	MAR 20	8.69	JUN 19	8.04	SEP 20	13.89
DEC 23	6.55	APR 19	3.55	JUL 21	10.68		

431540071452801. Local number, WCW 1.
LOCATION.--Lat 43°15'40", long 71°45'28", Hydrologic Unit 01070003, 44 ft (13.4 m) northeast of edge of pavement of northbound lane of Interstate Highway 89, about 2 mi (3.2 km) southeast of State Highway 103 overpass in Warner.
Owner: New Hampshire Department of Public Works and Highways.
AQUIFER.--Sand and fine gravel of Pleistocene age.
WELL CHARACTERISTICS.--Driven, unused water-table well, diameter 2 in (0.05 m), depth 42.8 ft (13.05 m).
DATUM.--Altitude of land-surface datum is 424 ft (129 m). Measuring point: Top of casing, 3.2 ft (0.98 m) above land-surface datum.
PERIOD OF RECORD.--December 1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.94 ft (7.60 m) below land-surface datum, May 5, 1969; lowest measured, 33.82 ft (10.31 m) below land-surface datum, Dec. 17, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, DECEMBER 1965 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 17,1965	33.82	APR 02,1969	30.54	FEB 01,1972	32.29	MAY 01,1975	28.21
JAN 04,1966	33.70	MAY 05	24.94	MAR 01	32.05	30	28.70
05	33.68	22	26.40	MAY 01	28.05	JUN 26	29.51
MAR 11	32.84	28	26.64	JUN 01	27.30	JUL 29	30.41
APR 06	31.81	JUN 20	27.96	JUL 03	28.27	SEP 05	31.38
JUN 03	30.51	JUL 22	29.39	AUG 17	29.70	29	31.81
JUL 08	30.99	AUG 01	29.88	SEP 01	30.19	OCT 28	31.30
AUG 09	31.77	08	29.87	OCT 11	31.32	NOV 26	30.68
SEP 22	32.28	18	30.00	26	31.55	JAN 08,1976	29.93
OCT 17	32.39	SEP 11	30.98	NOV 28	31.50	FEB 11	29.75
NOV 15	31.95	18	31.16	DEC 26	30.74	MAR 26	28.72
DEC 14	31.55	22	31.25	JAN 26,1973	30.47	APR 30	27.37
FEB 09,1967	31.86	OCT 09	31.30	FEB 26	29.77	JUN 08	28.64
MAR 23	32.00	NOV 06	31.80	MAR 22	28.53	30	29.22
APR 25	29.90	27	31.34	APR 26	26.24	JUL 28	30.25
MAY 05	28.96	DEC 12	31.20	JUN 15	27.23	SEP 15	31.39
18	28.52	FEB 12,1970	29.99	JUL 06	27.68	OCT 27	32.11
AUG 21	30.37	MAR 19	29.23	26	28.05	DEC 17	32.13
SEP 14	31.15	APR 21	27.60	AUG 27	29.20	JAN 26,1977	32.42
26	31.49	MAY 05	27.18	SEP 27	30.30	FEB 25	32.66
NOV 02	32.27	21	27.59	OCT 29	31.13	MAR 28	30.91
20	32.56	JUN 26	28.51	NOV 26	31.53	MAY 27	28.78
DEC 13	32.69	JUL 17	29.40	DEC 26	31.00	JUL 11	30.07
JAN 15,1968	32.36	AUG 10	30.38	JAN 28,1974	29.66	SEP 08	31.68
MAR 19	32.52	24	30.90	FEB 26	29.37	OCT 03	31.31
APR 11	30.69	SEP 29	31.82	MAR 27	29.17	NOV 03	30.71
30	30.09	NOV 20	32.19	APR 29	28.40	DEC 05	31.39
MAY 29	28.97	FEB 19,1971	32.17	MAY 28	28.36	JAN 09,1978	30.90
JUN 02	29.40	MAR 26	31.79	JUN 27	29.03	FEB 13	30.48
SEP 12	30.81	APR 29	29.10	JUL 30	30.02	MAR 14	29.12
OCT 04	31.37	JUN 01	27.95	SEP 05	31.27	APR 25	28.88
24	31.75	30	29.10	27	31.68	MAY 26	28.13
DEC 05	31.67	AUG 02	30.38	OCT 31	32.08	JUL 17	29.07
JAN 30,1969	30.63	SEP 01	31.28	NOV 27	32.00	AUG 29	30.36
FEB 11	30.70	OCT 04	31.97	DEC 26	31.56	SEP 27	31.44
MAR 03	30.89	30	32.23	JAN 31,1975	31.30		
14	30.99	DEC 01	32.46	MAR 03	31.05		
21	31.95	JAN 05,1972	32.40	APR 02	30.19		

431540071452802. Local number, WCW 2.
LOCATION.--Lat 43°15'40", long 71°45'28", Hydrologic Unit 01070003, 69 ft (21 m) northeast of edge of pavement of northbound lane of Interstate Highway 89, about 2 mi (3.2 km) southeast of State Highway 103 overpass in Warner.
Owner: New Hampshire Department of Public Works and Highways.
AQUIFER.--Sand and fine gravel of Pleistocene age.
WELL CHARACTERISTICS.--Driven, unused water-table well, diameter 2 in (.05 m), depth 43.7 ft (13.32 m).
DATUM.--Altitude of land-surface datum is 424 ft (129 m). Measuring point: Top of casing, 2.3 ft (0.70 m) above land-surface datum.
PERIOD OF RECORD.--December 1965 to May 1968, February 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.24 ft (8.00 m) below land-surface datum, Apr. 26, 1973; lowest measured, 33.90 ft (10.33 m) below land-surface datum, Dec. 15, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, DECEMBER 1965 TO MAY 1968, FEBRUARY 1970 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 15,1965	33.90	JUN 26,1970	28.48	APR 26,1973	26.24	NOV 26,1975	30.67
JAN 04,1966	33.27	JUL 17	29.42	JUN 18	27.22	JAN 08,1976	29.93
05	33.77	AUG 10	30.38	JUL 06	27.67	FEB 11	29.75
MAR 11	32.93	24	30.92	26	28.04	MAR 26	28.72
APR 06	31.90	SEP 29	31.86	AUG 27	29.19	APR 30	27.36
JUN 02	30.58	NOV 20	32.22	SEP 27	30.30	JUN 08	28.63
JUL 08	31.05	FEB 19,1971	32.18	OCT 29	31.13	30	29.22
AUG 09	31.83	MAR 26	31.76	NOV 26	31.51	JUL 28	30.23
SEP 22	32.34	APR 29	29.09	DEC 26	31.01	SEP 15	31.39
OCT 17	32.45	JUN 01	28.00	JAN 28,1974	29.64	OCT 27	32.11
NOV 15	31.72	30	29.11	FEB 26	29.35	DEC 17	32.13
DEC 14	31.63	AUG 02	30.37	MAR 27	29.16	JAN 26,1977	32.41
APR 25,1967	29.97	SEP 01	31.26	APR 29	28.39	FEB 25	32.66
MAY 05	29.03	OCT 04	31.79	MAY 28	28.36	MAR 28	30.91
09	28.83	30	32.24	JUN 27	29.03	MAY 27	28.70
AUG 21	30.90	DEC 01	32.48	JUL 30	30.01	JUL 11	30.06
SEP 14	31.21	JAN 05,1972	32.14	SEP 05	31.26	SEP 08	31.67
26	31.57	FEB 02	32.07	27	31.67	OCT 03	31.30
NOV 02	32.35	MAR 01	32.08	OCT 31	32.06	NOV 03	30.69
20	32.59	MAY 01	28.04	NOV 27	32.01	DEC 05	31.38
DEC 13	32.75	JUN 01	27.22	DEC 26	31.57	JAN 09,1978	30.90
JAN 15,1968	32.44	JUL 03	28.31	JAN 31,1975	31.30	FEB 13	30.47
MAR 19	32.43	AUG 17	29.57	MAR 03	31.04	MAR 14	29.09
APR 11	30.70	SEP 01	30.19	APR 02	30.18	APR 25	28.86
30	30.13	OCT 11	31.32	MAY 01	28.19	MAY 26	28.13
MAY 29	29.75	26	31.56	30	28.69	JUL 17	29.06
FEB 12,1970	30.92	NOV 28	31.52	JUN 26	29.50	AUG 29	30.36
MAR 19	29.26	DEC 26	30.74	JUL 29	30.40	SEP 27	31.42
APR 21	27.64	JAN 26,1973	30.47	SEP 05	31.36		
MAY 06	27.21	FEB 26	29.77	29	31.81		
21	27.59	MAR 27	28.50	OCT 28	31.29		

431540071452803. Local number, WCW 3.
LOCATION.--Lat 43°15'40", long 71°45'28", Hydrologic Unit 01070003, 103 ft (31.4 m) northeast of edge of pavement of northbound lane of Interstate Highway 89, about 2 mi (3.2 km) southeast of State Highway 103 overpass in Warner.
Owner: New Hampshire Department of Public Works and Highways.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 2 in (0.05 m), depth 60 ft (18.3 m).
DATUM.--Altitude of land-surface datum is 424 ft (129 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--February 1967 to May 1968, February 1970 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.53 ft (7.78 m) below land-surface datum, Apr. 27, 1973; lowest measured, 32.27 ft (9.84 m) below land-surface datum, Feb. 25, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, FEBRUARY 1967 TO MAY 1968, FEBRUARY 1970 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 09,1967	31.06	JUN 30,1971	28.25	OCT 29,1973	30.65	FEB 11,1976	29.22
AUG 21	29.61	AUG 02	29.86	NOV 26	31.09	MAR 26	28.16
SEP 14	30.69	SEP 01	30.82	DEC 26	30.63	APR 30	26.67
26	31.04	OCT 04	31.58	JAN 28,1974	29.14	JUN 08	28.00
NOV 02	31.91	30	31.89	FEB 26	28.81	30	28.56
20	31.97	DEC 01	31.84	MAR 27	28.57	JUL 28	29.68
DEC 13	32.23	JAN 05,1972	31.71	APR 29	27.76	SEP 15	30.92
JAN 15,1968	32.06	FEB 01	31.60	MAY 28	27.72	OCT 27	31.63
MAR 19	32.20	MAR 01	31.73	JUN 27	28.40	DEC 17	31.75
APR 11	30.22	MAY 01	27.37	JUL 30	29.45	JAN 26,1977	32.02
30	29.53	JUN 01	26.62	SEP 05	30.78	FEB 25	32.27
MAY 29	29.93	JUL 03	27.69	27	31.23	MAR 28	30.57
FEB 12,1970	29.53	AUG 17	28.67	OCT 31	31.67	MAY 27	28.05
MAR 19	28.66	SEP 01	29.65	NOV 27	31.63	JUL 11	29.49
APR 21	26.94	OCT 11	30.88	DEC 26	31.18	SEP 08	31.19
MAY 05	26.49	26	31.14	JAN 31,1975	30.90	OCT 03	30.88
21	26.89	NOV 28	31.15	MAR 03	30.62	NOV 03	30.30
JUN 26	27.93	DEC 26	30.35	APR 02	29.73	DEC 05	30.98
JUL 17	28.80	JAN 26,1973	30.03	MAY 01	27.57	JAN 09,1978	30.52
AUG 10	29.80	FEB 26	29.26	30	28.05	FEB 13	30.02
24	30.36	MAR 27	27.94	JUN 26	28.91	MAR 14	28.52
SEP 29	31.36	APR 27	25.53	JUL 29	29.90	APR 25	28.45
NOV 20	31.81	JUN 15	26.54	SEP 05	30.92	MAY 26	27.54
FEB 19,1971	31.76	JUL 06	27.06	29	31.38	JUL 17	28.46
MAR 26	31.42	26	27.42	OCT 28	30.93	AUG 29	30.01
APR 29	29.00	AUG 27	28.61	NOV 26	30.19	SEP 27	31.02
JUN 01	28.00	SEP 27	29.77	JAN 08,1976	29.41		

STRAFFORD COUNTY

430721071005001. Local number, LIW I (Formerly published as Lee 1).
LOCATION.--Lat 43°07'21", long 71°00'50", Hydrologic Unit 01060003, southwest side of Bennett Road about 200 ft (60 m) from the west corner of the Lee Town Green.
Owner: Mildred Carlson.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug observation water-table well, diameter 40 in (1.02 m) depth 32.8 ft (10.0 m), lined with stone to 32.8 ft (10.0 m).
DATUM.--Altitude of land-surface datum is 190 ft (58 m). Measuring point: Top of stone cover, at land-surface datum.
PERIOD OF RECORD.--November 1953 to current year. Prior to January 1958, published in New Hampshire Basic-Data Report No. 1, Ground-Water Series. Prior to January 1956, published in Water Levels and Artesian Pressures in Observation Wells in the United States: Part 1. Northeastern States; Geological Survey Water-Supply Paper Series. January 1956 to December 1972, published in Ground-Water Levels in the United States, Northeastern States; Geological Survey Water-Supply Paper Series.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.48 ft (8.68 m) below land-surface datum, Mar. 17, 1977; lowest measured, 32.35 ft (9.86 m) below land-surface datum, Nov. 1, 27, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 1977	30.65	JAN 24, 1978	30.75	APR 21, 1978	30.51	JUL 25, 1978	31.20
NOV 20	30.80	FEB 21	31.00	MAY 22	29.19	AUG 26	31.59
DEC 28	30.22	MAR 24	30.64	JUN 22	30.77	SEP 22	31.60

BENNINGTON COUNTY

424810073160401. Local number, PQW 1.
LOCATION.--Lat 42°48'10", long 73°16'04", Hydrologic Unit 02020003, in front of residence on west side of State Highway 346 and 0.15 mi (0.24 km) south of post office at North Pownal.
Owner: Robert Rudd, Sr.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in (0.61 m), depth 18 ft (5.5 m), cased with stone to 18 ft (5.5 m), open end.
DATUM.--Altitude of land-surface datum is 515 ft (157 m). Measuring point: Top of 0.75-in (0.02 m) diameter hole drilled in center of 0.38-in (0.01 m) thick steel cover at land-surface datum.
PERIOD OF RECORD.--October 1964 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.28 ft (3.13 m) below land-surface datum, Mar. 26, 1977; lowest measured, 16.59 ft (5.06 m) below land-surface datum, Oct. 19, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	13.10	DEC 21	12.15	FEB 20	13.26	APR 25	12.97	JUN 26	13.84	AUG 25	14.80
NOV 24	13.55	JAN 28	11.38	MAR 25	13.70	MAY 24	13.70	JUL 25	14.87	SEP 26	14.74

CHITTENDEN COUNTY

443646073124901. Local number, MJW 3.
LOCATION.--Lat 44°36'46", long 73°12'49", Hydrologic Unit 02010005, about 600 ft (183 m) south of manager's residence at Vermont Sandbar Waterfowl Development Area, about 400 ft (122 m) west of U.S. Highway 2, and 0.9 mi (1.4 km) northwest of Lamoille River bridge at Milton.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in (0.03 m), depth 40 ft (12.2 m), screened 38 to 40 ft (11.6 to 12.2 m).
DATUM.--Altitude of land-surface datum is 160 ft (49 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--November 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.97 ft (6.70 m) below land-surface datum, May 29, 1974; lowest measured, 37.82 ft (11.53 m) below land-surface datum, Feb. 26, 1965.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	30.69	DEC 27	27.07	FEB 21	25.85	APR 25	22.34	JUN 27	23.56	AUG 28	26.64
NOV 28	28.23	JAN 27	26.06	MAR 29	27.06	MAY 26	22.16	JUL 25	24.88	SEP 26	28.28

ESSEX COUNTY

444731071514701. Local number, BIW 1.
LOCATION.--Lat 44°47'31", long 71°51'47", Hydrologic Unit 01110000, south of road and just west of parking lot for Brighton State Park Beach at Brighton.
Owner: U.S. Geological Survey.
AQUIFER.--Medium and coarse sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 35 ft (10.7 m), screened 33 to 35 ft (10.1 to 10.7 m).
DATUM.--Altitude of land-surface datum is 1,180 ft (360 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.94 ft (0.59 m) below land-surface datum, Apr. 25, 1974; lowest measured, 4.94 ft (1.51 m) below land-surface datum, July 27, 1975, June 24, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	3.18	DEC 22	3.79	FEB 22	4.18	APR 25	3.97	JUN 26	3.18	AUG 28	4.58
NOV 22	3.11	JAN 24	3.78	MAR 23	4.23	MAY 23	3.00	JUL 28	4.92	SEP 26	4.37

FRANKLIN COUNTY

445603072422901. Local number, BKW 1.
LOCATION.--Lat 44°56'03", long 72°42'29", Hydrologic Unit 02010007, at southeast end of State Highway 118 bridge on Missisquoi River at East Berkshire.
Owner: U.S. Geological Survey.
AQUIFER.--Fine sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 51 ft (15.5 m), screened 49 to 51 ft (14.9 to 15.5 m).
DATUM.--Altitude of land-surface datum is 425 ft (130 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.78 ft (2.98 m) below land-surface datum, Apr. 25, 1978; lowest measured, 16.43 ft (5.01 m) below land-surface datum, Aug. 26, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	13.21	DEC 27	13.05	FEB 21	12.34	APR 25	9.78	JUN 27	12.57	AUG 28	15.51
NOV 28	12.87	JAN 27	10.16	MAR 29	11.03	MAY 26	13.10	JUL 25	14.99	SEP 26	15.53

LAMOILLE COUNTY

443405072323501. Local number, MPW 1.
LOCATION.--Lat 44°34'05", long 72°32'35", Hydrologic Unit 02010005, Vermont Highway Department right-of-way off State Highway 15 and 3 mi (5 km) east of Morrisville.
Owner: U.S. Geological Survey.
AQUIFER.--Silty, fine to medium sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 50 ft (15.2 m), screened 48 to 50 ft (14.6 to 15.2 m).
DATUM.--Altitude of land-surface datum is 660 ft (201 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--October 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.87 ft (4.53 m) below land-surface datum, Jan. 27, 1978; lowest measured, 20.35 ft (6.20 m) below land-surface datum, Aug. 26, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	18.18	DEC 27	17.76	FEB 21	16.02	APR 25	16.05	JUN 26	17.98	AUG 28	19.85
NOV 28	18.21	JAN 27	14.87	MAR 29	17.39	MAY 26	17.65	JUL 25	19.18	SEP 26	20.28

ORANGE COUNTY

435343072151801. Local number, WOW 1.
LOCATION.--Lat 43°53'43", long 72°15'18", Hydrologic Unit 01080103, 60 ft (18 m) west of salt shed and 1.3 mi (2.1 km) south-southeast of West Fairlee Village.
Owner: U.S. Geological Survey.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 54 ft (16.5 m) screened 52 to 54 ft (15.9 to 16.5 m).
DATUM.--Altitude of land-surface datum is 700 ft (213 m). Measuring point: Top of casing, 2.00 ft (0.61 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.71 ft (0.22 m) below land-surface datum, Jan. 26, 1978; lowest measured, 5.43 ft (1.66 m) below land-surface datum, Nov. 18, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	3.30	DEC 27	3.16	FEB 22	1.88	APR 24	0.94	JUN 26	3.25	AUG 28	4.93
NOV 28	3.12	JAN 26	0.71	MAR 28	2.86	MAY 25	2.33	JUL 26	4.46	SEP 25	5.14

ORLEANS COUNTY

443952072114001. Local number, GLW 1.
LOCATION.--Lat 44°39'52", long 72°11'40", Hydrologic Unit 01110000, at Vermont Highway Department salt shed west of State Highway 16 and 3 mi (5 km) south of Glover Village.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 82 ft (25 m), screened 80 to 82 ft (24.4 to 25 m).
DATUM.--Altitude of land-surface datum is 1,200 ft (366 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.11 ft (3.69 m) below land-surface datum, May 23, 1969; lowest measured, 18.95 ft (5.78 m) below land-surface datum, Mar. 28, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	15.88	DEC 27	15.97	FEB 21	16.22	APR 25	16.42	JUN 26	14.54	AUG 28	16.05
NOV 28	15.90	JAN 27	16.10	MAR 29	16.73	MAY 26	13.76	JUL 25	15.09	SEP 26	16.69

RUTLAND COUNTY

434217073010601. Local number, PFW 8.
LOCATION.--Lat 43°42'17", long 73°01'06", Hydrologic Unit 02010002, 12 ft (4 m) west of storage building at St. Alphonsus Cemetery at Pittsford.
Owner: U.S. Geological Survey.
AQUIFER.--Medium to fine sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 42 ft (12.8 m), screened 40 to 42 ft (12.2 to 12.8 m).
DATUM.--Altitude of land-surface datum is 490 ft (149 m). Measuring point: Top of casing, 2.00 ft (0.61 m) above land-surface datum.
REMARKS.--Well pulled Nov. 8, 1968, point replaced, depth changed from 43 ft (13.1 m) to 42 ft (12.8 m), old 3-ft (0.9 m) point was completely encrusted.
PERIOD OF RECORD.--October 1957 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.17 ft (10.42 m) below land-surface datum, May 26, 1976; lowest measured, 39.59 ft (12.07 m) below land-surface datum, Oct. 18, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	35.68	DEC 27	35.38	FEB 22	35.08	APR 24	34.83	JUN 26	35.38	AUG 28	36.03
NOV 28	35.61	JAN 26	35.00	MAR 28	34.83	MAY 25	35.10	JUL 26	35.84	SEP 25	36.18

WASHINGTON COUNTY

441829072413901. Local number, MHW 3.
LOCATION.--Lat 44°18'29", long 72°41'39", Hydrologic Unit 02010003, adjacent to salt shed at Vermont Highway Department garage off U.S. Highway 2 and 1.25 mi (2.01 km) west of Middlesex Village.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 50 ft (15.2 m), screened 48 to 50 ft (14.6 to 15.2 m).
DATUM.--Land-surface datum is 453.72 ft (138.294 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--October 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.99 ft (4.87 m) below land-surface datum, Feb. 24, 1976; lowest measured, 23.74 ft (7.24 m) below land-surface datum, Sept. 25, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	20.93	DEC 27	19.97	FEB 21	21.79	APR 25	18.01	JUN 27	22.10	AUG 28	23.43
NOV 28	21.10	JAN 27	18.71	MAR 29	18.50	MAY 26	21.60	JUL 25	23.05	SEP 25	23.74

441552072341901. Local number, MMW 2.
LOCATION.--Lat 44°15'52", long 72°34'19", Hydrologic Unit 02010003, at southeast corner of garage at Nine Winter Street in Montpelier.
Owner: U.S. Geological Survey.
AQUIFER.--Medium to coarse sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 26 ft (7.9 m), screened 24 to 26 ft (7.3 to 7.9 m).
DATUM.--Altitude of land-surface datum is 520 ft (158 m). Measuring point: Top of casing, 0.10 ft (0.03 m) above land-surface datum.
PERIOD OF RECORD.--October 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.09 ft (3.38 m) below land-surface datum, Apr. 24, 1969; lowest measured, 16.84 ft (5.13 m) below land-surface datum, Sept. 25, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	13.49	DEC 28	14.76	FEB 22	14.82	APR 26	12.32	JUN 26	15.15	AUG 28	16.68
NOV 28	14.88	JAN 27	12.99	MAR 29	15.10	MAY 26	14.28	JUL 25	16.31	SEP 25	16.84

441215072483101. Local number, WAW 2.
LOCATION.--Lat 44°12'15", long 72°48'31", Hydrologic Unit 02010003, at rest area on east side of State Highway 100 and 1.3 mi (2.1 km) northeast of Waitsfield Village.
Owner: U.S. Geological Survey.
AQUIFER.--Silty gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drive and wash observation water-level well, diameter 1.25 in (0.03 m), depth 45.5 ft (13.9 m), screened 43.5 to 45.5 ft (13.3 to 13.9 m).
DATUM.--Altitude of land-surface datum is 685 ft (209 m). Measuring point: Top of casing, 2.00 ft (0.61 m) above land-surface datum.
PERIOD OF RECORD.--June 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.69 ft (1.43 m) below land-surface datum, Apr. 25, 1977; lowest measured, 7.55 ft (2.30 m) below land-surface datum, Sept. 25, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	6.09	DEC 27	6.45	FEB 22	6.56	APR 24	5.19	JUN 26	6.60	AUG 28	7.25
NOV 28	6.20	JAN 26	6.08	MAR 28	5.55	MAY 25	6.16	JUL 26	7.40	SEP 25	7.55

441033072500201. Local number, WAW 3.
LOCATION.--Lat 44°10'33", long 72°50'02", Hydrologic Unit 02010003, town of Waitsfield, southeast of Vermont Highway Department salt shed on State Highway 100 and 0.5 mi (0.8 km) southeast of Irasville Village.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drive and wash observation water-level well, diameter 1.25 in (0.03 m), depth 53 ft (16.2 m), screened 51 to 53 ft (15.5 to 16.2 m).
DATUM.--Altitude of land-surface datum is 715 ft (218 m). Measuring point: Top of casing, 3.25 ft (0.99 m) above land-surface datum.
PERIOD OF RECORD.--June 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.34 ft (0.71 m) below land-surface datum, Feb. 24, 1976; lowest measured, 8.00 ft (2.44 m) below land-surface datum, Sept. 25, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	5.89	DEC 27	6.17	FEB 22	6.71	APR 24	4.96	JUN 26	6.83	AUG 28	7.70
NOV 28	6.21	JAN 26	5.65	MAR 28	5.32	MAY 25	6.08	JUL 26	7.59	SEP 25	8.00

WINDSOR COUNTY

431551072350601. Local number, CKW 1.
LOCATION.--Lat 43°15'51", long 72°35'06", Hydrologic Unit 01080107, at Vermont Highway Department salt shed on Elm Street in Chester.
Owner: U.S. Geological Survey.
AQUIFER.--Boulders, coarse gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 22 ft (6.7 m), screened 20 to 22 ft (6.1 to 6.7 m).
DATUM.--Altitude of land-surface datum is 580 ft (177 m). Measuring point: Top of casing, 2.00 ft (0.61 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.81 ft (0.55 m) below land-surface datum, Mar. 28, 1978; lowest measured, 6.31 ft (1.92 m) below land-surface datum, Sept. 28, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	4.15	DEC 27	4.57	FEB 22	4.92	APR 24	2.88	JUN 26	5.47	AUG 28	5.75
NOV 28	4.40	JAN 26	3.57	MAR 28	1.81	MAY 25	4.80	JUL 26	5.93	SEP 25	5.91

433240072242901. Local number, HLW 54.
LOCATION.--Lat 43°32'40", long 72°24'29", Hydrologic Unit 01080104, at northeast corner of fire station in Hartland.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-level well, diameter 1.25 in (0.03 m), depth 51 ft (15.54 m), screened 49 to 51 ft (14.93 to 15.54 m).
DATUM.--Altitude of land-surface datum is 575 ft (175 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--August 1969 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.65 ft (2.03 m) below land-surface datum, July 26, 1973; lowest measured, 9.94 ft (3.03 m) below land-surface datum, Oct. 22, 1971.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	8.89	DEC 27	8.60	FEB 22	8.31	APR 24	6.95	JUN 26	8.60	AUG 28	9.54
NOV 28	8.58	JAN 26	7.55	MAR 28	8.22	MAY 25	7.90	JUL 26	9.31	SEP 25	9.78

435129072483301. Local number, RJW 1.
LOCATION.--Lat 43°51'29", long 72°48'33", Hydrologic Unit 01080105, adjacent to salt shed at Vermont Highway Department garage 1.3 mi (2.1 km) south of Rochester Village.
Owner: U.S. Geological Survey.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 73 ft (22.3 m), screened 71 to 73 ft (21.6 to 22.3 m).
DATUM.--Altitude of land-surface datum is 800 ft (244 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--October 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.50 ft (1.37 m) below land-surface datum, Mar. 26, 1968; lowest measured, 13.05 ft (3.98 m) below land-surface datum, Aug. 25, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	8.51	DEC 27	8.98	FEB 22	10.71	APR 24	5.98	JUN 26	10.85	AUG 28	12.18
NOV 28	9.56	JAN 26	9.48	MAR 28	8.82	MAY 25	9.13	JUL 26	12.04	SEP 25	12.32

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APPENDIX

Alphabetical Listing of Changes in Selected Parameter Names and Parameter Codes

(First line is new terminology and second line is old terminology.)

39332	ALDRIN, SUSPENDED TOTAL (UG/L)
39332	ALDRIN, SUSPENDED (UG/L)
01505	ALPHA, SUSPENDED TOTAL (PCI/L)
01505	ALPHA, SUSPENDED (PCI/L)
01506	ALPHA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
01506	ALPHA, SUSPENDED, COUNTING ERROR (PCI/L)
01105	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
01105	ALUMINUM, TOTAL (UG/L AS AL)
01107	ALUMINUM, SUSPENDED RECOVERABLE (UG/L AS AL)
01107	ALUMINUM, SUSPENDED (UG/L AS AL)
01108	ALUMINUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AL)
01108	ALUMINUM, TOTAL IN BOTTOM MATERIAL (UG/G AS AL)
01096	ANTIMONY, SUSPENDED TOTAL (UG/L AS SB)
01096	ANTIMONY, SUSPENDED (UG/L AS SB)
39502	AROCLOR, SUSPENDED TOTAL, 1248 PCB SERIES (UG/L)
39502	AROCLOR, SUSPENDED, 1248 PCB SERIES (UG/L)
39506	AROCLOR, SUSPENDED TOTAL, 1254 PCB SERIES (UG/L)
39506	AROCLOR, SUSPENDED, 1254 PCB SERIES (UG/L)
39510	AROCLOR, SUSPENDED TOTAL, 1260 PCB SERIES (UG/L)
39510	AROCLOR, SUSPENDED, 1260 PCB SERIES (UG/L)
01001	ARSENIC, SUSPENDED TOTAL (UG/L AS AS)
01001	ARSENIC, SUSPENDED (UG/L AS AS)
01006	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
01006	BARIUM, SUSPENDED (UG/L AS BA)
01007	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
01007	BARIUM, TOTAL (UG/L AS BA)
01008	BARIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BA)
01008	BARIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BA)
01011	BERYLLIUM, SUSPENDED RECOVERABLE (UG/L AS BE)
01011	BERYLLIUM, SUSPENDED (UG/L AS BE)
01012	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)
01012	BERYLLIUM, TOTAL (UG/L AS BE)
01013	BERYLLIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BE)
01013	BERYLLIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BE)
03505	BETA, SUSPENDED TOTAL (PCI/L)
03505	BETA, SUSPENDED (PCI/L)
03506	BETA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
03506	BETA, SUSPENDED, COUNTING ERROR (PCI/L)
01016	BISMUTH, SUSPENDED TOTAL (UG/L AS BI)
01016	BISMUTH, SUSPENDED (UG/L AS BI)
01021	BORON, SUSPENDED RECOVERABLE (UG/L AS B)
01021	BORON, SUSPENDED (UG/L AS B)
01022	BORON, TOTAL RECOVERABLE (UG/L AS B)
01022	BORON, TOTAL (UG/L AS B)
01023	BORON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS B)
01023	BORON, TOTAL IN BOTTOM MATERIAL (UG/G AS B)
01026	CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)
01026	CADMIUM, SUSPENDED (UG/L AS CD)
01027	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)
01027	CADMIUM, TOTAL (UG/L AS CD)

01028 CADMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CD)
01028 CADMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CD)

00916 CALCIUM, TOTAL RECOVERABLE (MG/L AS CA)
00916 CALCIUM, TOTAL (MG/L AS CA)

07052 CALCIUM 45, SUSPENDED TOTAL (PCI/L)
07052 CALCIUM 45, SUSPENDED (PCI/L)

07053 CALCIUM 45, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07053 CALCIUM 45, SUSPENDED, COUNTING ERROR (PCI/L)

00683 CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00683 CARBON, ORGANIC, SUSPENDED (MG/L AS C)

00688 CARBON, INORGANIC, SUSPENDED TOTAL (MG/L AS C)
00688 CARBON, INORGANIC, SUSPENDED (MG/L AS C)

00689 CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00689 CARBON, ORGANIC, SUSPENDED (MG/L AS C)

00694 CARBON, INORGANIC PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00694 CARBON, INORGANIC PLUS ORGANIC, SUSPENDED (MG/L AS C)

01116 CESIUM, SUSPENDED TOTAL (UG/L AS CS)
01116 CESIUM, SUSPENDED (UG/L AS CS)

28404 CESIUM 137, SUSPENDED TOTAL (PCI/L)
28404 CESIUM 137, SUSPENDED (PCI/L)

28405 CESIUM 137,SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28405 CESIUM 137,SUSPENDED, COUNTING ERROR (PCI/L)

28412 CESIUM 134, SUSPENDED TOTAL (PCI/L)
28412 CESIUM 134, SUSPENDED (PCI/L)

28413 CESIUM 134, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28413 CESIUM 134, SUSPENDED, COUNTING ERROR (PCI/L)

39353 CHLORDANE, SUSPENDED TOTAL (UG/L)
39353 CHLORDANE, SUSPENDED (UG/L)

01029 CHROMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CR)
01029 CHROMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CR)

01031 CHROMIUM, SUSPENDED RECOVERABLE (UG/L AS CR)
01031 CHROMIUM, SUSPENDED (UG/L AS CR)

01034 CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
01034 CHROMIUM, TOTAL (UG/L AS CR)

01036 COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)
01036 COBALT, SUSPENDED (UG/L AS CO)

01037 COBALT, TOTAL RECOVERABLE (UG/L AS CO)
01037 COBALT, TOTAL (UG/L AS CO)

01038 COBALT, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CO)
01038 COBALT, TOTAL IN BOTTOM MATERIAL (UG/G AS CO)

01041 COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)
01041 COPPER, SUSPENDED (UG/L AS CU)

01042 COPPER, TOTAL RECOVERABLE (UG/L AS CU)
01042 COPPER, TOTAL (UG/L AS CU)

01043 COPPER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CU)
01043 COPPER, TOTAL IN BOTTOM MATERIAL (UG/G AS CU)

39362 DDD, SUSPENDED TOTAL (UG/L)
39362 DDD, SUSPENDED (UG/L)

39367 DDE, SUSPENDED TOTAL (UG/L)
39367 DDE, SUSPENDED (UG/L)

39372 DDT, SUSPENDED TOTAL (UG/L)
39372 DDT, SUSPENDED (UG/L)

39573 DIAZINON, SUSPENDED TOTAL (UG/L)
39573 DIAZINON, SUSPENDED (UG/L)

39382 DIELDRIN, SUSPENDED TOTAL (UG/L)
39382 DIELDRIN, SUSPENDED (UG/L)

39392 ENDRIN, SUSPENDED TOTAL (UG/L)
39392 ENDRIN, SUSPENDED (UG/L)

01121 GALLIUM, SUSPENDED TOTAL (UG/L AS GA)
01121 GALLIUM, SUSPENDED (UG/L AS GA)

01126 GERMANIUM, SUSPENDED TOTAL (UG/L AS GE)
01126 GERMANIUM, SUSPENDED (UG/L AS GE)

01516 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS U NATURAL)
01516 GROSS ALPHA RADIOACTIVITY, SUSPENDED (PCI/L AS U NATURAL)

01517 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS U NATURAL)
01517 GROSS ALPHA RADIOACTIVITY, SUSPENDED (PCI/G AS U NATURAL)

01518 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (UG/G AS U NATURAL)
01518 GROSS ALPHA RADIOACTIVITY, SUSPENDED (UG/G AS U NATURAL)

80040 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL (UG/L AS U NATURAL)
80040 GROSS ALPHA RADIOACTIVITY, SUSPENDED (UG/L AS U NATURAL)

80060 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS SR/YT-90)
80060 GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS SR/YT-90)

03516 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/L AS CS-137)
03516 GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/L AS CS-137)

03517 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS SR/YT-90)
03517 GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS SR/YT-90)

03518 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL (PCI/G AS CS-137)
03518 GROSS BETA RADIOACTIVITY, SUSPENDED (PCI/G AS CS-137)

39412 HEPTACHLOR, SUSPENDED TOTAL (UG/L)
39412 HEPTACHLOR, SUSPENDED (UG/L)

39422 HEPTACHLOR EPOXIDE, SUSPENDED TOTAL (UG/L)
39422 HEPTACHLOR EPOXIDE, SUSPENDED (UG/L)

01044 IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
01044 IRON, SUSPENDED (UG/L AS FE)

01045 IRON, TOTAL RECOVERABLE (UG/L AS FE)
01045 IRON, TOTAL (UG/L AS FE)

01170 IRON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS FE)
01170 IRON, TOTAL IN BOTTOM MATERIAL (UG/G AS FE)

07062 IRON 59, SUSPENDED TOTAL (PCI/L)
07062 IRON 59, SUSPENDED (PCI/L)

07063 IRON 59, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07063 IRON 59, SUSPENDED, COUNTING ERROR (PCI/L)

39432 ISODRIN, SUSPENDED TOTAL (UG/L)
39432 ISODRIN, SUSPENDED (UG/L)

01050 LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
01050 LEAD, SUSPENDED (UG/L AS PB)

01051 LEAD, TOTAL RECOVERABLE (UG/L AS PB)
01051 LEAD, TOTAL (UG/L AS PB)

01052 LEAD, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS PB)
01052 LEAD, TOTAL IN BOTTOM MATERIAL (UG/G AS PB)

39342 LINDANE, SUSPENDED TOTAL (UG/L)
39342 LINDANE, SUSPENDED (UG/L)

01131 LITHIUM, SUSPENDED RECOVERABLE (UG/L AS LI)
01131 LITHIUM, SUSPENDED (UG/L AS LI)

01132 LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)
01132 LITHIUM, TOTAL (UG/L AS LI)

00926 MAGNESIUM, SUSPENDED RECOVERABLE (MG/L AS MG)
00926 MAGNESIUM, SUSPENDED (MG/L AS MG)

00927 MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)
00927 MAGNESIUM, TOTAL (MG/L AS MG)

39533 MALATHION, SUSPENDED TOTAL (UG/L)
39533 MALATHION, SUSPENDED (UG/L)

01053 MANGANESE, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MN)
01053 MANGANESE, TOTAL IN BOTTOM MATERIAL (UG/G AS MN)

01054 MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)
01054 MANGANESE, SUSPENDED (UG/L AS MN)

01055 MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
01055 MANGANESE, TOTAL (UG/L AS MN)

71895 MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)
71895 MERCURY, SUSPENDED (UG/L AS HG)

71900 MERCURY, TOTAL RECOVERABLE (UG/L AS HG)
71900 MERCURY, TOTAL (UG/L AS HG)

71921 MERCURY, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS HG)
71921 MERCURY, TOTAL IN BOTTOM MATERIAL (UG/G AS HG)

39603 METHYL PARATHION, SUSPENDED TOTAL (UG/L)
39603 METHYL PARATHION, SUSPENDED (UG/L)

39757 MIREX, SUSPENDED TOTAL (UG/L)
39757 MIREX, SUSPENDED (UG/L)

01061 MOLYBDENUM, SUSPENDED RECOVERABLE (UG/L AS MO)
01061 MOLYBDENUM, SUSPENDED (UG/L AS MO)

01062 MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)
01062 MOLYBDENUM, TOTAL (UG/L AS MO)

01063 MOLYBDENUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MO)
01063 MOLYBDENUM, TOTAL IN BOTTOM MATERIAL (UG/G AS MO)

01066 NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
01066 NICKEL, SUSPENDED (UG/L AS NI)

01067 NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
01067 NICKEL, TOTAL (UG/L AS NI)

01068 NICKEL, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS NI)
01068 NICKEL, TOTAL IN BOTTOM MATERIAL (UG/G AS NI)

00623 NITROGEN, AMMONIA PLUS ORGANIC, DISSOLVED (MG/L AS N)
00623 NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)

00624 NITROGEN, AMMONIA PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS N)
00624 NITROGEN, KJELDAHL, SUSPENDED (MG/L AS N)

00625 NITROGEN, AMMONIA PLUS ORGANIC, TOTAL (MG/L AS N)
00625 NITROGEN, KJELDAHL, TOTAL (MG/L AS N)

00626 NITROGEN, AMMONIA PLUS ORGANIC,
TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
00626 NITROGEN, KJELDAHL, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)

39543 PARATHION, SUSPENDED TOTAL (UG/L)
39543 PARATHION, SUSPENDED (UG/L)

39518 PCB, SUSPENDED TOTAL (UG/L)
39518 PCB, SUSPENDED (UG/L)

09505 RADIUM 226, SUSPENDED TOTAL (PCI/L)
09505 RADIUM 226, SUSPENDED (PCI/L)

07082 RHODAMINE WT, SUSPENDED TOTAL (UG/L)
07082 RHODAMINE WT, SUSPENDED (UG/L)

01136 RUBIDIUM, SUSPENDED TOTAL (UG/L AS RB)
01136 RUBIDIUM, SUSPENDED (UG/L AS RB)

29633 SCANDIUM 46, SUSPENDED TOTAL (PCI/L)
29633 SCANDIUM 46, SUSPENDED (PCI/L)

29634 SCANDIUM 46, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
29634 SCANDIUM 46, SUSPENDED, COUNTING ERROR (PCI/L)

01146 SELENIUM, SUSPENDED TOTAL (UG/L AS SE)
01146 SELENIUM, SUSPENDED (UG/L AS SE)

07102 SELENIUM 75, SUSPENDED TOTAL (PCI/L)
07102 SELENIUM 75, SUSPENDED (PCI/L)

07103 SELENIUM 75, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07103 SELENIUM 75, SUSPENDED, COUNTING ERROR (PCI/L)

01076 SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
01076 SILVER, SUSPENDED (UG/L AS AG)

01077 SILVER, TOTAL RECOVERABLE (UG/L AS AG)
01077 SILVER, TOTAL (UG/L AS AG)

01078 SILVER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AG)
01078 SILVER, TOTAL IN BOTTOM MATERIAL (UG/G AS AG)

07122 SILVER 110, SUSPENDED TOTAL (PCI/L)
07122 SILVER 110, SUSPENDED (PCI/L)

07123 SILVER 110, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07123 SILVER 110, SUSPENDED, COUNTING ERROR (PCI/L)

39763 SILVEX, SUSPENDED TOTAL (UG/L)
39763 SILVEX, SUSPENDED (UG/L)

70299 SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED TOTAL (MG/L)
70299 SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED (MG/L)

01081 STRONTIUM, SUSPENDED RECOVERABLE (UG/L AS SR)
01081 STRONTIUM, SUSPENDED (UG/L AS SR)

01082 STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)
01082 STRONTIUM, TOTAL (UG/L AS SR)

01083 STRONTIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS SR)
01083 STRONTIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS SR)

13505 STRONTIUM 90, SUSPENDED TOTAL (PCI/L)
13505 STRONTIUM 90, SUSPENDED (PCI/L)

13506 STRONTIUM 90, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
13506 STRONTIUM 90, SUSPENDED, COUNTING ERROR (PCI/L)

07142 SULFUR 35, SUSPENDED TOTAL (PCI/L)
07142 SULFUR 35, SUSPENDED (PCI/L)

07143 SULFUR 35, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07143 SULFUR 35, SUSPENDED, COUNTING ERROR (PCI/L)

01101 TIN, SUSPENDED RECOVERABLE (UG/L AS SN)
01101 TIN, SUSPENDED (UG/L AS SN)

01102 TIN, TOTAL RECOVERABLE (UG/L AS SN)
01102 TIN, TOTAL (UG/L AS SN)

01151 TITANIUM, SUSPENDED TOTAL (UG/L AS TI)
01151 TITANIUM, SUSPENDED (UG/L AS TI)

39402 TOXAPHENE, SUSPENDED TOTAL (UG/L)
39402 TOXAPHENE, SUSPENDED (UG/L)

07010 TRITIUM, SUSPENDED TOTAL (PCI/L)
07010 TRITIUM, SUSPENDED (PCI/L)

07011 TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07011 TRITIUM, SUSPENDED, COUNTING ERROR (PCI/L)

07014 TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (TRITIUM UNITS)
07014 TRITIUM, SUSPENDED, COUNTING ERROR (TRITIUM UNITS)

07016 TRITIUM, SUSPENDED TOTAL (TRITIUM UNITS)
07016 TRITIUM, SUSPENDED (TRITIUM UNITS)

22705 URANIUM, NATURAL, SUSPENDED TOTAL (UG/L AS U NATURAL)
22705 URANIUM, NATURAL, SUSPENDED (UG/L AS U NATURAL)

01086 VANADIUM, SUSPENDED TOTAL (UG/L AS V)
01086 VANADIUM, SUSPENDED (UG/L AS V)

01091 ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)
01091 ZINC, SUSPENDED (UG/L AS ZN)

01092 ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
01092 ZINC, TOTAL (UG/L AS ZN)

01093 ZINC, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS ZN)
01093 ZINC, TOTAL IN BOTTOM MATERIAL (UG/G AS ZN)

01161 ZIRCONIUM, SUSPENDED TOTAL (UG/L AS ZR)
01161 ZIRCONIUM, SUSPENDED (UG/L AS ZR)

39733 2,4-D, SUSPENDED TOTAL (UG/L)
39733 2,4-D, SUSPENDED (UG/L)

39743 2,4,5-T, SUSPENDED TOTAL (UG/L)
39743 2,4,5-T, SUSPENDED (UG/L)

Numerical Listing of Changes in Selected Parameter Names and Parameter Codes

(First line is new terminology and second line is old terminology.)

00623 NITROGEN, AMMONIA PLUS ORGANIC, DISSOLVED (MG/L AS N)
00623 NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)

00624 NITROGEN, AMMONIA PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS N)
00624 NITROGEN, KJELDAHL, SUSPENDED (MG/L AS N)

00625 NITROGEN, AMMONIA PLUS ORGANIC, TOTAL (MG/L AS N)
00625 NITROGEN, KJELDAHL, TOTAL (MG/L AS N)

00626 NITROGEN, AMMONIA PLUS ORGANIC,
TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
00626 NITROGEN, KJELDAHL, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)

00683 CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00683 CARBON, ORGANIC, SUSPENDED (MG/L AS C)

00688 CARBON, INORGANIC, SUSPENDED TOTAL (MG/L AS C)
00688 CARBON, INORGANIC, SUSPENDED (MG/L AS C)

00689 CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00689 CARBON, ORGANIC, SUSPENDED (MG/L AS C)

00694 CARBON, INORGANIC PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00694 CARBON, INORGANIC PLUS ORGANIC, SUSPENDED (MG/L AS C)

00916 CALCIUM, TOTAL RECOVERABLE (MG/L AS CA)
00916 CALCIUM, TOTAL (MG/L AS CA)

00926 MAGNESIUM, SUSPENDED RECOVERABLE (MG/L AS MG)
00926 MAGNESIUM, SUSPENDED (MG/L AS MG)

00927 MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)
00927 MAGNESIUM, TOTAL (MG/L AS MG)

01001 ARSENIC, SUSPENDED TOTAL (UG/L AS AS)
01001 ARSENIC, SUSPENDED (UG/L AS AS)

01006 BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
01006 BARIUM, SUSPENDED (UG/L AS BA)

01007 BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
01007 BARIUM, TOTAL (UG/L AS BA)

01008 BARIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BA)
01008 BARIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BA)

01011 BERYLLIUM, SUSPENDED RECOVERABLE (UG/L AS BE)
01011 BERYLLIUM, SUSPENDED (UG/L AS BE)

01012 BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)
01012 BERYLLIUM, TOTAL (UG/L AS BE)

01013 BERYLLIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BE)
01013 BERYLLIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BE)

01016 BISMUTH, SUSPENDED TOTAL (UG/L AS BI)
01016 BISMUTH, SUSPENDED (UG/L AS BI)

01021 BORON, SUSPENDED RECOVERABLE (UG/L AS B)
01021 BORON, SUSPENDED (UG/L AS B)

01022 BORON, TOTAL RECOVERABLE (UG/L AS B)
01022 BORON, TOTAL (UG/L AS B)

01023 BORON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS B)
01023 BORON, TOTAL IN BOTTOM MATERIAL (UG/G AS B)

01026 CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)
01026 CADMIUM, SUSPENDED (UG/L AS CD)

01027 CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)
01027 CADMIUM, TOTAL (UG/L AS CD)

01028 CADMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CD)
01028 CADMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CD)

01029 CHROMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CR)
01029 CHROMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CR)

01031 CHROMIUM, SUSPENDED RECOVERABLE (UG/L AS CR)
01031 CHROMIUM, SUSPENDED (UG/L AS CR)

01034 CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
01034 CHROMIUM, TOTAL (UG/L AS CR)

01036 COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)
01036 COBALT, SUSPENDED (UG/L AS CO)

01037 COBALT, TOTAL RECOVERABLE (UG/L AS CO)
01037 COBALT, TOTAL (UG/L AS CO)

01038 COBALT, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CO)
01038 COBALT, TOTAL IN BOTTOM MATERIAL (UG/G AS CO)

01041 COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)
01041 COPPER, SUSPENDED (UG/L AS CU)

01042 COPPER, TOTAL RECOVERABLE (UG/L AS CU)
01042 COPPER, TOTAL (UG/L AS CU)

01043 COPPER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CU)
01043 COPPER, TOTAL IN BOTTOM MATERIAL (UG/G AS CU)

01044 IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
01044 IRON, SUSPENDED (UG/L AS FE)

01045 IRON, TOTAL RECOVERABLE (UG/L AS FE)
01045 IRON, TOTAL (UG/L AS FE)

01050 LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
01050 LEAD, SUSPENDED (UG/L AS PB)

01051 LEAD, TOTAL RECOVERABLE (UG/L AS PB)
01051 LEAD, TOTAL (UG/L AS PB)

01052 LEAD, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS PB)
01052 LEAD, TOTAL IN BOTTOM MATERIAL (UG/G AS PB)

01053 MANGANESE, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MN)
01053 MANGANESE, TOTAL IN BOTTOM MATERIAL (UG/G AS MN)

01054 MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)
01054 MANGANESE, SUSPENDED (UG/L AS MN)

01055 MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
01055 MANGANESE, TOTAL (UG/L AS MN)

01061 MOLYBDENUM, SUSPENDED RECOVERABLE (UG/L AS MO)
01061 MOLYBDENUM, SUSPENDED (UG/L AS MO)

01062 MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)
01062 MOLYBDENUM, TOTAL (UG/L AS MO)

01063 MOLYBDENUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MO)
01063 MOLYBDENUM, TOTAL IN BOTTOM MATERIAL (UG/G AS MO)

01066 NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
01066 NICKEL, SUSPENDED (UG/L AS NI)

01067 NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
01067 NICKEL, TOTAL (UG/L AS NI)

01068 NICKEL, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS NI)
01068 NICKEL, TOTAL IN BOTTOM MATERIAL (UG/G AS NI)

01076 SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
01076 SILVER, SUSPENDED (UG/L AS AG)

01077 SILVER, TOTAL RECOVERABLE (UG/L AS AG)
01077 SILVER, TOTAL (UG/L AS AG)

01078 SILVER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AG)
01078 SILVER, TOTAL IN BOTTOM MATERIAL (UG/G AS AG)

01081 STRONTIUM, SUSPENDED RECOVERABLE (UG/L AS SR)
01081 STRONTIUM, SUSPENDED (UG/L AS SR)

01082 STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)
01082 STRONTIUM, TOTAL (UG/L AS SR)

01083 STRONTIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS SR)
01083 STRONTIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS SR)

01086 VANADIUM, SUSPENDED TOTAL (UG/L AS V)
01086 VANADIUM, SUSPENDED (UG/L AS V)

01091 ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)
01091 ZINC, SUSPENDED (UG/L AS ZN)

01092 ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
01092 ZINC, TOTAL (UG/L AS ZN)

01093 ZINC, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS ZN)
01093 ZINC, TOTAL IN BOTTOM MATERIAL (UG/G AS ZN)

01096 ANTIMONY, SUSPENDED TOTAL (UG/L AS SB)
01096 ANTIMONY, SUSPENDED (UG/L AS SB)

01101 TIN, SUSPENDED RECOVERABLE (UG/L AS SN)
01101 TIN, SUSPENDED (UG/L AS SN)

01102 TIN, TOTAL RECOVERABLE (UG/L AS SN)
01102 TIN, TOTAL (UG/L AS SN)

01105 ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
01105 ALUMINUM, TOTAL (UG/L AS AL)

01107 ALUMINUM, SUSPENDED RECOVERABLE (UG/L AS AL)
01107 ALUMINUM, SUSPENDED (UG/L AS AL)

01108 ALUMINUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AL)
01108 ALUMINUM, TOTAL IN BOTTOM MATERIAL (UG/G AS AL)

01116 CESIUM, SUSPENDED TOTAL (UG/L AS CS)
01116 CESIUM, SUSPENDED (UG/L AS CS)

01121 GALLIUM, SUSPENDED TOTAL (UG/L AS GA)
01121 GALLIUM, SUSPENDED (UG/L AS GA)

01126 GERMANIUM, SUSPENDED TOTAL (UG/L AS GE)
01126 GERMANIUM, SUSPENDED (UG/L AS GE)

01131 LITHIUM, SUSPENDED RECOVERABLE (UG/L AS LI)
01131 LITHIUM, SUSPENDED (UG/L AS LI)

01132 LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)
01132 LITHIUM, TOTAL (UG/L AS LI)

01136 RUBIDIUM, SUSPENDED TOTAL (UG/L AS RB)
01136 RUBIDIUM, SUSPENDED (UG/L AS RB)

01146 SELENIUM, SUSPENDED TOTAL (UG/L AS SE)
01146 SELENIUM, SUSPENDED (UG/L AS SE)

01151 TITANIUM, SUSPENDED TOTAL (UG/L AS TI)
01151 TITANIUM, SUSPENDED (UG/L AS TI)

01161 ZIRCONIUM, SUSPENDED TOTAL (UG/L AS ZR)
01161 ZIRCONIUM, SUSPENDED (UG/L AS ZR)

01170 IRON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS FE)
01170 IRON, TOTAL IN BOTTOM MATERIAL (UG/G AS FE)

01505 ALPHA, SUSPENDED TOTAL (PCI/L)
01505 ALPHA, SUSPENDED (PCI/L)

01506 ALPHA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
01506 ALPHA, SUSPENDED, COUNTING ERROR (PCI/L)

01516 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/L AS U NATURAL)
01516 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(PCI/L AS U NATURAL)

01517 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/G AS U NATURAL)
01517 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(PCI/G AS U NATURAL)

01518 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(UG/G AS U NATURAL)
01518 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(UG/G AS U NATURAL)

03505 BETA, SUSPENDED TOTAL (PCI/L)
03505 BETA, SUSPENDED (PCI/L)

03506 BETA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
03506 BETA, SUSPENDED, COUNTING ERROR (PCI/L)

03516 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/L AS CS-137)
03516 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/L AS CS-137)

03517 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/G AS SR/YT-90)
03517 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/G AS SR/YT-90)

03518 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/G AS CS-137)
03518 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/G AS CS-137)

07010 TRITIUM, SUSPENDED TOTAL (PCI/L)
07010 TRITIUM, SUSPENDED (PCI/L)

07011 TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07011 TRITIUM, SUSPENDED, COUNTING ERROR (PCI/L)

07014 TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (TRITIUM UNITS)
07014 TRITIUM, SUSPENDED, COUNTING ERROR (TRITIUM UNITS)

07016 TRITIUM, SUSPENDED TOTAL (TRITIUM UNITS)
07016 TRITIUM, SUSPENDED (TRITIUM UNITS)

07052 CALCIUM 45, SUSPENDED TOTAL (PCI/L)
07052 CALCIUM 45, SUSPENDED (PCI/L)

07053 CALCIUM 45, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07053 CALCIUM 45, SUSPENDED, COUNTING ERROR (PCI/L)

07062 IRON 59, SUSPENDED TOTAL (PCI/L)
07062 IRON 59, SUSPENDED (PCI/L)

07063 IRON 59, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07063 IRON 59, SUSPENDED, COUNTING ERROR (PCI/L)

07082 RHODAMINE WT, SUSPENDED TOTAL (UG/L)
07082 RHODAMINE WT, SUSPENDED (UG/L)

07102 SELENIUM 75, SUSPENDED TOTAL (PCI/L)
07102 SELENIUM 75, SUSPENDED (PCI/L)

07103 SELENIUM 75, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07103 SELENIUM 75, SUSPENDED, COUNTING ERROR (PCI/L)

07122 SILVER 110, SUSPENDED TOTAL (PCI/L)
07122 SILVER 110, SUSPENDED (PCI/L)

07123 SILVER 110, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07123 SILVER 110, SUSPENDED, COUNTING ERROR (PCI/L)

07142 SULFUR 35, SUSPENDED TOTAL (PCI/L)
07142 SULFUR 35, SUSPENDED (PCI/L)

07143 SULFUR 35, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07143 SULFUR 35, SUSPENDED, COUNTING ERROR (PCI/L)

09505 RADIUM 226, SUSPENDED TOTAL (PCI/L)
09505 RADIUM 226, SUSPENDED (PCI/L)

13505 STRONTIUM 90, SUSPENDED TOTAL (PCI/L)
13505 STRONTIUM 90, SUSPENDED (PCI/L)

13506 STRONTIUM 90, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
13506 STRONTIUM 90, SUSPENDED, COUNTING ERROR (PCI/L)

22705 URANIUM, NATURAL, SUSPENDED TOTAL (UG/L AS U NATURAL)
22705 URANIUM, NATURAL, SUSPENDED (UG/L AS U NATURAL)

28404 CESIUM 137, SUSPENDED TOTAL (PCI/L)
28404 CESIUM 137, SUSPENDED (PCI/L)

28405 CESIUM 137,SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28405 CESIUM 137,SUSPENDED, COUNTING ERROR (PCI/L)

28412 CESIUM 134, SUSPENDED TOTAL (PCI/L)
28412 CESIUM 134, SUSPENDED (PCI/L)

28413 CESIUM 134, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28413 CESIUM 134, SUSPENDED, COUNTING ERROR (PCI/L)

29633 SCANDIUM 46, SUSPENDED TOTAL (PCI/L)
29633 SCANDIUM 46, SUSPENDED (PCI/L)

29634 SCANDIUM 46, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
29634 SCANDIUM 46, SUSPENDED, COUNTING ERROR (PCI/L)

39332 ALDRIN, SUSPENDED TOTAL (UG/L)
39332 ALDRIN, SUSPENDED (UG/L)

39342 LINDANE, SUSPENDED TOTAL (UG/L)
39342 LINDANE, SUSPENDED (UG/L)

39353 CHLORDANE, SUSPENDED TOTAL (UG/L)
39353 CHLORDANE, SUSPENDED (UG/L)

39362 DDD, SUSPENDED TOTAL (UG/L)
39362 DDD, SUSPENDED (UG/L)

39367 DDE, SUSPENDED TOTAL (UG/L)
39367 DDE, SUSPENDED (UG/L)

39372 DDT, SUSPENDED TOTAL (UG/L)
39372 DDT, SUSPENDED (UG/L)

39382 DIELDRIN, SUSPENDED TOTAL (UG/L)
39382 DIELDRIN, SUSPENDED (UG/L)

39392 ENDRIN, SUSPENDED TOTAL (UG/L)
39392 ENDRIN, SUSPENDED (UG/L)

39402 TOXAPHENE, SUSPENDED TOTAL (UG/L)
39402 TOXAPHENE, SUSPENDED (UG/L)

39412 HEPTACHLOR, SUSPENDED TOTAL (UG/L)
39412 HEPTACHLOR, SUSPENDED (UG/L)

39422 HEPTACHLOR EPOXIDE, SUSPENDED TOTAL (UG/L)
39422 HEPTACHLOR EPOXIDE, SUSPENDED (UG/L)

39432 ISODRIN, SUSPENDED TOTAL (UG/L)
39432 ISODRIN, SUSPENDED (UG/L)

39502 AROCLOR, SUSPENDED TOTAL, 1248 PCB SERIES (UG/L)
39502 AROCLOR, SUSPENDED, 1248 PCB SERIES (UG/L)

39506 AROCLOR, SUSPENDED TOTAL, 1254 PCB SERIES (UG/L)
39506 AROCLOR, SUSPENDED, 1254 PCB SERIES (UG/L)

39510 AROCLOR, SUSPENDED TOTAL, 1260 PCB SERIES (UG/L)
39510 AROCLOR, SUSPENDED, 1260 PCB SERIES (UG/L)

39518 PCB, SUSPENDED TOTAL (UG/L)
39518 PCB, SUSPENDED (UG/L)

39533 MALATHION, SUSPENDED TOTAL (UG/L)
39533 MALATHION, SUSPENDED (UG/L)

39543 PARATHION, SUSPENDED TOTAL (UG/L)
39543 PARATHION, SUSPENDED (UG/L)

39573 DIAZINON, SUSPENDED TOTAL (UG/L)
39573 DIAZINON, SUSPENDED (UG/L)

39603 METHYL PARATHION, SUSPENDED TOTAL (UG/L)
39603 METHYL PARATHION, SUSPENDED (UG/L)

39733 2,4-D, SUSPENDED TOTAL (UG/L)
39733 2,4-D, SUSPENDED (UG/L)

39743 2,4,5-T, SUSPENDED TOTAL (UG/L)
39743 2,4,5-T, SUSPENDED (UG/L)

39757 MIREX, SUSPENDED TOTAL (UG/L)
39757 MIREX, SUSPENDED (UG/L)

39763 SILVEX, SUSPENDED TOTAL (UG/L)
39763 SILVEX, SUSPENDED (UG/L)

70299 SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED TOTAL (MG/L)
70299 SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED (MG/L)

71895 MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)
71895 MERCURY, SUSPENDED (UG/L AS HG)

71900 MERCURY, TOTAL RECOVERABLE (UG/L AS HG)
71900 MERCURY, TOTAL (UG/L AS HG)

71921 MERCURY, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS HG)
71921 MERCURY, TOTAL IN BOTTOM MATERIAL (UG/G AS HG)

80040 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(UG/L AS U NATURAL)
80040 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(UG/L AS U NATURAL)

80060 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/L AS SR/YT-90)
80060 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/L AS SR/YT-90)

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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