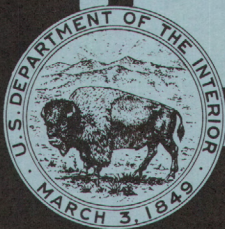


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Water Resources Data for New Hampshire and Vermont Water Year 1975



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NH-VT-75-1

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

CALENDAR FOR WATER YEAR 1975

1974

OCTOBER

S	M	T	W	T	F	S
		1	2	3	4	5
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13	14	15	16	17	18	19
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27	28	29	30	31		

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1975

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30	31					

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AUGUST

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31						

SEPTEMBER

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28	29	30				

Water Resources Data for New Hampshire and Vermont Water Year 1975



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PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the states of New Hampshire and Vermont and with other agencies, by personnel of the New England District of the Water Resources Division under the supervision of J. A. Baker, District Chief, and J. T. Callahan, Regional Hydrologist, Northeastern Region.

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

UNITED STATES DEPARTMENT OF THE INTERIOR

THOMAS S. KLEPPE, Secretary

GEOLOGICAL SURVEY

V. E. McKelvey, Director

Prepared in cooperation with

New Hampshire Water Resources Board
New Hampshire Water Supply and Pollution Control Commission
Vermont Department of Water Resources
Corps of Engineers, U.S. Army
Environmental Protection Agency

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150 Causeway Street
Boston, MA 02114

1976

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FOR WHICH RECORDS ARE PUBLISHED

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(d), discharge; (l), lake; (c) chemical; (b), biological; (t), water temperature)

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-------------------------------------------------------------------------	----

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Isinglass River:

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Little River:

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---------------------------------------------------------------------------	----

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WATER RESOURCES DATA FOR NEW HAMPSHIRE AND VERMONT, 1975

INTRODUCTION

Water-resources data for the 1975 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 91 gaging stations; stage records for 5 lakes; monthend contents for 27 lakes and reservoirs; water-quality data for 5 continuing stations and 16 partial-record stations; and water levels for 17 wells. Also included are data for 42 crest-stage 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, water-quality stations, crest-stage 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 operated 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 water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of surface waters of the United States." Records of ground-water levels were published from 1942 to 1974 in a series of water-supply papers entitled, "Ground-water levels in the United States."

Beginning with the 1961 water year and continuing through water year 1974, streamflow data have been released by the Geological Survey in annual reports on a State- or District-boundary basis. Water-quality records beginning with the 1964 water year, have been similarly released either in separate reports or in conjunction with streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State- or District-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report NH-VT 75-1." These reports are for sale to the public for a nominal fee from the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22151. For more information on publications available, see "PUBLICATIONS" on a subsequent page.

COOPERATION

Organizations that assisted in the collection of data in this report through cooperative agreements with the Geological Survey in 1975 are:

New Hampshire: State WaterResources Board, G. M. McGee, chairman; State Water Supply and Pollution Control Commission, W. A. Healy, executive director; Strafford-Regional Council, George N. Olson, executive director.

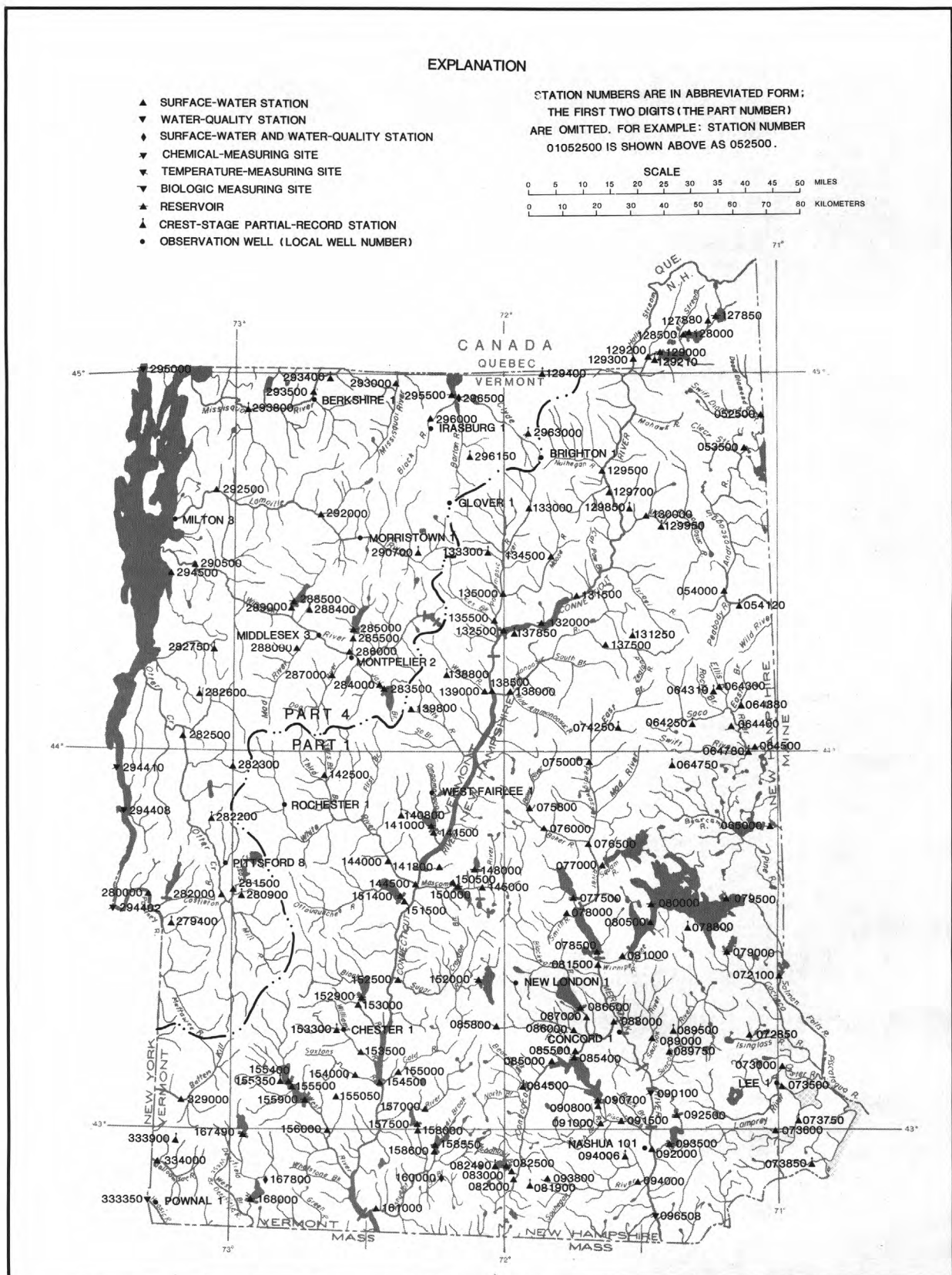
Vermont: State Department of Water Resources, Gordon R. Pyper, commissioner, John E. Cerutti, director of Division of Management and Engineering; town of Springfield, Paul T. McCarthy, town manager.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records published herein for 27 gaging stations, and by the Environmental Protection Agency, for 2 water-quality stations.

Assistance in collecting records was also furnished by New England Power Co., New England Utility Co., and Green Mountain Power Corp.

Organizations that supplied data are acknowledged in 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."



DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English Units to International System (SI) Units on page 15.

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

Algae are mostly aquatic single-celled, colonial, or multi-celled 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.

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

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

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

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded 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 \pm 1.0°C on M-enterococcus medium (nutrient medium for bacterial growth). Concentrations are expressed as number of colonies per 100 ml of sample.

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 weight per unit area or volume of habitat.

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

Biomass pigment ratio is the ratio of organic weight in mg/m² (milligrams per square meter) to the weight of chlorophyll a, mg/m².

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

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, approximately 1.9835 acre-feet, or 2,445 cubic meters. It represents a runoff of approximately 0.0372 inch from 1 square mile or 0.3468 millimeter from 1 square kilometer.

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

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

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of water. The number of coliform colonies per 100 ml of sample is determined by the immediate-incubation membrane-filter method.

Color is expressed in units of the platinum-cobalt scale proposed by Hazen (1892, p. 427-428). A unit of color is produced by one milligram per liter of platinum in the form of the chloroplatinate ion.

The extent to which water is colored by material in solution is reported as part of the water analysis because a significant color in water may indicate the presence of organic material that may have some bearing on the dissolved solids content.

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

Continuing Record Station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken once or more times daily.
3. When sediment discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

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

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

Cubic foot per second (FT³/S, ft³/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.

Curie is a unit for measuring radioactivity. One curie equals that quantity of any radioactive isotope undergoing 3.7×10^{10} disintegration per second.

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

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

Instantaneous discharge is the discharge at a given time.

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

Dissolved oxygen (DO). The dissolved-oxygen content of water in equilibrium with air is a function of atmospheric pressure, dissolved-solids content, and temperature of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids content. Photosynthesis and respiration may cause diurnal variations in dissolved-oxygen content in water from streams.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane and 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.

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 designated site on a stream, canal, lake, or reservoir where systematic observations are made of the physical and (or) chemical and biological character of the water. The scope and frequency of data collected at a gaging station varies. This variation is reflected by the terminology used in further identifying the type of gaging station as follows:

Stream-gaging station is a gaging station at which a continuous record of discharge is generally computed. Water-quality data collected at a stream-gaging station may vary from only a temperature observation with each discharge measurement to continuous monitoring of one or more parameters. However, monthly and annual means and loads for dissolved constituents are not usually computed from less than daily samples.

Partial-record station is a gaging station where limited streamflow and(or) water-quality data are collected systematically over a period of years for use in hydrologic analyses of low-flow, peak-flow, and(or) general-runoff characteristics. Partial-record stations are further categorized as follows:

Crest-stage partial-record station is a gaging station at which only the annual peak stage and(or) discharge is obtained. Water-quality data are not usually collected at this type of gaging station.

Low-flow partial-record station is a gaging station at which definition of the quantity and(or) quality of the low flow (principally base flow) is sought. One or more discharge measurements and(or) water-quality samples may be obtained annually.

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).

Herbicides are substances or mixtures of substances intended to control or destroy vegetation.

Insecticides are substances or mixtures of substances intended to prevent, destroy, or repel insects.

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

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

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter based on 1961 atomic weights

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia as NH_4^{+1}	.05544	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-2})	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-1})	.02821	Nitrate (NO_3^{-1})	.01613
Chromium (Cr^{+6})*	.11539	Nitrite (NO_2^{-1})	.02174
Cobalt (Co^{+2})*	.03394	Phosphate (PO_4^{-3})	.03159
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})*	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO_4^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (Zn^{+2})*	.03060

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

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

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

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters, acres, or hectares. Numbers of periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

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

Periphyton is the assemblage of microorganisms attached to and growing upon solid 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 or destroy undesirable plants and animals. The major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide, almost 60,000 pesticide formulations have been registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to replace many of the chlorinated hydrocarbon pesticides with more specific, fast acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

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

Picocurie (PC) is a unit for measuring radioactivity. One picocurie is equivalent to 1 trillionth of a curie. See Curie.

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

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).

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

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

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

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

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

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

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

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

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

Total (as used in tables of chemical analysis) refers to the amount of a substance that is present both in solution and in suspension.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS 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.

SPECIAL NETWORKS AND PROGRAMS

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

Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Radiochemical program is a network of regularly sampled water-quality stations where additional 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.

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in UG/L (micrograms per liter), radium as radium-226 in PC/L (picocuries per liter), gross beta radiation as equivalent strontium/yttrium-90 (SR90/Y90) or cesium-137 in PC/L and gross alpha radiation as micrograms of uranium equivalent per liter. Gross alpha and beta radioactivity associated with the fine-grained (silt and clay-sized) sediments in the samples are also determined.

A 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).

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each gaging station, partial-record station, and water-quality station has been assigned a station number. These are in the same downstream order used in this report. Downstream order station numbers are not assigned to wells and miscellaneous sites where only random discharge measurements are made. In assigning station numbers, no distinction is made between partial-record stations and gaging stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the 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 01127880 which appears just to the left of the station name includes the 2-digit part number "01" plus the 6-digit downstream-order number "127880." The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 1 (North Atlantic Slope basins). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

NUMBERING SYSTEM FOR WELLS

The well-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 and a unique number for each well. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude; the next 7 digits denote the degrees, minutes, and seconds of longitude; and the last 2 digits is a sequential number for wells within a 1-second grid.

A local well-numbering system is used in this report. These numbers consist of the name of the city or town in which the well is located followed by a sequential number.

EXPLANATION OF SURFACE WATER 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 15-, 30-, or 60-minute intervals or a continuous graph of the fluctuations. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables; then the monthly and 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 gage observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

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

At some stream-gaging stations the stage-discharge relation is affected by ice 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 being given to the available information on temperature and precipitation, notes by hydrologists and gage observers, and comparable records of discharge for other stations in the same or nearby basins.

For some lake or 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 or contents. This happens when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily reservoir stages may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

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 stage and contents is given. Tables of daily mean gage heights are included for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the inside of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, type and history of gages, notations of revisions of previously published records, general remarks, average discharge, and extremes of discharge, contents, or stage. The 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." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey, unless otherwise qualified. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and to a recording rain gage at the gaging station is given under "REMARKS;" for reservoir stations information on the dam forming the reservoir, on the capacity, outlet works, and spillway, and on the purpose and use of the reservoir, is also 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. The maximum discharge, the maximum gage height, and the minimum discharge if there is little or no regulation are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge if it is abnormally low). In the paragraph under "EXTREMES," headed "Period of record," the data given are for the period of record given in the PERIOD OF RECORD paragraph. In the paragraph headed "Current year," the data given are for the complete current water year unless otherwise specified. Reliable information, when available, concerning major floods that occurred outside the period of record is given in a separate paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder (digital or graphic), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge, it is given separately.

Previously published 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 with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing 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 were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), and in inches (line headed "IN.").

In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

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

Peak discharges and their times of occurrence and corresponding gage heights for most stations are listed below the "Current year" paragraph under "EXTREMES." All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any 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.

For gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and 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 two tables following the information for continuous record sites. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at miscellaneous sites.

Accuracy of Data

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

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

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

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

Publications

In each water-supply paper entitled "Surface Water Supply of the United States" there is a list of the numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in New Hampshire and Vermont for the period October 1960 to September 1965 are in Water-Supply Papers 1901 and 1902.

Two series of summary reports entitled "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950, and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and month-end storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for the stations in New Hampshire and Vermont through September 1950 are compiled in Water-Supply Papers 1301 and 1302, and for October 1950 to September 1960, in 1721 and 1722.

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

Other Data Available

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Water-quality data on chemical, physical, and biological characteristics of surface and ground water were collected from designated sampling sites at predetermined intervals such as once daily, weekly, monthly, or less frequently, and at some sites data were recorded on punched paper tape at 60-minute intervals.

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

Descriptive statements are given for water-quality stations at which continuing records are collected. Given are location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations. For ground-water stations, no descriptive statements are given; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality data are presented for chemical, biological, and microbiological constituents, water temperature, and fluvial sediment. Chemical data include concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, specific conductance, pH, and radioactivity. Biological data include qualitative and quantitative analyses of phytoplankton and periphyton organisms. Microbiological data include quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent daily maximum, minimum, and mean temperature. Fluvial-sediment data are given for suspended-sediment discharges and concentrations.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm), and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/l) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using table 2, p. 12.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements and some pollutants in micrograms per liter instead of milligrams per liter. (See "DEFINITION OF TERMS," p. 5, and table 3 for converting English Units to SI Units, p. 15).

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown and others (1970). The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory (1971). Analysis of pesticides, herbicides, and organic substances in water are described by Lamar and others (1965); Goerlitz and Lamar (1967); and Goerlitz and Brown (1972). The collection and analysis of aquatic, biological, and microbiological samples are described by Slack and others (1973).

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 the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

EXPLANATION OF WATER QUALITY RECORDS

For chemical-quality stations equipped with noncontinuous 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 U.S. Geological Survey district office at the address given on the back of the title page of this report.

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

Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of most discharge measurements for surface-water stations. Large streams have a small diurnal 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 monitors are installed, the record consists of maximum, minimum, and mean temperature for each day.

Table 2.--Degrees Celsius (°C) to degrees Fahrenheit (°F)
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	8.0	46	16.0	61	24.0	75
.5	33	8.5	47	16.5	62	24.5	76
1.0	34	9.0	48	17.0	63	25.0	77
1.5	35	9.5	49	17.5	63	25.5	78
2.0	36	10.0	50	18.0	64	26.0	79
2.5	36	10.5	51	18.5	65	26.5	80
3.0	37	11.0	52	19.0	66	27.0	81
3.5	38	11.5	53	19.5	67	27.5	81
4.0	39	12.0	54	20.0	68	28.0	82
4.5	40	12.5	54	20.5	69	28.5	83
5.0	41	13.0	55	21.0	70	29.0	84
5.5	42	13.5	56	21.5	71	29.5	85
6.0	43	14.0	57	22.0	72	30.0	86
6.5	44	14.5	58	22.5	72	30.5	87
7.0	45	15.0	59	23.0	73	31.0	88
7.5	45	15.5	60	23.5	74	31.5	89
						32.0	90
						32.5	90
						33.0	91
						33.5	92
						34.0	93
						34.5	94
						35.0	95
						35.5	96
						36.0	97
						36.5	98
						37.0	99
						37.5	99
						38.0	100
						38.5	101
						39.0	102
						39.5	103

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.

Publications

The annual series of water-supply papers that contain information on quality of surface waters in New Hampshire and Vermont are listed below. Data for the North Atlantic slope basins are given in Part 1; data for the St. Lawrence River basin are given in Part 4.

Water-supply paper numbers and parts, water years 1953-70

Year	Part 1	Year	Part 1	Year	Part 1	Part 4
1953	1290	1959	1641	1965	1961	-
1954	1350	1960	1741	1966	1991	-
1955	1400	1961	1881	1967	2011	2012
1956	1450	1962	1941	1968	2091	2094
1958	1571	1964	1954	1970	2151	2154

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the Data

Ground-water-level data for a network of 18 observation wells within the states of New Hampshire and Vermont are published herein. These water-level measurements, part of a national network of observation wells, are intended to provide a sampling and historical record of water-level changes in the nation's most important aquifers.

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

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

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. The altitude of the land-surface datum with reference to mean sea level and the height of the measuring point (MP) above or below the land-surface datum are 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).

Publications

Publication of ground-water level data for the United States in Water-Supply Papers was begun by the Geological Survey in 1935. The first report containing water-level data for Vermont was Water-Supply Paper 986 and for New Hampshire was Water-Supply Paper 1016. Water-level data for these states are in the water-supply papers listed below, each report containing data for 1 or more calendar years (January-December). Data in this report are for the 12-month water year ending September 30, 1975.

<u>Calendar year</u>	<u>Water-Supply Paper number</u>	<u>Calendar year</u>	<u>Water-Supply Paper number</u>	<u>Calendar year</u>	<u>Water-Supply Paper number</u>
1943	986	1950	1165	1956-57	1537
1944	1016	1951	1191	1958-62	1782
1945	1023	1952	1221	1963-67	1977
1946	1071	1953	1265	1968-72	2140
1947	1096	1954	1321	1973-74	(In
1948	1126	1955	1404		preparation)
1949	1156				

Information about reports and other data on ground water in New Hampshire and Vermont may be obtained from the U.S. Geological Survey district office at the address given on the back of the title page of this report.

HYDROLOGIC CONDITIONS

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

Cumulative runoff for October to March was in the normal range except in southern Vermont and extreme southern New Hampshire, where it was excessive. Below-normal temperatures and precipitation and sublimation of the snow pack combined to produce only moderate spring peak discharges and only the usual lowland flooding was experienced.

Cumulative runoff for April to September was in the normal range except in southern Vermont, where it was excessive; however, runoff at the index gaging station, Lamprey River near Newmarket, N.H., equalled the second lowest for May for period of record (July 1934-). The highest August runoff and the third highest September runoff for period of record occurred at the index station, Batten Kill at Arlington, Vt. (October 1928-).

Cumulative runoff for the water year was in the normal range except in southern Vermont and southwestern New Hampshire, where it was excessive. Water year runoff at Batten Kill at Arlington, Vt., was the fourth highest for period of record.

At the end of the water year, runoff was excessive throughout New Hampshire and Vermont.

Figure 2 on page , for which records of two, long-term index gaging stations were used, shows a comparison of the monthly and yearly mean discharge for the 1975 water year with the median discharge for the period 1941-70.

WATER RESOURCES DATA, 1975

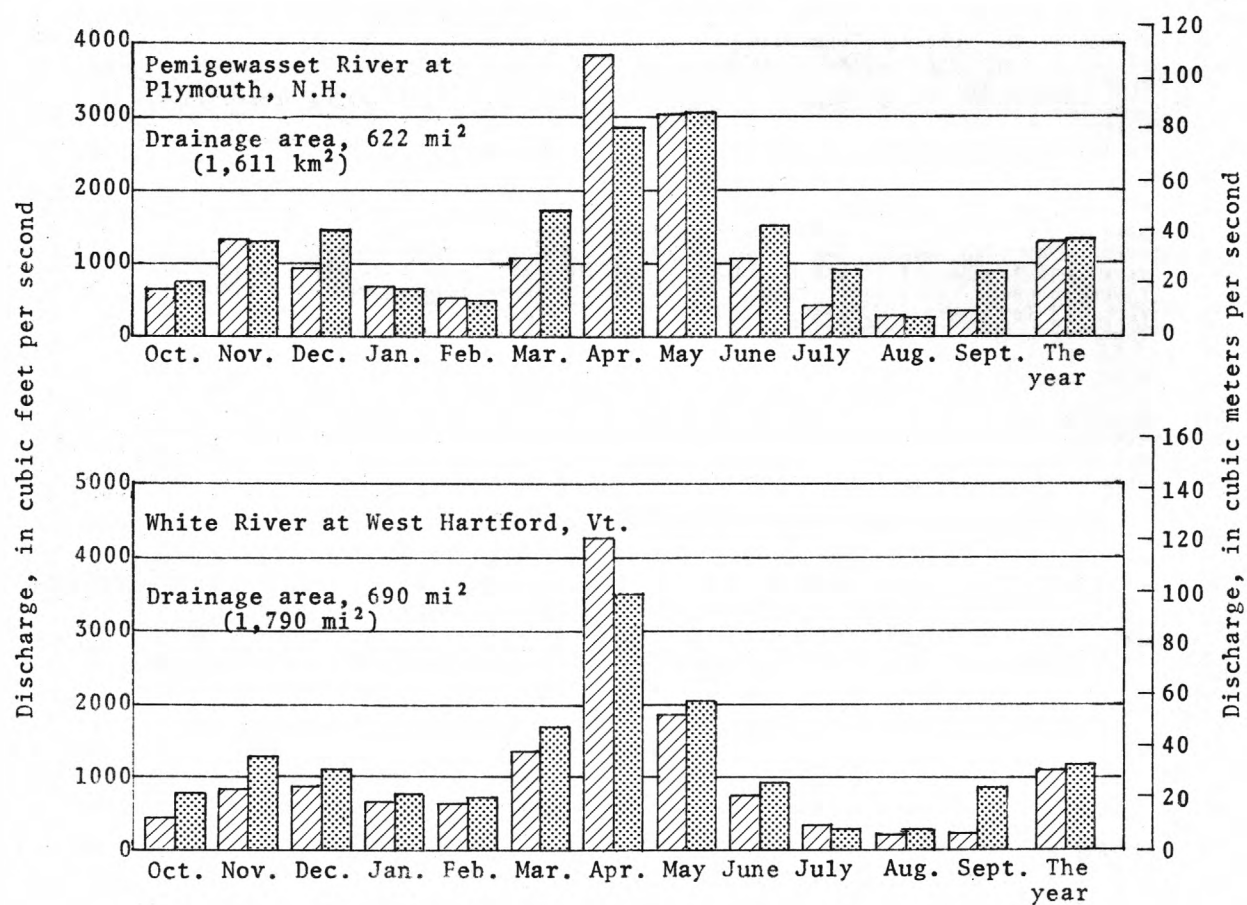


Figure 2.--Comparison of discharge at two long-term index gaging stations during 1975 water year with median discharges for period 1941-70

Table 3.--Factors for converting English units to International System units (SI)

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

Multiply English units	By	To obtain SI units
	<u>Length</u>	
inches (in)	25.4	millimeters (mm)
feet (ft)	.0254	meters (m)
miles (mi)	.3048	meters (m)
	1.609	kilometers (km)
	<u>Area</u>	
square miles (mi ²)	2.590	square kilometers (km ²)
	<u>Volume</u>	
gallons (gal)	3.785	*liters (l)
	3.785	cubic decimeters (dm ³)
million gallons (10 ⁶ gal)	3.785x10 ⁻³	cubic meters (m ³)
	3785	cubic meters (m ³)
cubic feet (ft ³)	3.785x10 ⁻³	cubic hectometers (hm ³)
	28.32	cubic decimeters (dm ³)
cfs/days [(ft ³ /s) : d]	.02832	cubic meters (m ³)
	2447	cubic meters (m ³)
	2.447x10 ⁻³	cubic hectometers (hm ³)
	<u>Flow</u>	
cubic feet per second (ft ³ /s)	28.32	liters per second (l/s)
	28.32	cubic decimeters per second (dm ³ /s)
million gallons per day (mgd)	.02832	cubic meters per second (m ³ /s)
	43.81	cubic decimeters per second (dm ³ /s)
	.04381	cubic meters per second (m ³ /s)
	<u>Mass</u>	
tons (short)	.9072	tonnes (t)

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

SELECTED REFERENCES

- American Public Health Association, and others, 1971, Standard methods for the examination of water and wastewater, 13th ed.: Am. Public Health Assoc., New York, 874 p.
- Barker, F. B., and Johnson, J. O., 1964, Determination of radium in water: U.S. Geol. Survey Water-Supply Paper 1696-B, 29 p.
- Barker, F. B., Johnson, J. O., Edwards, K. W., and Robinson, B. P., 1965, Determination of uranium in natural waters: U.S. Geol. Survey Water-Supply Paper 1696-C, 25 p.
- Barker, F. B., and Robinson, B. P., 1963, Determination of beta activity in water: U.S. Geol. Survey Water-Supply Paper 1696-A, 32 p.
- Barnett, P. R., and Mallory, E. C., Jr., 1971, Determination of minor elements in water by emission spectroscopy: U.S. Geol. Survey Techniques of Water Resources Inv., book 5, chap. A2, 31 p.
- Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved minerals and gases: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A1, 160 p.
- Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. A6, 13 p.
- Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurement of sediment discharge: U.S. Geol. Survey Bull. 1181-A, 47 p.
- Colby, B. R. and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geol. Survey Water-Supply Paper 1357, 187 p.
- Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geol. Survey Water-Supply Paper 1593, 17 p.

- Corbett, D. M., and others, 1943, reprinted 1957, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.
- Goerlitz, D. F., and Brown, Eugene, 1972, Methods for analysis of organic substances in water: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A3, 40 p.
- Goerlitz, D. F., and Lamar, W. L., 1967, Determination of phenoxy acid herbicides in water by electron-capture and microcoulometric gas chromatography: U.S. Geol. Survey Water-Supply Paper 1817-C, 21 p.
- Guy, H. P., 1969, Laboratory theory and methods for sediment analysis: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C1, 58 p.
- _____, 1970, Fluvial sediment concepts: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C1, 55 p.
- Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C2, 59 p.
- Hem, J. D., 1970, Study and interpretation of the chemical characteristics of natural water, 2d ed: U.S. Geol. Survey Water-Supply Paper 1473, 363 p.
- Lamar, W. L., Goerlitz, D. F., and Law, L. M., 1965, Identification and measurement of chlorinated organic pesticides in water by electron-capture gas chromatography: U.S. Geol. Survey Water-Supply Paper 1817-B, 12 p.
- Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.
- Porterfield, George, 1972, Computation of fluvial-sediment discharges: U. S. Geol. Survey Techniques of Water Resources Inv., book 3, chap. C3, 66 p.
- Rose, Arthur and Elizabeth, 1966, The condensed chemical dictionary: Reinhold Pub. Corp., New York, 7th ed., 257 p.
- Slack, K. V., Averett, R. C., Greeson, P. E., and Lipscomb, R. G., 1973, Methods for collection and analysis of aquatic biological and microbiological samples: U. S. Geol. Survey Techniques of Water Resources Inv., book 5, chap. A-4, 165 p.
- U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn., published in separate volumes as follows:
- _____, 1941, Methods of analyzing sediment samples: Rept. 4, 203 p.
- _____, 1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10.
- _____, 1957, The development and calibration of the visual-accumulation tube: Rept. 11, 109 p.
- _____, 1957, Some fundamentals of particle-size analysis: Rept. 12, 55 p.
- _____, 1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.
- _____, 1961, The single-stage sampler for suspended sediment: Rept. 13, 105 p.
- _____, 1963, Determination of fluvial sediment discharge: Rept. 14, 151 p.

GAGING-STATION RECORDS

17

NORTH ATLANTIC SLOPE BASINS

ANDROSCOGGIN RIVER BASIN

01052500 DIAMOND RIVER NEAR WENTWORTH LOCATION, N.H.

LOCATION.--Lat 44°52'40", long 71°03'25", Coos County, 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.

Chemical analyses: Water year 1954 (partial-record station).

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

REMARKS.--Records excellent except those for winter period, which are fair.

AVERAGE DISCHARGE.--34 years, 346 ft³/s (9.798 m³/s), 30.71 in/yr (780 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 8,630 ft³/s (244 m³/s) June 16, 1943 (gage height, 10.66 ft or 3.249 m), from rating curve extended above 3,900 ft³/s (110 m³/s); minimum, 6.8 ft³/s (0.19 m³/s) Aug. 27, 28, 1949, Sept. 1, 1952.

Current year: Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 6	2200	*3,080 87.2	*6.94 2.115				

No peaks above base.

Minimum discharge, 9.3 ft³/s (0.26 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	204	174	100	94	84	188	1500	325	37	32	85
2	146	284	208	99	92	79	175	2180	370	35	28	58
3	143	188	206	98	88	78	166	2540	282	130	24	127
4	128	153	186	96	85	75	138	2690	286	95	70	119
5	106	174	242	96	82	73	157	2610	374	70	45	90
6	102	214	337	94	83	72	150	2630	616	56	35	60
7	94	198	306	95	83	70	146	2560	1000	43	30	57
8	78	160	221	98	83	70	139	2060	680	39	31	50
9	69	139	1210	105	81	69	135	2090	475	62	26	53
10	65	123	952	115	80	68	131	2070	340	203	21	45
11	77	114	513	125	77	66	134	2080	263	95	19	36
12	80	110	381	218	75	66	138	1940	226	70	18	150
13	87	186	315	248	72	66	149	1910	403	73	17	442
14	98	334	271	173	71	66	140	1710	422	100	16	216
15	189	359	184	157	70	65	160	1310	279	134	14	188
16	418	312	158	140	68	65	276	1250	227	208	13	118
17	235	219	155	130	66	65	415	1150	217	95	12	87
18	231	191	155	120	65	68	759	792	176	58	12	79
19	186	193	150	115	64	74	1430	702	152	43	11	103
20	142	195	140	110	65	184	2160	648	167	35	10	492
21	115	392	130	105	64	1080	1450	542	140	99	9.5	270
22	103	305	125	100	59	1030	799	429	112	153	24	165
23	104	207	120	96	61	749	784	373	97	73	36	125
24	101	205	115	94	68	445	1120	301	84	48	26	142
25	93	437	115	92	87	317	995	236	71	56	28	173
26	103	366	110	94	106	415	955	213	61	50	29	187
27	109	199	110	100	108	331	870	819	55	36	161	884
28	86	193	105	104	93	285	674	1920	50	35	114	747
29	90	198	105	101	---	279	559	887	46	105	47	557
30	93	192	100	100	---	238	739	475	42	63	168	326
31	110	---	100	98	---	207	---	290	---	40	207	---
TOTAL	4039	6744	7699	3616	2190	6899	16231	42907	8038	2439	1333.5	6231
MEAN	130	225	248	117	78.2	223	541	1384	268	78.7	43.0	208
MAX	418	437	1210	248	108	1080	2160	2690	1000	208	207	884
MIN	65	110	100	92	59	65	131	213	42	35	9.5	36
CFSM	.85	1.47	1.62	.76	.51	1.46	3.54	9.05	1.75	.51	.28	1.36
IN.	.98	1.64	1.87	.88	.53	1.68	3.95	10.43	1.95	.59	.32	1.51

CAL YR 1974 TOTAL 154417.0 MEAN 423 MAX 5650 MIN 25 CFSM 2.76 IN 37.54
WTR YR 1975 TOTAL 108366.5 MEAN 297 MAX 2690 MIN 9.5 CFSM 1.94 IN 26.35

ANDROSCOGGIN RIVER BASIN

01053500 ANDROSCOGGIN RIVER AT ERROL, N.H.

LOCATION.--Lat 44°46'57", long 71°07'46", Coos County, 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."
Chemical analyses: Water years 1955, 1958-59 (partial-record station).
Water temperatures: Water years 1958-59 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 1,227.30 ft (374.081 m) above mean sea level. Prior to Dec. 8, 1943, nonrecording gage at Errol Dam at datum 5.0 ft (1.52 m) higher.

REVISIONS.--WSP 1001: Drainage area.

REMARKS.--Records excellent. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Aziscohos, and Umbagog Lakes (combined usable capacity, 28,100,000,000 ft³ or 796,000,000 m³), with final regulation at Errol Dam.

COOPERATION.--Records prior to Dec. 9, 1943, furnished by Union Water Power Co.

AVERAGE DISCHARGE.--70 years, 1,894 ft³/s (53.64 m³/s), 24.61 in/yr (625 mm/yr), adjusted for storage.

EXTREMES.--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.
Instantaneous maximum discharge not available prior to Dec. 9, 1943.
Current year: Maximum discharge, 4,310 ft³/s (122 m³/s) May 7 (gage height, 4.30 ft or 1.311 m); minimum daily, 651 ft³/s (18.4 m³/s) Dec. 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1760	1730	1520	1610	1730	1590	1920	2190	1220	1710	1780	1580		
2	1580	1750	1660	1700	1730	1570	1960	2660	1190	1720	1790	1570		
3	1630	1730	1440	1710	1760	1580	1850	3090	1220	1720	1790	1520		
4	1510	1760	1580	1790	1840	1660	1680	3740	1350	1730	1790	1510		
5	1590	1670	1680	1790	1850	1680	1760	4010	1300	1730	1780	1550		
6	1760	1510	1570	1790	1760	1680	1790	4160	1300	1730	1730	1580		
7	1800	1550	1610	1760	1680	1680	1810	4250	2300	1730	1730	1580		
8	1840	1520	1440	1640	1680	1700	1810	4140	2090	1730	1730	1610		
9	1860	1530	651	1580	1700	1750	1880	2640	1470	1730	1750	1600		
10	1920	1630	769	1570	1760	1820	1920	909	1420	1700	1760	1560		
11	1940	1680	1010	1580	1760	1760	1920	1060	1450	1650	1760	1570		
12	1890	1680	1080	1570	1750	1720	1920	1150	1440	1630	1760	1500		
13	1890	1570	1120	1500	1770	1710	1890	664	1370	1590	1760	1350		
14	1900	1420	1290	1520	1800	1680	1860	884	1330	1500	1760	1450		
15	1840	1270	1480	1640	1800	1670	1890	838	1400	1440	1760	1580		
16	1790	1340	1550	1730	1720	1640	1900	1230	1490	1500	1780	1580		
17	1670	1400	1490	1730	1670	1670	1780	1080	1520	1560	1800	1580		
18	1670	1520	1400	1770	1680	1610	2050	1390	1510	1660	1790	1580		
19	1760	1550	1410	1760	1700	1580	2200	1360	1540	1710	1780	1570		
20	1730	1510	1490	1770	1710	1290	2460	1300	1530	1730	1770	1480		
21	1770	924	1520	1860	1710	770	2490	1310	1580	1710	1770	1420		
22	1840	1020	1530	1800	1710	737	2700	1400	1610	1690	1750	1520		
23	1860	1170	1610	1840	1610	910	2700	1500	1620	1700	1760	1520		
24	1820	1380	1580	1700	1670	1080	2700	1490	1610	1690	1780	1480		
25	1710	1250	1570	1570	1710	1270	2700	1550	1620	1710	1780	1470		
26	1660	1150	1580	1520	1630	1380	2670	1700	1650	1710	1760	1500		
27	1770	1510	1670	1590	1630	1380	2640	1510	1660	1750	1740	1230		
28	1850	1580	1660	1720	1630	1430	2570	830	1670	1780	1750	1200		
29	1860	1470	1610	1710	---	1370	2460	948	1700	1780	1760	1430		
30	1850	1400	1610	1670	---	1350	2360	1310	1710	1780	1730	1440		
31	1790	---	1590	1720	---	1900	---	1220	---	1790	1630	---		
TOTAL	55110	44174	44770	52210	48150	46617	64240	57513	45870	52290	54560	45110		
MEAN	1778	1472	1444	1684	1720	1504	2141	1855	1529	1687	1760	1504		
MAX	1940	1760	1680	1860	1850	1900	2700	4250	2300	1790	1800	1610		
MIN	1510	924	651	1500	1610	737	1680	664	1190	1440	1630	1200		
MEAN†	375	1276	1769	596	391	1180	3206	7485	1602	476	-47	1095		
CFSM†	.36	1.22	1.69	.57	.37	1.13	3.07	7.16	1.53	.46	-.04	1.05		
IN.†	.41	1.36	1.95	.66	.39	1.30	3.42	8.26	1.71	.32	-.05	1.17		
CAL YR 1974	TOTAL	959074	MEAN	2628	MAX	11300	MIN	651	MEAN†	2,377	CFSM†	2.28	IN†	30.99
WTR YR 1975	TOTAL	610614	MEAN	1673	MAX	4250	MIN	651	MEAN†	1,625	CFSM†	1.56	IN†	21.2

† Adjusted for change in contents in Rangeley, Mooselookmeguntic, Richardson, Aziscohos, and Umbagog Lakes.

01054000 ANDROSCOGGIN RIVER NEAR GORHAM, N.H.

LOCATION.--Lat 44°26'10", long 71°11'27", Coos County, 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.--Discharge: 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."

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

REVISIONS.--WSP 1001: Drainage area.

REMARKS.--Records excellent. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Aziscohos, and Umbagog Lakes (combined usable capacity, 28,100,000,000 ft³ or 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.

AVERAGE DISCHARGE.--62 years, 2,459 ft³/s (69.64 m³/s), 24.50 in/yr (622 mm/yr), adjusted for storage.

EXTREMES.--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.
Current year: Maximum discharge, 7,180 ft³/s (203 m³/s) May 5 (gage height, 6.50 ft or 1.981 m); minimum daily, 1,670 ft³/s (47.3 m³/s) Nov. 23, Sept. 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2230	1960	1750	1880	1880	1920	2210	4420	1800	1820	1940	1770
2	2360	1940	1900	1880	1870	1860	2330	5250	1860	1800	1950	1740
3	2130	1930	2110	1840	1850	1820	2400	5860	1750	1820	1960	1810
4	2100	1920	1900	1990	1900	1830	2190	6600	1760	1850	1970	1750
5	1800	2030	1890	2010	2000	1870	2100	6840	1890	1830	1990	1690
6	1870	2070	2020	1900	2040	1890	2140	6900	2250	1810	1960	1690
7	2020	2010	1910	2000	1940	1880	2150	6950	3250	1850	1840	1720
8	1980	1870	2090	1990	1860	1880	2160	6520	3850	1820	1850	1730
9	2000	1770	3670	1860	1850	1870	2140	6120	2690	1860	1820	1850
10	2030	1800	2880	1830	1840	1920	2220	3780	2140	1950	1840	1400
11	2070	1890	2180	1830	1920	1990	2260	2590	1970	1920	1850	1710
12	2060	1920	1970	1940	1860	1910	2280	2980	1890	1890	1840	1740
13	2030	2040	1850	1980	1880	1890	2270	2740	2030	2020	1850	1880
14	2030	2070	1770	1880	1920	1870	2250	2310	2060	2230	1850	1670
15	2100	1970	1800	1870	1930	1870	2330	2160	1870	1930	1820	1700
16	2220	1870	1940	1950	1940	1840	2540	2050	1910	1850	1820	1750
17	2210	1830	1990	1920	1880	1840	2770	2400	1890	1810	1850	1730
18	2120	1840	1920	1840	1860	1870	3230	2020	1870	1800	1870	1720
19	2090	1930	1840	2080	1860	1890	4450	2250	1840	1830	1840	1780
20	2040	1960	1830	1900	1900	2470	6530	2080	1840	1870	1840	2020
21	2010	2240	1910	1960	1890	2670	5490	2000	1750	1910	1830	1870
22	2030	1960	1910	2010	1890	1960	4660	1940	1800	1940	1890	1720
23	2080	1670	1930	1910	1880	1850	4590	1970	1830	1900	1800	1770
24	2120	1770	1960	2020	1850	1840	4950	1980	1810	1820	1830	1730
25	2130	2190	1930	1910	1980	2030	4930	1910	1770	1800	1870	1690
26	1950	2140	1870	1780	2010	2470	4870	1950	1800	1810	1880	1680
27	1870	1800	1850	1740	1970	2320	4690	2430	1800	1820	1890	2190
28	1990	2010	2000	1810	1950	2160	4340	3340	1800	1830	1870	1970
29	2020	2040	1900	1910	---	2160	3940	2180	1790	1890	1850	1890
30	2020	1880	1920	1910	---	2020	3870	1870	1870	1880	1900	1810
31	2030	---	1850	1790	---	1910	---	1920	---	1850	1890	---
TOTAL	63740	58320	62240	59120	53400	61570	99280	106310	60430	58010	58050	53570
MEAN	2056	1944	2008	1907	1907	1986	3309	3429	2014	1871	1873	1786
MAX	2360	2240	3670	2080	2040	2670	6530	6950	3850	2230	1990	2190
MIN	1800	1670	1750	1740	1840	1820	2100	1870	1750	1800	1800	1670
MEAN†	653	1748	2333	819	578	1662	4374	9059	2087	660	66	1377
CFSM†	.48	1.28	1.71	.60	.42	1.22	3.21	6.65	1.53	.48	.05	1.01
IN.†	.55	1.43	1.97	.69	.44	1.40	3.58	7.67	1.71	.56	.06	1.13
CAL YR 1974 TOTAL	1209330			3313	MAX 13400	MIN 1670		MEAN† 3,072	CFSM† 2.25	IN† 30.52		
WTR YR 1975 TOTAL	794040			2175	MAX 6950	MIN 1670		MEAN† 2,127	CFSM† 1.56	IN† 21.19		

† Adjusted for change in contents in Rangeley, Mooselookmeguntic, Richardson, Aziscohos, and Umbagog Lakes.

SACO RIVER BASIN

01064300 ELLIS RIVER NEAR JACKSON, N.H.

LOCATION.--Lat 44°13'12", long 71°15'00", Carroll County, 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 mi² (28.2 km²).

PERIOD OF RECORD.--Discharge: 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 shifting control, which are fair.

AVERAGE DISCHARGE.--11 years, 34.2 ft³/s (0.969 m³/s), 42.61 in/yr (1,082 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 4,500 ft³/s (127 m³/s) Nov. 3, 1966 (gage height, 10.34 ft or 3.152 m from recorder, affected by drawdown, 18.9 ft or 5.76 m from floodmarks, site and datum then in use), from rating curve extended above 390 ft³/s (11.0 m³/s) on basis of slope-area measurement at gage height 10.34 ft (3.152 m); minimum, 3.7 ft³/s (0.10 m³/s) Mar. 27, 1965.

Current year: Peak discharges above base of 400 ft³/s (11.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 8	2230	†*845 23.9	*4.19 1.277	Mar. 20	1015	758 21.5	4.00 1.219

† From rating curve extended above 390 ft³/s (11.0 m³/s) as explained above.

Minimum discharge not determined, occurred during period of ice effect; minimum daily, 5.0 ft³/s (0.14 m³/s) Feb. 11-16, Mar. 16, 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	11	20	11	5.7	7.5	11	71	57	22	13	12
2	28	11	18	11	5.6	7.0	10	86	52	20	12	12
3	25	9.8	17	10	5.5	6.8	9.8	88	44	19	12	17
4	21	11	16	9.7	5.4	6.5	9.7	83	47	17	14	13
5	20	19	15	9.4	5.4	6.2	9.5	80	43	16	16	12
6	23	27	14	9.2	5.3	6.0	9.4	88	123	17	13	12
7	19	17	14	9.2	5.3	5.9	9.2	83	85	17	14	12
8	16	14	203	9.0	5.2	5.8	9.0	83	66	14	20	11
9	14	12	230	9.0	5.2	5.7	8.8	92	53	31	14	20
10	14	12	52	9.0	5.1	6.0	8.6	95	46	36	12	13
11	15	11	36	15	5.0	5.7	8.4	123	41	38	11	10
12	15	14	30	25	5.0	5.5	8.6	144	49	25	10	34
13	14	107	27	15	5.0	6.0	8.6	213	204	113	11	25
14	13	43	25	13	5.0	7.0	8.5	138	89	61	10	18
15	20	32	22	12	5.0	6.0	10	125	63	52	8.3	16
16	21	25	21	11	5.0	5.0	13	138	55	41	8.9	14
17	20	22	19	10	5.2	5.0	21	102	49	33	9.8	14
18	22	20	18	9.5	5.5	5.3	29	94	43	27	9.6	12
19	17	17	16	9.0	6.0	5.6	116	116	40	26	9.2	29
20	14	21	15	8.8	5.8	302	82	120	38	23	9.1	38
21	13	55	14	8.4	5.4	76	43	116	35	30	8.8	31
22	14	40	13	8.0	5.2	36	36	94	32	21	13	22
23	14	32	13	7.5	6.0	25	38	88	29	17	9.6	24
24	13	29	12	7.3	6.8	20	55	86	29	21	10	25
25	12	51	11	7.0	12	28	94	62	26	25	11	25
26	13	39	10	6.7	10	40	80	55	24	19	10	27
27	11	36	10	6.5	9.0	20	52	76	22	17	9.2	107
28	10	30	12	6.3	8.0	16	38	104	21	16	8.9	43
29	10	25	14	6.1	---	14	34	56	27	16	8.9	35
30	10	23	13	6.0	---	13	43	49	26	14	25	29
31	11	---	12	5.8	---	12	---	71	---	13	16	---
TOTAL	509	815.8	962	300.4	168.6	716.5	913.1	3019	1558	857	367.3	712
MEAN	16.4	27.2	31.0	9.69	6.02	23.1	30.4	97.4	51.9	27.6	11.8	23.7
MAX	28	107	230	25	12	302	116	213	204	113	25	107
MIN	10	9.8	10	5.8	5.0	8.4	49	21	13	13	8.3	10
CFSM	1.50	2.50	2.84	.89	.55	2.12	2.79	8.94	4.76	2.53	1.08	2.17
IN.	1.74	2.78	3.28	1.03	.58	2.45	3.12	10.30	5.32	2.92	1.25	2.43

CAL YR 1974 TOTAL 15499.9 MEAN 42.5 MAX 800 MIN 4.0 CFMS 3.90 IN 52.89
WTR YR 1975 TOTAL 10898.7 MEAN 29.9 MAX 302 MIN 5.0 CFMS 2.74 IN 37.19

NOTE.--No gage-height record Jan. 14 to Feb. 13. Shifting-control method used Oct. 1-27, Apr. 17 to Sept. 25.

SACO RIVER BASIN

21

01064400 LUCY BROOK NEAR NORTH CONWAY, N.H.

LOCATION.--Lat 44°04'10", long 71°10'30", Carroll County, 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.--Discharge: 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, which are fair.

AVERAGE DISCHARGE.--11 years, 10.7 ft³/s (0.303 m³/s), 31.05 in/yr (789 mm/yr).

EXTREMES.--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 or 2.804 m, from floodmarks), from rating curve extended above 50 ft³/s (1.42 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.

Current year: Peak discharges above base of 190 ft³/s (5.38 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 8	2315	233 6.60	6.68 2.036	Apr. 5	1015	ice jam	*7.19 2.192
Mar. 20	1030	*394 11.2	7.14 2.176				

Minimum discharge, 0.80 ft³/s (0.022 m³/s) July 8, 9, Aug. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	3.0	6.4	4.6	3.0	3.2	12	43	4.3	1.2	3.2	1.6
2	6.4	2.5	7.5	4.4	3.0	3.1	12	55	4.2	1.1	2.3	1.5
3	6.4	2.5	11	4.2	2.9	3.0	25	55	4.0	1.1	1.6	1.5
4	4.9	2.5	7.5	4.1	2.9	2.9	29	45	5.8	1.1	1.9	1.4
5	4.0	4.3	6.1	4.0	2.8	2.8	26	37	5.2	1.0	3.4	1.2
6	3.8	4.9	6.1	3.9	2.8	2.7	8.4	37	16	.90	2.7	1.2
7	3.6	4.3	5.8	3.9	2.8	2.6	8.4	36	17	.90	2.1	1.2
8	3.4	3.8	4.2	3.9	2.7	2.6	7.9	31	10	.90	2.7	1.2
9	3.0	3.6	101	3.9	2.7	2.6	7.5	28	7.9	2.1	2.3	1.7
10	3.0	3.4	39	4.0	2.7	2.5	6.7	28	6.4	2.1	1.7	1.4
11	3.0	3.4	26	4.5	2.7	2.6	6.7	28	5.2	1.5	1.2	1.2
12	3.0	3.2	20	5.4	2.6	2.6	6.7	26	6.4	1.5	1.1	1.8
13	3.0	27	15	5.0	2.6	2.6	6.7	26	40	18	1.1	1.7
14	3.0	17	12	4.9	2.6	2.6	7.0	20	27	20	1.1	1.5
15	3.0	11	11	4.7	2.6	2.6	8.8	16	13	27	1.0	1.2
16	3.8	7.9	10	4.6	2.5	2.6	12	13	9.3	13	1.0	1.2
17	4.9	6.4	9.2	4.4	2.5	2.6	18	11	7.5	6.1	1.0	1.2
18	3.8	6.1	8.6	4.3	2.5	2.7	28	9.3	5.5	4.0	1.0	1.2
19	3.6	5.5	8.0	4.2	2.5	3.1	57	7.9	4.3	3.0	1.0	2.5
20	3.6	9.7	7.5	4.1	2.5	168	66	7.0	3.8	2.7	.90	5.5
21	3.6	83	7.2	3.9	2.6	78	46	7.9	3.4	3.0	.90	3.6
22	3.4	31	6.8	3.8	2.6	38	34	7.0	2.5	2.5	.80	3.2
23	3.2	17	6.4	3.7	2.7	29	36	7.0	2.3	2.3	.90	2.7
24	3.2	13	6.2	3.6	3.4	25	51	6.7	1.9	1.9	.90	3.2
25	3.2	19	5.9	3.5	4.3	28	63	5.2	1.8	2.1	.90	3.6
26	3.2	17	5.7	3.4	3.8	34	62	4.9	1.6	1.9	.90	5.2
27	3.2	12	6.4	3.3	3.5	31	45	5.2	1.6	1.8	.90	58
28	3.0	10	5.8	3.2	3.3	28	34	5.8	1.5	1.7	.90	14
29	3.0	8.8	5.2	3.2	---	17	28	4.3	1.4	2.5	1.0	7.0
30	3.0	7.9	5.0	3.1	---	16	30	4.0	1.4	3.4	5.8	4.3
31	3.0	---	4.8	3.0	---	15	---	4.3	---	3.4	1.9	---
TOTAL	112.8	350.7	425.1	124.7	80.1	559.0	788.8	621.5	222.2	135.70	50.10	137.7
MEAN	3.64	11.7	13.7	4.02	2.86	18.0	26.3	20.0	7.41	4.38	1.62	4.59
MAX	6.4	83	101	5.4	4.3	168	66	55	40	27	5.8	58
MIN	3.0	2.5	4.8	3.0	2.5	2.5	6.7	4.0	1.4	.90	.80	1.2
CFSM	.78	2.50	2.93	.86	.61	3.85	5.62	4.27	1.58	.94	.35	.98
IN.	.90	2.79	3.38	.99	.64	4.44	6.27	4.94	1.77	1.08	.40	1.09
CAL YR 1974	TOTAL	4080.00	MEAN	11.2	MAX	101	MIN	1.1	CFSM	2.39	IN	32.42
WTR YR 1975	TOTAL	3608.40	MEAN	9.89	MAX	168	MIN	.80	CFSM	2.11	IN	28.68

SACO RIVER BASIN

01064500 SACO RIVER NEAR CONWAY, N.H.

LOCATION.--Lat 43°59'27", long 71°05'29", Carroll County, 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."

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

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1301: 1908-9.

REMARKS.--Records excellent except those for winter period, which are fair.

AVERAGE DISCHARGE.--51 years (1903-9, 1929-74), 923 ft³/s (26.14 m³/s), 32.47 in/yr (825 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 43,900 ft³/s (1,240 m³/s) Mar. 27, 1953 (gage height, 17.20 ft or 5.243 m), from rating curve extended above 23,000 ft³/s (651 m³/s) on basis of slope-area measurement of peak flow; minimum, 40 ft³/s (1.13 m³/s) Mar. 16, 1932.

Current year: Peak discharges above base of 8,700 ft³/s (246 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 18	1600	*11,300 320	*8.84 2,694				

Minimum discharge, 130 ft³/s (3.68 m³/s) Aug. 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	714	280	450	420	270	436	870	2240	750	210	150	272
2	587	275	480	400	265	393	830	2510	781	185	140	225
3	662	270	1300	380	265	365	780	3400	667	190	130	239
4	552	265	1000	370	260	340	760	3880	720	180	135	257
5	483	375	780	365	260	315	730	4370	770	170	150	221
6	451	580	620	360	260	300	698	3470	1090	165	190	205
7	432	460	520	360	260	285	677	3540	1400	160	250	200
8	393	390	720	365	260	280	709	3860	1100	155	333	190
9	369	340	6000	390	255	270	730	3400	860	155	361	233
10	360	310	3600	425	255	265	740	3190	770	150	275	284
11	350	290	2200	470	255	265	750	3060	700	280	236	217
12	330	1000	1400	640	250	260	780	3110	640	500	220	216
13	320	1390	1150	580	250	260	830	3260	900	700	211	488
14	310	866	1000	510	250	260	900	3840	1500	1900	203	333
15	330	729	860	450	250	265	1030	3030	1350	1200	192	265
16	370	629	780	400	250	270	1100	2720	1150	860	183	239
17	473	574	700	380	250	285	1300	2640	950	640	178	225
18	524	536	650	370	250	4560	1700	2120	800	475	178	224
19	468	530	600	350	260	4220	2840	1930	670	370	170	236
20	400	2530	560	340	270	2410	4740	1940	590	300	160	644
21	365	1960	520	330	265	1970	3400	1850	520	340	154	637
22	343	1300	490	320	260	1670	2560	1700	460	370	159	527
23	337	1100	470	310	280	1980	2440	1450	400	320	175	397
24	336	1200	440	300	375	2060	2310	1280	350	300	166	424
25	325	1750	420	300	540	1510	2930	1100	300	385	175	440
26	320	1300	400	290	660	1410	3500	920	270	330	188	463
27	311	950	380	290	580	1250	3830	840	250	275	177	2260
28	298	730	450	280	500	1160	4060	1200	220	240	163	1470
29	290	600	540	280	---	1030	3090	900	200	210	155	908
30	290	500	490	275	---	939	2440	742	250	185	316	673
31	290	---	450	270	---	888	---	770	---	170	411	---
TOTAL	12383	24009	30420	11570	8605	32171	54054	74262	21378	12070	6284	13612
MEAN	399	800	981	373	307	1038	1802	2396	713	389	203	454
MAX	714	2530	6000	640	660	4560	4740	4370	1500	1900	411	2260
MIN	290	265	380	270	250	260	677	742	200	150	130	190
CFSM	1.03	2.07	2.54	.97	.80	2.69	4.67	6.21	1.85	1.01	.53	1.18
IN.	1.19	2.31	2.93	1.12	.83	3.10	5.21	7.16	2.06	1.16	.61	1.31
CAL YR 1974	TOTAL	368909	MEAN	1011	MAX	7360	MIN	170	CFSM	2.62	IN	35.55
WTR YR 1975	TOTAL	300818	MEAN	824	MAX	6000	MIN	130	CFSM	2.13	IN	28.99

SACO RIVER BASIN

23

01065000 OSSIPEE RIVER AT EFFINGHAM FALLS, N.H.

LOCATION.--Lat 43°47'44", long 71°03'36", Carroll County, 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.

Chemical analyses: Water year 1955 (partial-record station).

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

REMARKS.--Records excellent. Flow regulated by Ossipee and Silver Lakes and Pine River Pond (combined capacity, 1,430,000,000 ft³ or 40,500,000 m³).

AVERAGE DISCHARGE.--33 years, 687 ft³/s (19.46 m³/s), 28.27 in/yr (718 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 11,700 ft³/s (331 m³/s) Mar. 28, 1953 (gage height, 11.64 ft or 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.

Current year: Maximum discharge, 2,560 ft³/s (72.5 m³/s) Apr. 27 (gage height, 6.95 ft or 2.118 m; minimum, 133 ft³/s (3.77 m³/s) Sept. 10; minimum daily, 165 ft³/s (4.67 m³/s) Aug. 27-29, Sept. 3, 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	552	321	373	481	344	725	1290	1980	180	181	170	167
2	547	316	451	477	383	687	1210	1750	180	184	172	167
3	540	311	585	445	381	659	1170	1660	185	185	174	165
4	533	308	521	425	379	619	1140	1650	209	186	175	165
5	524	312	469	423	378	585	1100	1550	233	185	175	227
6	516	318	466	420	378	556	1070	1500	667	183	174	264
7	507	330	463	417	377	537	1030	1450	1020	182	173	262
8	495	256	462	417	375	534	994	1400	1060	181	173	260
9	486	199	716	417	373	480	967	1100	1010	182	174	259
10	477	199	999	310	371	491	939	740	966	190	175	251
11	469	200	1200	233	370	480	921	730	658	194	175	253
12	460	200	1340	235	368	467	916	720	475	199	176	253
13	452	202	1260	239	367	467	921	715	624	452	177	252
14	443	203	1210	243	365	526	921	710	1360	1150	177	251
15	435	207	1160	245	364	548	921	700	1570	1270	177	251
16	428	210	937	247	362	530	944	690	1850	1250	175	251
17	424	212	812	250	360	516	1010	540	2030	1190	172	249
18	422	215	794	251	359	512	1140	530	1560	1140	171	248
19	420	216	784	251	358	505	1370	520	1160	1100	171	249
20	421	218	627	253	356	608	1830	520	877	1050	169	251
21	418	236	530	253	355	944	2220	515	484	535	169	251
22	414	414	530	255	353	1400	2310	510	483	205	169	252
23	409	537	527	256	352	1590	2250	500	297	166	167	253
24	402	559	524	257	352	1620	2230	495	173	167	167	254
25	353	568	523	258	356	1640	2350	490	174	168	167	255
26	345	582	517	262	651	1710	2470	480	175	169	166	394
27	343	580	507	332	790	1760	2540	470	175	169	165	592
28	338	576	501	385	753	1670	2460	460	175	171	165	807
29	333	457	496	396	---	1580	2290	450	177	169	165	810
30	328	373	492	386	---	1480	2110	350	179	170	167	799
31	324	---	485	386	---	1410	---	250	---	171	167	---
TOTAL	13568	9835	21266	10095	11370	27836	45034	25125	20366	13094	5309	9362
MEAN	438	328	686	326	406	898	1501	843	679	422	171	312
MAX	552	582	1340	481	790	1760	2540	1980	2030	1270	177	810
MIN	324	199	373	233	352	467	916	250	173	166	165	165
CAL YR 1974	TOTAL	253527	MEAN	695	MAX	2220	MIN	197				
WTR YR 1975	TOTAL	213260	MEAN	584	MAX	2540	MIN	165				

PISCATAQUA RIVER BASIN

01072100 SALMON FALLS RIVER AT MILTON, N.H.

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

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--Discharge: 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 except those for periods of doubtful or no gage-height record, which are poor. 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.--7 years, 208 ft³/s (5.891 m³/s).

EXTREMES.--Period of record: Maximum discharge, 1,730 ft³/s (49.0 m³/s) Feb. 12, 1970 (gage height, 5.49 ft or 1.673 m); minimum daily, 19 ft³/s (0.54 m³/s) Aug. 30, Sept. 13, 1970.
Current year: Maximum discharge, about 1,060 ft³/s (30.0 m³/s) probably occurred Mar. 22 (gage height, about 4.9 ft or 1.49 m); minimum daily, 26 ft³/s (0.74 m³/s) June 6-12.

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

DAY	OCT	NOV	DEC	JAN	FEH	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	151	122	146	195	272	350	390	35	42	37	37
2	150	168	120	141	180	254	350	370	32	42	37	37
3	149	160	131	133	160	235	380	360	27	42	37	37
4	149	150	150	130	145	212	790	330	27	42	37	37
5	151	146	154	121	135	192	1010	310	27	42	37	37
6	152	149	150	116	125	173	960	260	26	42	37	37
7	152	154	144	110	115	163	810	260	26	36	37	37
8	152	151	137	110	105	154	720	170	26	36	37	37
9	152	147	177	109	85	152	640	50	26	36	37	37
10	149	140	242	108	70	149	590	50	26	36	37	37
11	147	133	276	113	65	146	530	50	26	36	37	37
12	146	121	280	127	50	145	530	42	26	36	37	37
13	146	97	280	149	40	141	530	35	55	36	37	37
14	143	96	277	168	50	141	480	35	152	36	37	37
15	143	95	262	169	65	148	440	35	188	36	36	37
16	146	87	240	167	95	148	460	37	179	36	36	37
17	146	84	228	158	90	149	470	37	152	36	36	37
18	146	79	224	131	100	149	500	37	128	36	36	37
19	146	76	221	146	105	152	550	33	101	36	36	37
20	144	75	207	146	105	301	630	27	77	36	36	37
21	143	97	199	135	106	780	690	27	68	36	37	37
22	146	136	187	132	106	1050	710	27	60	36	37	39
23	151	153	176	126	106	990	650	27	54	36	37	93
24	146	160	169	122	110	860	500	27	48	36	37	138
25	146	160	166	120	201	770	390	27	43	37	37	138
26	146	160	157	138	255	730	440	27	42	37	37	218
27	145	151	152	155	270	720	450	27	42	37	37	354
28	142	149	152	175	276	660	450	28	42	37	37	372
29	138	140	152	200	---	590	440	35	42	37	37	341
30	138	130	152	210	---	530	420	35	42	37	37	288
31	138	---	149	210	---	420	---	35	---	37	37	---
TOTAL	4542	3895	5833	4421	3510	11676	16860	3240	1845	1159	1141	2758
MEAN	147	130	188	143	125	377	562	105	61.5	37.4	36.8	91.9
MAX	154	168	280	210	276	1050	1010	390	188	42	37	372
MIN	138	75	120	108	40	141	350	27	26	36	36	37
(†)	739.7	682.7	712.3	731.7	744.1	925.4	1048.2	1102.4	1187.6	1176.2	1085.6	1062.8

CAL YR 1974 TOTAL 68700 MEAN 188 MAX 706 MIN 34
WTR YR 1975 TOTAL 60880 MEAN 167 MAX 1050 MIN 26

† 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.
NOTE.--Doubtful or no gage-height record Jan. 28 to Feb. 20, Mar. 21 to May 8, June 23-30, July 7-10.

PISCATAQUA RIVER BASIN

25

01072850 MOHAWK BROOK NEAR CENTER STRAFFORD, N.H.

LOCATION.--Lat 43°15'47", long 71°05'50", Strafford County, on left bank 0.5 mi (0.8 km) downstream from bridge on State Highway 202A and 1.2 mi (1.9 km) east of Center Strafford.

DRAINAGE AREA.--8.87 mi² (22.97 km²).

PERIOD OF RECORD.--Discharge: May 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 285 ft (87 m) from topographic map.

REMARKS.--Records good except those for winter period, period of backwater from leaves, periods of no gage-height record, which are fair.

AVERAGE DISCHARGE.--11 years, 12.0 ft³/s (0.340 m³/s), 18.37 in/yr (467 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 934 ft³/s (26.5 m³/s) Apr. 3, 1975 (gage height, 4.82 ft or 1.469 m), from rating curve extended above 230 ft³/s (6.51 m³/s); maximum gage height, 6.02 ft (1.835 m) Feb. 11, 1970 (backwater from ice); no flow at times most years.

Current year: Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 25	0745	134 3.79	3.00 .914	Apr. 3	2345	*934 26.5	*4.82 1.469
Mar. 20	1430	468 13.3	4.03 1.228				

Minimum discharge, .07 ft³/s (0.002 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.3	4.5	6.9	11	19	26	9.4	1.1	.61	.12	2.9
2	1.3	1.2	9.6	6.8	8.4	16	22	8.8	1.6	.55	.12	1.7
3	1.3	1.1	21	6.4	7.4	14	143	9.1	1.9	.49	.09	1.2
4	1.3	1.4	17	6.1	6.6	12	305	9.1	3.6	.48	.08	.81
5	1.2	1.9	12	6.0	7.4	11	72	9.1	5.9	.44	.14	.57
6	1.1	3.5	9.2	5.4	6.7	10	50	9.1	8.9	.39	.15	.48
7	1.0	3.4	7.7	5.6	6.6	11	43	7.9	22	.36	.30	.48
8	.95	2.7	8.8	5.7	5.6	12	35	7.4	11	.31	.57	.44
9	.81	2.2	34	6.3	5.0	13	31	7.4	7.4	.34	.60	.40
10	.81	2.0	25	8.0	4.6	11	27	5.7	5.3	.71	.40	.40
11	.76	1.9	18	9.5	3.6	10	26	5.5	3.8	1.0	.35	.34
12	.76	1.8	14	16	3.2	9.8	25	5.5	2.8	2.8	.30	.31
13	.76	2.4	13	22	3.0	9.6	22	6.0	17	2.3	.20	.44
14	1.3	2.9	11	22	3.0	11	20	7.7	51	2.7	.11	.44
15	.64	2.9	10	17	4.0	10	19	6.7	27	1.8	.08	.44
16	.88	2.7	9.0	14	3.9	10	18	5.7	16	1.3	.20	.44
17	2.9	2.5	14	13	3.8	10	16	5.1	12	.90	.16	.44
18	2.9	2.4	16	9.9	3.6	11	13	4.3	8.8	.60	.14	.40
19	2.6	2.2	14	13	4.1	13	16	4.0	6.8	.40	.11	.40
20	2.1	2.9	12	11	4.5	230	21	3.5	4.9	.34	.09	.75
21	1.9	17	10	9.2	4.4	151	17	2.7	3.6	1.4	.07	.88
22	1.5	22	9.8	8.7	4.2	66	14	2.3	2.6	1.2	.08	.88
23	1.1	14	9.8	7.9	4.2	48	12	2.2	2.2	.72	.10	1.1
24	1.0	11	9.3	7.6	23	44	14	2.1	1.8	.42	.21	2.2
25	1.0	9.0	8.9	12	113	52	21	1.9	1.3	.36	.28	5.7
26	1.0	8.2	8.4	54	58	58	18	1.5	.97	.31	.28	6.4
27	.95	6.7	7.7	33	29	43	15	1.3	.81	.25	.25	31
28	.71	5.9	7.5	22	23	32	13	1.3	.67	.20	.22	17
29	.71	5.6	7.3	16	---	27	11	1.1	.68	.19	.18	8.8
30	.80	5.1	7.2	16	---	29	10	1.0	.72	.18	4.9	6.0
31	.95	---	7.0	13	---	34	---	.96	---	.15	6.0	---
TOTAL	38.29	149.8	372.7	410.0	364.8	1037.4	1095	155.36	234.15	24.20	16.88	93.74
MEAN	1.24	4.99	12.0	13.2	13.0	33.5	36.5	5.01	7.81	.78	.54	3.12
MAX	2.9	22	34	54	113	230	305	9.4	51	2.8	6.0	31
MIN	.64	1.1	4.5	5.4	3.0	9.6	10	.96	.67	.15	.07	.31
CFSM	.14	.56	1.35	1.49	1.47	3.78	4.11	.56	.88	.09	.06	.35
IN.	.16	.63	1.56	1.72	1.53	4.35	4.59	.65	.98	.10	.07	.39
CAL YR 1974 TOTAL	3897.43			MEAN 10.7	MAX 107	MIN 0	CFSM 1.21	IN 16.34				
WTR YR 1975 TOTAL	3992.32			MEAN 10.9	MAX 305	MIN .07	CFSM 1.23	IN 16.74				

NOTE.--Backwater from leaves Oct. 1-29; no gage-height record Oct. 30 to Nov. 4, Mar. 4-19, July 12 to Aug. 20.

PISCATAQUA RIVER BASIN

01073000 OYSTER RIVER NEAR DURHAM, N.H.

LOCATION.--Lat 43°08'55", long 70°57'56", Strafford County, 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.--Discharge: 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.

AVERAGE DISCHARGE.--41 years, 19.2 ft³/s (0.544 m³/s), 21.55 in/yr (547 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 862 ft³/s (24.4 m³/s) Sept. 11, 1954 (gage height, 6.47 ft or 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.

Current year: Peak discharges above base of 170 ft³/s (4.81 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 20	1830	229 6.49	3.54 1.079	Apr. 4	0200	*299 8.47	*3.92 1.195

Minimum discharge, 0.62 ft³/s (0.018 m³/s) Aug. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.1	5.8	12	19	40	38	14	3.5	1.9	.92	6.0
2	2.3	2.8	4.2	12	15	30	32	14	3.3	1.5	.92	3.7
3	2.4	2.4	7.4	11	13	25	99	18	2.7	1.4	.76	2.9
4	2.0	3.1	3.6	11	11	21	255	15	10	1.3	.76	2.4
5	1.7	6.2	23	10	13	19	170	15	8.4	1.6	1.4	1.8
6	1.7	7.9	18	8.8	12	17	100	12	28	1.1	1.5	1.9
7	1.7	4.7	15	9.1	12	18	70	11	33	.92	3.5	3.8
8	1.6	3.9	18	9.5	11	25	50	10	20	1.1	6.0	3.3
9	1.5	3.3	43	12	10	19	45	11	15	1.1	6.0	2.8
10	1.5	3.1	29	17	9.6	17	40	12	11	2.6	4.5	2.2
11	1.9	2.8	22	20	9.3	16	35	12	8.5	8.1	4.1	1.7
12	3.1	4.7	19	28	9.0	16	33	11	8.6	6.2	3.1	1.4
13	2.9	5.0	18	34	8.8	18	30	15	58	7.6	1.8	2.2
14	2.3	4.3	17	35	8.7	21	28	17	53	6.0	1.2	2.2
15	1.3	3.7	15	29	8.2	17	26	14	33	4.3	.86	1.7
16	3.3	3.3	13	24	8.6	16	24	12	25	3.3	2.2	1.4
17	10	2.9	56	18	8.1	17	22	12	20	2.4	2.0	1.4
18	4.3	2.9	47	15	8.9	20	20	10	16	1.6	1.7	1.2
19	3.3	2.8	33	18	10	35	25	8.9	13	1.4	1.3	1.1
20	2.8	4.7	26	22	13	160	30	6.7	9.5	1.2	.94	1.7
21	2.4	41	22	16	13	157	20	5.5	7.4	6.0	.83	1.8
22	2.1	29	20	13	12	88	19	5.0	6.1	5.4	.86	1.5
23	1.9	17	19	12	13	73	18	5.6	6.0	3.5	1.4	1.6
24	1.7	12	18	11	30	66	23	5.7	4.3	2.3	2.4	5.0
25	1.9	11	15	16	108	71	29	5.3	2.7	2.1	1.7	18
26	1.7	12	13	71	92	71	23	4.8	2.0	2.0	1.4	13
27	1.7	9.5	11	48	67	51	22	4.2	1.7	1.6	1.3	57
28	1.7	8.1	12	39	50	41	19	4.0	2.1	1.3	1.2	34
29	1.9	7.5	13	28	---	36	17	3.1	3.3	1.3	.98	19
30	2.1	6.7	13	28	---	46	15	2.4	2.9	1.3	27	13
31	2.6	---	12	23	---	49	---	3.5	---	1.1	15	---
TOTAL	76.2	231.4	737.8	660.4	603.2	1316	1377	299.7	418.0	84.52	99.53	210.7
MEAN	2.46	7.71	23.8	21.3	21.5	42.5	45.9	9.67	13.9	2.73	3.21	7.02
MAX	10	41	74	71	108	160	255	18	58	8.1	27	57
MIN	1.3	2.4	5.8	8.8	8.1	16	15	2.4	1.7	.92	.76	1.1
CFSM	.20	.64	1.97	1.76	1.78	3.51	3.79	.80	1.15	.23	.27	.58
IN.	.23	.71	2.27	2.03	1.85	4.05	4.23	.92	1.28	.26	.31	.65

CAL YR 1974 TOTAL 5953.52 MEAN 16.3 MAX 93 MIN .45 CFSM 1.35 IN 18.30
WTR YR 1975 TOTAL 6114.45 MEAN 16.8 MAX 255 MIN .76 CFSM 1.39 IN 18.80

PISCATAQUA RIVER BASIN

27

01073500 LAMPREY RIVER NEAR NEWMARKET, N.H.

LOCATION.--Lat 43°06'09", long 70°57'11", Rockingham County, 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.

Chemical analyses: Water year 1954 (partial-record station).

Water temperatures: Water year 1954 (partial-record station).

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

REVISIONS (WATER YEARS).--WSP 1231: 1936-37.

REMARKS.--Records excellent. Some regulation by Pawtuckaway and Mendums Ponds (combined capacity, about 600,000,000 ft³ or 17,000,000 m³).

AVERAGE DISCHARGE.--41 years, 278 ft³/s (7.873 m³/s), 20.63 in/yr (524 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 5,490 ft³/s (155 m³/s) Mar. 20, 1936 (gage height, 14.88 ft or 4.535 m), from rating curve extended above 3,100 ft³/s (87.8 m³/s) on basis of computation of flow over dam at gage height 14.69 ft (4.478 m); minimum daily, 1 ft³/s (0.028 m³/s) Oct. 21, 1935.
Current year: Maximum discharge, 2,240 ft³/s (63.4 m³/s) Apr. 5 (gage height, 7.77 ft or 2.368 m); minimum daily, 16 ft³/s (0.45 m³/s) Oct. 13, 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	89	133	214	375	706	612	225	56	38	41	156
2	57	82	335	209	311	577	562	213	55	35	38	118
3	48	83	733	169	265	490	660	216	52	35	34	88
4	45	115	586	211	219	417	1630	212	86	32	31	69
5	37	132	480	178	214	372	2100	217	105	29	33	58
6	31	127	390	158	207	311	1990	209	185	28	35	50
7	27	198	350	167	209	284	1380	200	307	27	42	47
8	23	185	326	168	204	336	1040	184	299	27	61	43
9	20	155	424	189	198	318	849	164	263	27	70	38
10	20	132	496	241	180	314	680	150	209	33	69	34
11	18	121	556	275	186	302	554	140	160	75	64	34
12	17	125	488	343	180	272	498	130	134	137	55	34
13	16	162	415	421	183	319	454	142	283	222	46	40
14	16	183	364	483	177	332	417	179	450	202	39	37
15	19	162	329	436	177	302	387	187	535	203	38	42
16	29	144	296	399	176	300	366	154	478	186	32	44
17	119	127	488	330	171	313	336	160	369	157	28	46
18	131	115	556	258	171	337	307	142	292	128	27	36
19	125	110	530	318	179	374	311	122	235	102	28	30
20	122	144	471	336	203	919	333	110	189	84	22	29
21	110	306	406	271	204	1480	323	97	162	102	20	30
22	97	345	367	272	195	1820	298	81	134	148	23	31
23	129	340	337	242	200	1600	272	78	101	149	25	33
24	158	313	318	225	305	1160	268	74	80	124	23	48
25	134	275	297	237	735	996	304	66	68	102	24	156
26	118	253	279	488	886	965	316	60	59	89	26	195
27	107	221	229	550	928	900	307	56	51	76	25	430
28	110	190	253	560	857	761	290	53	47	67	24	559
29	110	176	244	502	---	631	265	48	44	60	22	609
30	109	157	233	462	---	596	243	46	41	51	141	480
31	100	---	215	412	---	634	---	53	---	45	208	---
TOTAL	2273	5267	11924	9724	8495	19438	18352	4168	5529	2820	1394	3644
MEAN	73.3	176	385	314	303	627	612	134	184	91.0	45.0	121
MAX	158	345	733	560	928	1820	2100	225	535	222	208	609
MIN	16	82	133	158	171	272	243	46	41	27	20	29
CFSM	.40	.96	2.10	1.72	1.66	3.43	3.34	.73	1.01	.50	.25	.66
IN.	.46	1.07	2.42	1.98	1.73	3.95	3.73	.85	1.12	.57	.28	.74
CAL YR 1974 TOTAL	92897.9		MEAN 255	MAX 1100	MIN		4.3	CFSM 1.39	IN 18.88			
WTR YR 1975 TOTAL	93028.0		MEAN 255	MAX 2100	MIN		16	CFSM 1.39	IN 18.91			

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

PISCATAQUA RIVER BASIN

01073600 DUDLEY BROOK NEAR EXETER, N.H.

LOCATION.--Lat 42°59'37", long 71°01'24", Rockingham County, 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.--Discharge: May 1962 to current year.

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

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair.

AVERAGE DISCHARGE.--13 years, 6.99 ft³/s (0.198 m³/s), 19.10 in/yr (485 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 358 ft³/s (10.14 m³/s) Apr. 2, 1973 (gage height, 7.74 ft or 2.36 m), from rating curve extended above 210 ft³/s (5.95 m³/s); no flow at times some years.

Current year: Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 4	0030	*171 4.84	*6.38 1.94				

Minimum discharge, 0.02 ft³/s (0.001 m³/s) Aug. 3-5.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.5	2.0	4.0	6.0	15	13	4.2	1.7	.21	.05	7.8
2	1.0	1.3	5.0	3.5	4.5	13	9.1	4.2	1.7	.16	.04	2.9
3	1.2	1.1	15	3.2	3.5	11	44	4.2	1.5	.12	.03	1.2
4	1.0	1.6	12	3.0	3.0	10	98	4.5	4.5	.10	.02	.62
5	.80	3.5	10	2.8	2.3	9.0	38	5.1	8.0	.10	.05	.40
6	.78	3.0	8.0	2.6	5.0	8.0	26	5.1	12	.09	.08	.26
7	.74	2.0	6.5	2.0	4.7	7.0	17	5.1	33	.09	.24	.32
8	.70	1.7	25	3.5	4.5	12	13	4.2	15	.10	1.2	.32
9	.68	1.3	15	4.5	4.3	9.0	11	3.3	8.2	.11	1.6	.28
10	.80	1.2	12	10	4.1	7.5	9.4	3.1	5.7	.16	.98	.22
11	1.2	1.1	10	14	3.9	6.5	8.4	3.0	3.8	.20	.38	.20
12	1.6	1.0	8.0	25	3.8	6.0	7.8	2.9	2.3	.32	.26	.26
13	1.4	2.5	7.0	20	3.7	7.0	7.4	6.0	15	.52	.17	1.1
14	.90	2.0	6.5	15	3.6	9.0	6.8	12	29	.38	.12	1.1
15	.65	1.7	6.0	10	3.5	7.5	6.4	9.8	15	.26	.10	.53
16	3.0	1.5	5.5	7.0	3.5	6.5	6.4	6.2	8.9	.17	.08	.30
17	5.0	1.5	20	5.0	3.5	7.0	5.6	5.2	5.7	.12	.08	.30
18	2.5	1.4	15	4.5	3.7	8.0	5.1	4.3	3.3	.09	.08	.36
19	1.7	1.3	11	6.0	4.0	10	6.2	3.1	2.2	.07	.08	.36
20	1.4	5.0	20	4.5	6.0	50	8.0	2.7	1.5	.06	.06	.52
21	1.1	20	15	4.0	5.6	45	6.6	2.2	1.1	.32	.05	.59
22	.95	12	10	3.5	5.0	35	5.1	1.9	.73	.59	.06	.59
23	.85	9.0	8.5	3.0	5.5	25	4.3	1.9	.66	.26	.07	.87
24	.75	7.0	6.6	3.5	20	22	5.1	1.6	.56	.14	.08	1.8
25	.90	5.4	5.2	5.0	45	23	8.7	1.5	.42	.15	.11	8.4
26	.98	6.4	4.7	20	35	24	8.0	1.3	.32	.32	.12	15
27	.87	7.4	4.2	15	25	33	6.6	1.2	.26	.26	.10	25
28	.76	3.6	3.8	9.0	17	19	5.9	1.2	.22	.15	.09	33
29	.73	3.0	3.3	7.0	---	7.8	5.1	1.1	.22	.10	.08	13
30	.69	2.7	3.1	10	---	14	4.3	.92	.26	.08	6.8	6.8
31	1.2	---	3.6	7.0	---	29	---	1.3	---	.06	15	---
TOTAL	38.13	113.7	287.5	237.1	239.2	495.8	406.3	114.32	182.75	5.86	28.26	124.40
MEAN	1.23	3.79	9.27	7.65	8.54	16.0	13.5	3.69	6.09	.19	.91	4.15
MAX	5.0	20	25	25	45	50	98	12	33	.59	15	33
MIN	.65	1.0	2.0	2.0	2.3	6.0	4.3	.92	.22	.06	.02	.20
CFSM	.25	.76	1.87	1.54	1.72	3.22	2.72	.74	1.23	.04	.18	.84
IN.	.29	.85	2.15	1.77	1.79	3.71	3.04	.86	1.37	.04	.21	.93

CAL YR 1974 TOTAL 2436.15 MEAN 6.67 MAX 74 MIN .21 CFSM 1.34 IN 18.23
WTR YR 1975 TOTAL 2273.32 MEAN 6.23 MAX 98 MIN .02 CFSM 1.25 IN 17.01

NOTE.--No gage-height record Oct. 1-24, Oct. 31 to Nov. 24, Dec. 2-22, Feb. 7-23, Feb. 28 to Mar. 25.

MERRIMACK RIVER BASIN

29

01075000 PEMIGEWASSET RIVER AT WOODSTOCK, N.H.

LOCATION.--Lat 43°58'34", long 71°40'48", Grafton County, on right bank 0.2 mi (0.3 km) east of Woodstock and 0.7 mi (1.1 km) upstream from Eastman Brook.

DRAINAGE AREA.--193 mi² (500 km²).

PERIOD OF RECORD.--Discharge: October 1939 to current year.

Chemical analyses: Water years 1970-73 (partial-record station).

Water temperatures: Water years 1970-73 (partial-record station).

GAGE.--Water-stage recorder. Altitude of gage is 615 ft (187 m) from topographic map.

REVISIONS (WATER YEARS).--WSP 1701: 1942(M).

REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation caused by power-plant above station.

AVERAGE DISCHARGE.--36 years, 509 ft³/s (14.41 m³/s), 35.81 in/yr (910 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 47,000 ft³/s (1,330 m³/s) Oct. 24, 1959 (gage height, 16.13 ft or 4.916 m), from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 42 ft³/s (1.19 m³/s) Feb. 11, 1948.

Current year: Peak discharges above base of 7,100 ft³/s (201 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 9	0030	*7,710 218	*8.40 2.560				

Minimum discharge, 67 ft³/s (1.90 m³/s) Aug. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	689	208	290	210	160	170	328	1430	632	207	144	123
2	578	202	390	190	140	155	320	1860	666	165	134	111
3	522	189	500	160	130	145	328	2190	489	148	128	240
4	440	204	360	200	120	135	334	2060	515	138	195	182
5	385	293	300	175	120	130	293	1940	564	126	231	144
6	358	563	290	140	125	130	272	2160	1220	120	158	121
7	322	455	270	205	125	135	255	2140	1130	131	158	138
8	291	341	1430	199	120	125	241	1900	869	111	263	115
9	271	290	3750	183	120	115	231	1930	662	123	197	197
10	259	261	1300	178	110	125	228	2040	533	222	143	169
11	250	244	846	190	110	130	241	2180	454	263	120	124
12	235	234	697	423	105	120	253	2400	466	205	110	470
13	227	333	607	330	105	130	246	3370	2320	1850	102	582
14	220	615	541	238	105	135	243	2480	1700	1410	98	305
15	260	443	467	150	105	125	293	2220	878	1240	89	248
16	354	398	433	160	105	125	391	2220	691	933	83	202
17	453	331	438	120	105	130	560	1840	603	606	80	182
18	498	308	412	100	110	140	742	1520	508	445	79	173
19	372	299	371	220	110	150	1510	1560	446	354	73	266
20	304	291	346	200	110	2500	1830	1480	397	301	69	876
21	265	1140	326	150	115	2070	1080	1380	341	424	68	1030
22	248	1010	315	170	115	953	818	1100	299	425	88	520
23	249	554	293	140	115	751	877	889	267	297	91	427
24	241	482	281	200	160	586	1410	759	240	253	77	433
25	230	609	277	190	480	677	1950	612	216	360	98	438
26	231	597	215	210	500	847	1930	514	197	272	90	501
27	218	456	180	180	250	550	1380	494	182	221	88	3200
28	199	430	230	170	180	525	1010	757	169	199	77	1230
29	198	390	215	180	---	460	841	498	230	189	72	794
30	195	350	230	200	---	426	960	415	405	172	288	590
31	201	---	210	170	---	373	---	550	---	157	206	---
TOTAL	9763	12520	16810	5931	4255	13268	21395	48888	18289	12067	3897	14131
MEAN	315	417	542	191	152	428	713	1577	610	389	126	471
MAX	689	1140	3750	423	500	2500	1950	3370	2320	1850	288	3200
MIN	195	189	180	100	105	115	228	415	169	111	68	111
CFSM	1.63	2.16	2.81	.99	.79	2.22	3.69	8.17	3.16	2.02	.65	2.44
IN.	1.88	2.41	3.24	1.14	.82	2.56	4.12	9.42	3.53	2.33	.75	2.72

CAL YR 1974 TOTAL 204934 MEAN 561 MAX 4240 MIN 107 CFSM 2.91 IN 39.50
WTR YR 1975 TOTAL 181214 MEAN 496 MAX 3750 MIN 68 CFSM 2.57 IN 34.93

MERRIMACK RIVER BASIN

01075800 STEVENS BROOK NEAR WENTWORTH, N.H.

LOCATION.--Lat 43°50'12", long 71°53'07", Grafton County, 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.--Discharge: 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.

AVERAGE DISCHARGE.--12 years, 4.60 ft³/s (0.130 m³/s), 21.25 in/yr (540 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 1,120 ft³/s (31.7 m³/s) June 30, 1973 (gage height, 6.36 ft or 1.939 m), from rating curve extended above 120 ft³/s (3.40 m³/s); minimum, 0.01 ft³/s (<0.001 m³/s) Aug. 8-13, Sept. 18-29, 1963, Sept. 16, 19-21, 1964, Aug. 15-18, 1965, Aug. 18-23, 1971, Aug. 20-22, 1975.

Current year: Peak discharges above base of 90 ft³/s (2.55 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 8	2200	*153 4.33	3.29 1.003	Mar. 20	1115	(ice jam)	3.36 1.024

Minimum discharge, 0.01 ft³/s (<0.001 m³/s) Aug. 20, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	1.2	2.7	1.6	1.2	2.8	4.0	15	.92	.21	.15	.14
2	2.9	.98	3.0	1.5	1.0	2.5	3.3	17	.92	.15	.10	.17
3	2.6	.85	3.6	1.5	.90	2.2	5.3	15	.69	.13	.09	.25
4	2.1	1.3	3.1	1.4	.80	2.0	8.3	12	.92	.10	.08	.17
5	1.7	3.1	2.5	1.4	.90	1.8	3.1	11	1.3	.08	.07	.16
6	1.7	6.1	2.3	1.3	1.4	1.7	2.6	10	5.9	.06	.16	.15
7	1.2	4.0	2.1	1.3	1.1	1.6	2.4	8.8	5.1	.05	.33	.15
8	.98	3.0	32	1.4	1.0	1.5	2.2	7.2	3.4	.04	.36	.13
9	.89	2.4	40	1.5	.95	1.4	2.0	6.5	2.3	.06	.13	.17
10	.82	2.1	12	1.6	.90	1.3	2.1	6.5	1.5	.09	.19	.15
11	.79	1.8	8.9	5.0	.85	1.2	2.6	5.9	.98	.08	.14	.12
12	.75	1.7	6.1	4.0	.85	1.2	3.1	5.5	1.6	.05	.13	.15
13	.72	5.7	5.0	2.5	.84	1.1	2.9	7.8	23	4.3	.10	.17
14	.69	5.5	4.6	2.0	.84	1.1	3.4	5.3	9.2	6.8	.08	.15
15	.85	4.7	4.0	1.6	.83	1.0	6.5	4.2	4.6	8.4	.06	.20
16	1.9	3.7	3.7	1.3	.82	1.0	8.0	3.6	3.3	6.3	.05	.20
17	5.1	3.0	3.5	1.1	.82	1.0	16	3.0	2.4	4.3	.04	.20
18	4.0	2.8	3.3	1.6	.81	.98	19	2.5	1.7	2.6	.04	.16
19	2.9	2.6	3.0	2.4	.81	.98	55	2.2	1.2	.94	.04	.21
20	2.2	3.3	2.8	1.8	.80	30	38	1.9	.94	.51	.02	1.5
21	1.7	26	2.6	1.3	.81	15	18	1.6	.62	1.3	.01	2.3
22	1.6	9.7	2.4	1.1	.85	9.0	13	1.7	.42	1.6	.03	1.7
23	1.4	5.9	2.3	1.0	1.1	6.0	14	1.7	.30	.89	.05	.73
24	1.3	4.9	2.2	1.2	2.0	4.0	28	1.3	.23	.51	.06	1.1
25	1.2	8.0	2.0	1.8	10	10	29	.89	.21	1.3	.10	2.3
26	1.2	6.8	1.6	3.0	5.0	8.5	19	.82	.19	.68	.10	1.9
27	1.1	4.6	1.2	1.7	4.0	7.0	12	.79	.15	.33	.08	32
28	.89	4.0	1.5	1.4	3.5	25	11	.66	.14	.22	.06	9.7
29	.85	3.5	2.0	1.2	---	10	6.8	.56	.21	.19	.05	4.6
30	.85	3.0	1.6	2.0	---	5.5	9.1	.54	.26	.19	.54	4.0
31	1.1	---	1.5	1.5	---	3.9	---	.72	---	.17	.19	---
TOTAL	52.28	136.23	169.1	55.0	45.68	162.26	349.7	162.18	74.60	42.63	3.63	65.03
MEAN	1.69	4.54	5.45	1.77	1.63	5.23	11.7	5.23	2.49	1.38	.12	2.17
MAX	5.1	26	40	5.0	10	30	55	17	23	8.4	.54	32
MIN	.69	.85	1.2	1.0	.80	.98	2.0	.54	.14	.04	.01	.12
CFSM	.57	1.54	1.85	.60	.55	1.78	3.98	1.78	.85	.47	.04	.74
IN.	.66	1.72	2.14	.70	.58	2.05	4.42	2.05	.94	.54	.05	.82

CAL YR 1974 TOTAL 2182.02 MEAN 5.98 MAX 86 MIN .04 CFSM 2.03 IN 27.60
WTR YR 1975 TOTAL 1318.32 MEAN 3.61 MAX 55 MIN .01 CFSM 1.23 IN 16.68

01076000 BAKER RIVER NEAR RUMNEY, N.H.

LOCATION.--Lat 43°47'46", long 71°50'42", Grafton County, on right bank 200 ft (60 m) upstream from small right-bank tributary, 0.3 mi (0.5 km) upstream from Halls Brook, and 1.8 mi (2.9 km) southwest of Rumney.

DRAINAGE AREA.--143 mi² (370 km²).

PERIOD OF RECORD.--Discharge: October 1928 to current year. October 1928 monthly discharge only, published in WSP 1301.

Chemical analyses: Water years 1953-54 (partial-record station).

GAGE.--Water-stage recorder. Concrete control since Sept. 10, 1938. Altitude of gage is 495 ft (151 m) from topographic map.

REVISIONS (WATER YEARS).--WSP 726: Drainage area. WSP 781: 1934(M). WSP 1231: 1929-33(M), 1934.

REMARKS.--Records excellent except those for winter period, which are fair. High flow slightly affected by retarding reservoirs since 1968.

AVERAGE DISCHARGE.--47 years, 253 ft³/s (7.165 m³/s), 24.03 in/yr (610 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 21,400 ft³/s (606 m³/s) June 15, 1942 (gage height, 15.50 ft or 4.724 m), from rating curve extended above 3,800 ft³/s (108 m³/s) on basis of slope-area measurements at gage heights 13.03, 14.49, and 15.50 ft (3.972, 4.417, and 4.924 m); minimum, 6.5 ft³/s (0.18 m³/s) Dec. 4, 1947, caused by ice conditions upstream.
Maximum discharge since valley was settled about 1766, 25,900 ft³/s (733 m³/s) Nov. 3, 1927 (gage height, 17.4 ft or 5.30 m, from floodmarks), from rating curve extended above 3,800 ft³/s (108 m³/s) as described above.

Current year: Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 20	2000	*3,060 86.7	*6.34 1.932				

Minimum discharge, 27 ft³/s (0.76 m³/s) Aug. 21, 22, 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	367	110	170	114	100	182	266	907	120	66	41	51
2	240	104	180	102	90	160	252	995	165	54	38	44
3	192	94	230	87	80	149	278	914	109	46	37	72
4	163	109	220	112	80	131	372	874	105	42	36	58
5	138	182	190	97	83	121	294	749	150	40	37	47
6	123	392	150	82	90	119	256	712	288	38	36	42
7	109	304	130	97	91	117	231	648	400	37	38	41
8	99	225	374	96	85	110	212	555	313	35	235	40
9	88	179	1380	96	83	105	200	490	228	35	59	42
10	84	153	740	99	76	100	195	459	165	40	46	46
11	83	140	520	115	78	98	225	429	122	46	41	40
12	79	131	410	247	77	96	256	414	122	47	39	40
13	77	267	347	200	76	99	263	593	1030	285	37	68
14	74	362	302	160	76	104	252	454	706	479	35	54
15	80	308	255	125	77	100	330	386	419	454	34	47
16	119	271	230	100	77	96	449	359	313	359	33	42
17	236	222	235	80	76	95	671	317	256	228	31	40
18	233	192	218	70	77	100	927	278	195	135	30	41
19	179	182	194	110	78	150	1570	266	157	92	29	43
20	149	185	162	90	78	1750	1690	238	124	73	29	184
21	129	1010	170	80	76	1530	1220	212	100	92	28	209
22	115	725	165	90	76	975	934	215	85	140	28	140
23	110	467	153	80	80	700	927	181	76	92	28	94
24	104	353	148	82	105	571	1310	155	66	73	29	122
25	97	367	145	88	291	642	1370	124	59	117	31	165
26	99	397	113	120	377	836	1340	105	54	96	33	178
27	94	280	99	110	275	689	1070	98	52	69	33	874
28	87	250	143	100	215	731	830	120	49	58	31	449
29	83	210	119	90	---	434	683	90	52	51	29	274
30	82	180	125	110	---	347	731	76	120	46	62	184
31	94	---	104	120	---	313	---	94	---	43	69	---
TOTAL	4006	8351	8141	3349	3123	11750	19604	12507	6200	3508	1342	3771
MEAN	129	278	263	108	112	379	653	403	207	113	43.3	126
MAX	367	1010	1380	247	377	1750	1690	995	1030	479	235	874
MIN	74	94	99	70	76	95	195	76	49	35	28	40
CFSM	.90	1.94	1.84	.76	.78	2.65	4.57	2.82	1.45	.79	.30	.88
IN.	1.04	2.17	2.12	.87	.81	3.06	5.10	3.25	1.61	.91	.35	.98
CAL YR 1974	TOTAL	104687	MEAN 287	MAX 2280	MIN 38	CFSM 2.01	IN 27.23					
WTR YR 1975	TOTAL	85652	MEAN 235	MAX 1750	MIN 28	CFSM 1.64	IN 22.28					

01076500 PEMIGEWASSET RIVER AT PLYMOUTH, N.H.

LOCATION.--Lat 43°45'33", long 71°41'10", Grafton County, 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).

PERIOD OF RECORD.--Discharge: October 1903 to current year. Records for April 1886 to September 1903, published in WSP 124, are unreliable and should not be used.

Chemical analyses: Water years 1953, 1971-74 (partial-record station).

Water temperatures: Water years 1967-69, 1971-74 (partial-record station).

Sediment records: Water years 1967-74 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 457.07 ft (139.315 m) above mean sea level. 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.

REVISIONS (WATER YEARS).--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.

REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation during period 1940-52 caused by powerplants above station.

AVERAGE DISCHARGE.--72 years, 1,348 ft³/s (38.18 m³/s), 29.43 in/yr (748 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 65,400 ft³/s (1,850 m³/s) Mar. 19, 1936 (gage height, 29.0 ft or 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, 27.4, and 29.0 ft (7.01, 8.35, and 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.

Current year: Peak discharges above base of 12,600 ft³/s (357 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 9	0730	13,300 377	9.41 2.868	Mar. 20	2400	*25,100 711	12.76 3.889
Mar. 20	1600	-	*14.02 4.273				

† Ice jam.

Minimum discharge, 165 ft³/s (4.67 m³/s) Aug. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2170	560	900	720	560	840	1380	3930	1130	480	285	318
2	1530	540	1000	640	480	730	1320	4890	1440	366	270	258
3	1360	501	1450	500	440	660	1360	4810	1040	315	249	371
4	1100	521	1150	640	400	600	1560	4990	1010	293	285	384
5	934	818	700	580	430	550	1380	4260	1290	270	339	298
6	832	1840	950	540	460	530	1200	4450	1910	249	300	257
7	750	1520	1000	620	450	520	1090	4450	2940	249	278	252
8	667	1120	1100	640	410	500	1010	3820	2100	237	402	244
9	613	919	9830	620	380	470	957	3690	1620	231	460	304
10	581	790	4200	600	350	450	908	3680	1250	393	323	353
11	550	723	2630	560	345	440	1030	3720	1010	393	263	266
12	521	678	2110	1050	350	430	1160	3930	924	460	237	256
13	501	979	1820	1150	355	440	1200	5340	6580	2490	226	1060
14	482	1860	1600	800	350	460	1150	4440	5720	4490	220	537
15	501	1400	1380	600	340	455	1480	3850	3010	3420	208	416
16	700	1250	1150	520	330	410	1900	3680	2180	3030	194	352
17	1170	1030	1200	470	330	470	2570	3300	1810	1850	188	311
18	1290	919	1180	450	340	470	3770	2790	1460	1240	185	299
19	1040	860	1040	560	350	520	5520	2700	1220	876	180	302
20	818	860	960	700	360	4000	8180	2610	1010	696	171	1420
21	712	3780	885	560	355	10000	5180	2450	844	844	167	1720
22	645	3550	870	580	350	6040	3660	2230	710	1150	167	1170
23	613	2090	795	540	360	3680	3480	1880	616	780	186	803
24	591	1680	775	520	450	2840	5080	1620	544	592	180	902
25	560	1790	762	560	800	2810	5920	1320	480	780	193	947
26	560	1960	580	700	1700	3930	6650	1080	420	752	208	981
27	550	1300	540	760	1300	2640	4980	974	384	532	200	5430
28	501	1050	780	620	1000	2240	3750	1390	357	450	191	3280
29	482	1100	800	570	---	2060	3020	1060	339	393	178	1970
30	473	1050	760	680	---	1870	3070	844	724	339	383	1360
31	511	---	660	650	---	1670	---	974	---	308	534	---
TOTAL	24308	39038	45557	19700	14125	53725	84915	95152	46072	28948	7850	26821
MEAN	784	1301	1470	635	504	1733	2831	3069	1536	934	253	894
MAX	2170	3780	9830	1150	1700	10000	8180	5340	6580	4490	534	5430
MIN	473	501	540	450	330	410	908	844	339	231	167	244
CFSM	1.26	2.09	2.36	1.02	.81	2.79	4.55	4.93	2.47	1.50	.41	1.44
IN.	1.45	2.33	2.72	1.18	.84	3.21	5.08	5.69	2.76	1.73	.47	1.60

CAL YR 1974	TOTAL	562836	MEAN	1542	MAX	11100	MIN	236	CFSM	2.48	IN	33.66
WTR YR 1975	TOTAL	486211	MEAN	1332	MAX	10000	MIN	167	CFSM	2.14	IN	29.08

MERRIMACK RIVER BASIN

33

01077000 SQUAM RIVER AT ASHLAND, N.H.

LOCATION.--Lat 43°42'19", long 71°37'49", Grafton County, 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.

Chemical analyses: Water year 1957 (partial-record station).

Water temperatures: Water year 1957 (partial-record station).

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

REMARKS.--Records excellent. Flow completely regulated by Squam and Little Squam Lakes.

AVERAGE DISCHARGE.--36 years, 87.4 ft³/s (2.475 m³/s).

EXTREMES.--Period of record: Maximum discharge, 1,090 ft³/s (30.9 m³/s) July 4, 1973 (gage height, 14.29 ft or 4.356 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Nov. 28, 1969.

Current year: Maximum discharge, 154 ft³/s (4.36 m³/s) Apr. 29 (gage height, 10.83 ft or 3.301 m); minimum daily, 7.4 ft³/s (0.21 m³/s) July 1-8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	66	68	107	109	117	116	150	57	7.4	57	55
2	59	67	68	107	109	117	89	149	57	7.4	57	55
3	59	66	68	107	109	117	58	149	57	7.4	57	55
4	59	67	68	107	113	117	60	148	58	7.4	57	54
5	58	68	68	107	117	117	60	149	57	7.4	57	54
6	57	68	68	107	117	117	60	129	58	7.4	57	54
7	58	68	68	107	117	117	79	95	57	7.4	57	54
8	57	68	68	107	117	115	100	82	57	7.4	57	54
9	57	68	69	107	117	115	117	63	57	29	57	54
10	57	68	68	107	117	115	117	63	57	54	57	54
11	57	68	68	107	115	115	117	63	57	54	57	54
12	57	68	68	107	115	115	118	63	56	55	57	54
13	57	68	76	107	115	115	118	64	57	57	57	54
14	57	68	82	107	115	115	118	64	57	58	57	54
15	57	68	82	107	115	115	119	64	57	57	56	54
16	62	68	82	107	115	115	121	64	56	57	56	54
17	68	68	82	107	115	115	124	63	56	57	56	54
18	68	68	82	107	115	115	127	63	56	56	56	54
19	68	68	82	107	115	115	132	63	56	56	56	54
20	68	68	82	107	115	117	135	57	56	57	56	54
21	68	69	82	107	115	117	137	54	56	57	56	54
22	68	68	82	107	115	72	139	54	57	57	56	54
23	68	68	92	107	115	52	140	54	56	57	55	54
24	68	68	107	107	115	53	145	50	56	57	55	54
25	68	68	107	107	117	90	149	50	56	57	55	54
26	67	68	107	109	117	114	151	54	56	57	55	54
27	67	68	107	109	117	115	151	57	39	57	54	55
28	67	68	107	109	117	115	151	57	7.9	57	55	54
29	66	68	107	109	---	115	152	56	7.9	57	56	54
30	66	68	107	109	---	116	151	56	7.7	57	56	54
31	67	---	107	109	---	116	---	56	---	57	56	---
TOTAL	1939	2035	2579	3329	3220	3391	3551	2403	1535.6	1333.2	1743	1624
MEAN	62.5	67.8	83.2	107	115	109	118	77.5	51.2	43.0	56.2	54.1
MAX	68	69	107	109	117	117	152	150	58	58	57	55
MIN	57	66	68	107	109	52	58	50	7.7	7.4	54	54
CFSM	1.09	1.18	1.44	1.86	2.00	1.89	2.05	1.35	.89	.75	.98	.94
IN.	1.25	1.31	1.67	2.15	2.08	2.19	2.29	1.55	.99	.86	1.13	1.05
CAL YR 1974	TOTAL	39229.0	MEAN	107	MAX	443	MIN	5.0	CFSM	1.86	IN	25.34
WTR YR 1975	TOTAL	28682.7	MEAN	78.6	MAX	152	MIN	7.4	CFSM	1.36	IN	18.52

MERRIMACK RIVER BASIN

01078000 SMITH RIVER NEAR BRISTOL, N.H.

LOCATION.--Lat 43°34'04", long 71°44'54", Merrimack County, 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).

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

Chemical analyses: Water year 1957 (partial-record station).

Water temperatures: Water year 1957 (partial-record station).

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

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

REMARKS.--Record excellent except those for winter period, which are fair. Prior to 1954, some diurnal fluctuation caused by small mill above station; greater fluctuation prior to 1941.

AVERAGE DISCHARGE.--57 years, 142 ft³/s (4.021 m³/s), 22.48 in/yr (571 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 8,100 ft³/s (229 m³/s) Mar. 19, 1936 (gage height, 16.09 ft or 4.904 m, from floodmarks), from rating curve extended above 2,700 ft³/s (76.5 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.

Current year: Peak discharges above base of 1,150 ft³/s (32.6 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	2200	*1,220 34.6	*5.70 1.737				

Minimum discharge, 14 ft³/s (0.40 m³/s) Aug. 21, 22, 23, 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	37	80	68	85	150	191	458	68	22	27	47
2	62	38	88	67	75	129	174	475	74	20	25	37
3	62	35	117	60	65	117	176	441	62	18	23	35
4	55	39	111	58	62	105	182	390	74	17	22	32
5	46	67	76	56	60	96	184	350	77	16	23	27
6	41	159	70	52	58	89	170	311	172	16	23	24
7	39	146	65	56	55	86	155	267	305	15	25	23
8	34	108	104	60	54	80	144	230	197	15	54	22
9	32	84	446	64	52	75	138	206	136	17	57	22
10	31	70	355	70	50	73	132	184	98	22	41	23
11	28	62	228	81	49	69	146	166	75	22	32	22
12	27	61	176	120	48	70	166	151	74	20	28	23
13	26	120	150	144	48	75	178	160	253	76	25	28
14	25	193	130	115	47	82	176	174	370	267	22	28
15	26	153	110	95	47	80	220	151	261	513	20	25
16	31	132	95	80	46	80	288	141	180	416	18	22
17	64	109	107	70	46	75	417	132	140	407	17	21
18	72	98	120	60	46	73	610	118	109	292	17	20
19	61	92	112	58	47	102	888	105	88	155	16	23
20	51	100	101	56	48	551	1160	93	75	98	15	43
21	46	404	96	54	48	938	1060	83	65	79	14	70
22	42	523	96	52	48	767	802	79	54	87	14	70
23	40	343	85	51	50	580	666	74	46	69	14	68
24	38	220	83	50	86	458	787	67	39	55	15	84
25	36	188	78	50	178	458	923	59	35	72	19	107
26	35	160	68	140	208	520	928	53	31	79	19	127
27	34	115	65	150	199	400	807	51	27	58	19	374
28	32	105	73	120	174	319	651	53	25	45	17	321
29	31	95	70	110	---	282	485	49	23	38	16	188
30	30	90	75	100	---	245	433	44	22	33	73	130
31	33	---	70	95	---	223	---	46	---	30	80	---
TOTAL	1284	4146	3700	2462	2079	7447	13437	5361	3255	3089	830	2086
MEAN	41.4	138	119	79.4	74.3	240	448	173	109	99.6	26.8	69.5
MAX	74	523	446	150	208	938	1160	475	370	513	80	374
MIN	25	35	65	50	46	69	132	44	22	15	14	20
CFSM*	.48	1.61	1.39	.93	.87	2.80	5.22	2.02	1.27	1.16	.31	.81
IN.	.56	1.80	1.60	1.07	.90	3.23	5.83	2.32	1.41	1.34	.36	.90

CAL YR 1974	TOTAL	52487.0	MEAN 144	MAX 1190	MIN	8.7	CFSM 1.68	IN 22.76
WTR YR 1975	TOTAL	49176.0	MEAN 135	MAX 1160	MIN	14	CFSM 1.57	IN 21.32

MERRIMACK RIVER BASIN

35

01080000 LAKE WINNIPESAUKEE AT WEIRS BEACH, N.H.

LOCATION.--Lat 43°36'27", long 71°27'30", Belknap County, 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 500.00 ft (152.400 m) above mean sea level. 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) above mean sea level. Stage regulated at outlet and by Wentworth, Merrymeeting (see p. 59), 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.--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.

Current year: Maximum daily gage height, 4.49 ft (1.369 m) July 17, 18; minimum daily, 2.11 ft (0.643 m) Feb. 23.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.45	3.05	3.28	3.37	2.67	2.22	3.12	4.10	4.14	4.26	4.23	3.90
2	3.45	3.04	3.32	3.29	2.64	2.22	3.15	4.11	4.14	4.23	4.21	3.89
3	3.43	3.03	3.29	3.29	2.60	2.21	3.22	4.12	4.14	4.20	4.22	3.83
4	3.38	3.06	3.27	3.25	2.57	2.21	3.38	4.14	4.16	4.19	4.20	3.80
5	3.37	3.10	3.29	3.22	2.55	2.21	3.44	4.15	4.18	4.18	4.18	3.79
6	3.36	3.12	3.30	3.19	2.55	2.21	3.48	4.16	4.23	4.17	4.15	3.77
7	3.35	3.12	3.30	3.16	2.53	2.21	3.50	4.17	4.23	4.14	4.17	3.74
8	3.33	3.12	3.33	3.13	2.50	2.22	3.52	4.17	4.23	4.12	4.24	3.72
9	3.32	3.11	3.42	3.12	2.47	2.21	3.55	4.18	4.23	4.11	4.22	3.67
10	3.29	3.11	3.44	3.11	2.45	2.22	3.57	4.19	4.19	4.13	4.20	3.62
11	3.27	3.11	3.46	3.09	2.41	2.21	3.59	4.20	4.19	4.12	4.20	3.60
12	3.26	3.12	3.50	3.06	2.38	2.21	3.60	4.20	4.20	4.11	4.21	3.58
13	3.25	3.13	3.52	3.09	2.35	2.21	3.61	4.22	4.27	4.21	4.20	3.56
14	3.23	3.14	3.54	3.07	2.31	2.21	3.61	4.22	4.27	4.32	4.17	3.52
15	3.23	3.12	3.55	3.05	2.27	2.22	3.63	4.24	4.34	4.39	4.13	3.49
16	3.26	3.10	3.56	3.02	2.25	2.21	3.66	4.24	4.35	4.44	4.13	3.46
17	3.27	3.10	3.62	2.96	2.22	2.21	3.68	4.24	4.35	4.49	4.11	3.44
18	3.26	3.10	3.60	2.96	2.20	2.22	3.72	4.23	4.35	4.49	4.07	3.43
19	3.23	3.10	3.61	2.95	2.18	2.22	3.78	4.23	4.35	4.48	4.02	3.43
20	3.21	3.13	3.61	2.91	2.14	2.34	3.80	4.23	4.33	4.45	3.99	3.45
21	3.16	3.24	3.60	2.88	2.13	2.47	3.82	4.24	4.33	4.46	3.96	3.45
22	3.13	3.27	3.60	2.84	2.12	2.57	3.84	4.23	4.32	4.46	3.94	3.43
23	3.12	3.30	3.60	2.81	2.11	2.65	3.87	4.23	4.31	4.43	3.91	3.47
24	3.11	3.30	3.55	2.78	2.14	2.70	3.92	4.24	4.30	4.41	3.90	3.50
25	3.12	3.30	3.56	2.77	2.20	2.79	3.97	4.22	4.29	4.42	3.91	3.51
26	3.11	3.27	3.51	2.80	2.21	2.86	4.01	4.19	4.28	4.36	3.89	3.52
27	3.08	3.26	3.50	2.78	2.21	2.90	4.02	4.18	4.26	4.35	3.87	3.65
28	3.08	3.30	3.46	2.75	2.21	2.95	4.05	4.14	4.24	4.31	3.85	3.67
29	3.06	3.29	3.45	2.75	---	3.00	4.08	4.13	4.26	4.26	3.85	3.68
30	3.05	3.29	3.42	2.73	---	3.05	4.09	4.14	4.29	4.25	3.95	3.68
31	3.06	---	3.39	2.71	---	3.09	---	4.14	---	4.23	3.93	---
MEAN	3.23	3.16	3.47	3.00	2.34	2.43	3.68	4.19	4.26	4.30	4.07	3.61
MAX	3.45	3.30	3.62	3.37	2.67	3.09	4.09	4.24	4.35	4.49	4.24	3.90
MIN	3.05	3.03	3.27	2.71	2.11	2.21	3.12	4.10	4.14	4.11	3.85	3.43
(†)	15960	16400	16600	15230	14290	16040	18040	18120	18380	18300	17680	17200
(‡)	-291	+170	+74.7	-512	-389	+653	+772	+29.9	+100	-29.9	-231	-185
CAL YR 1974	MEAN 3.69	MAX 4.54	MIN 2.80	(‡) +14.6								
WTR YR 1975	MEAN 3.48	MAX 4.49	MIN 2.11	(‡) -57.1								

† Contents, in millions of cubic feet, at 2400 on last day of month.

‡ Change in contents, equivalent in cubic feet per second.

MERRIMACK RIVER BASIN

01080500 LAKE WINNIPESAUKEE OUTLET AT LAKEPORT, N.H.

LOCATION.--Lat 43°32'57", long 71°27'54", Belknap County, 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.

Chemical analyses: Water years 1954-55 (partial-record station).

GAGE.--Water-stage recorder, Keeler deflection meter, and measuring flume. Datum of gage is 500.55 ft (152.568 m) above mean sea level, 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 Winnepesaukee (see preceding page), Wentworth, Merrymeeting (see p. 59), and other lakes. Daily discharge computed from relation between discharge, stage, and deflection of vane in measuring flume.

AVERAGE DISCHARGE.--42 years, 529 ft³/s (14.98 m³/s).

EXTREMES.--Period of record: Maximum daily discharge, 2,890 ft³/s (81.8 m³/s) Mar. 31, 1936; no flow Sept. 29, 1962.

Current year: Maximum daily discharge, 1,230 ft³/s (34.8 m³/s) Apr. 19, 20, 21; minimum daily, 230 ft³/s (6.51 m³/s) Mar. 21, 22, May 7.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	280	290	1060	1100	515	250	565	235	235	235	310
2	235	280	290	1060	1100	515	250	565	235	235	235	450
3	235	280	290	1050	1090	515	255	565	235	235	235	590
4	235	280	290	1050	1090	515	370	565	235	235	235	590
5	235	280	290	1050	1080	515	540	565	235	235	235	590
6	235	280	290	1040	1080	515	540	395	235	235	235	590
7	235	280	290	1040	1080	515	545	230	235	235	235	590
8	235	280	290	1040	1080	515	545	235	235	235	235	590
9	235	280	290	1040	1070	515	630	235	235	235	235	590
10	235	280	290	965	1070	515	760	235	235	235	235	590
11	235	280	290	1150	1060	515	770	235	235	235	245	585
12	265	280	295	1170	1050	515	770	235	235	235	320	585
13	290	280	295	1170	1050	515	775	235	235	235	320	580
14	290	280	300	1170	1040	515	775	235	235	235	320	580
15	290	280	300	1170	1040	515	780	235	235	235	320	575
16	290	280	300	1010	1030	515	780	235	235	240	315	575
17	290	280	300	1160	1030	515	780	235	235	435	315	435
18	290	280	410	1160	1020	515	1010	235	235	530	315	295
19	285	280	620	1150	1020	515	1230	235	235	530	315	295
20	285	280	620	1150	685	375	1230	235	235	530	315	295
21	285	285	620	1140	515	230	1230	235	235	530	315	295
22	285	290	620	1140	515	230	905	235	235	530	315	295
23	285	290	730	1130	515	235	580	235	235	530	310	295
24	285	290	840	1120	515	240	580	235	235	530	310	300
25	285	290	840	1120	515	245	570	235	235	530	310	300
26	285	290	840	1130	515	245	570	235	235	530	310	300
27	280	290	840	1120	515	245	570	235	235	530	310	300
28	280	290	840	1120	515	245	570	235	235	530	310	300
29	280	290	840	1120	---	245	570	235	235	530	310	300
30	280	290	900	1110	---	245	570	235	235	530	310	300
31	240	---	1060	1110	---	250	---	235	---	235	310	---
TOTAL	8270	8495	15600	34215	24985	12815	20300	9090	7050	10835	8870	13265
MEAN	267	283	503	1104	892	413	677	293	235	350	286	442
MAX	290	290	1060	1170	1100	515	1230	565	235	530	320	590
MIN	235	280	290	965	515	230	250	230	235	235	235	295
CAL YR 1974	TOTAL	210580	MEAN	577	MAX	1980	MIN	180				
WTR YR 1975	TOTAL	173790	MEAN	476	MAX	1230	MIN	230				

MERRIMACK RIVER BASIN

37

01081000 WINNIPESAUKEE RIVER AT TILTON, N.H.

LOCATION.--Lat 43°26'31", long 71°35'20", Belknap County, 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.
Chemical analyses: Water year 1953 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 441.87 ft (134.682 m) above mean sea level, unadjusted.

REVISIONS (WATER YEARS).--WSP 1901: 1960.

REMARKS.--Records excellent. Flow regulated by powerplants prior to 1967 and by Winnepesaukee (see sta 01080000), Winnisquam 4.5 mi (7.2 km) upstream, Wentworth, Merrymeeting (see p. 59), and other lakes above station.

AVERAGE DISCHARGE.--38 years, 692 ft³/s (19.60 m³/s).

EXTREMES.--Period of record: Maximum discharge, 3,810 ft³/s (108 m³/s) Sept. 21, 1938 (gage height, 7.90 ft or 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.

Current year: Maximum discharge, 1,950 ft³/s (55.2 m³/s) Apr. 21 (gage height, 5.74 ft or 1.750 m); minimum daily, 190 ft³/s (5.38 m³/s) Oct. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	362	411	1120	1280	730	624	694	232	321	251	354
2	217	370	442	1140	1270	720	600	691	233	307	252	345
3	213	355	488	1140	1250	708	662	694	240	305	254	488
4	208	356	484	1150	1250	699	984	693	238	300	248	520
5	202	376	446	1150	1240	691	1110	701	244	297	254	533
6	194	394	425	1150	1260	685	1020	661	300	298	252	591
7	194	385	413	1170	1250	683	987	528	355	303	266	602
8	200	369	436	1170	1240	693	972	487	335	300	331	600
9	260	352	678	1190	1230	697	952	441	318	299	355	591
10	267	341	718	1200	1220	681	946	282	305	311	329	587
11	260	337	639	1200	1210	674	989	256	296	329	312	575
12	251	340	594	1240	1200	667	1050	254	296	327	313	575
13	249	350	589	1290	1200	673	1090	273	386	423	311	593
14	249	351	576	1310	1200	682	1110	291	495	616	302	586
15	251	346	555	1300	1180	681	1150	290	460	712	297	573
16	273	340	540	1290	1170	673	1200	284	429	639	291	566
17	304	349	556	1260	1170	677	1250	259	410	680	285	538
18	302	346	574	1250	1170	680	1340	254	389	831	278	399
19	292	343	666	1270	1170	693	1680	256	374	784	270	372
20	282	363	680	1270	1160	922	1860	298	326	743	264	396
21	275	526	689	1260	1090	1190	1890	330	306	724	259	412
22	270	622	705	1250	999	1080	1930	339	292	715	267	404
23	269	593	764	1240	927	963	1740	323	288	675	269	415
24	287	542	944	1230	889	888	1350	311	283	613	269	443
25	394	513	978	1250	967	820	1280	295	285	635	285	455
26	396	503	984	1340	953	896	1210	278	279	632	283	460
27	378	483	978	1370	773	807	1120	277	273	603	282	709
28	325	460	980	1340	742	736	1050	269	275	583	279	782
29	198	443	982	1330	---	630	958	256	287	544	276	663
30	190	425	1010	1330	---	624	720	243	334	301	386	575
31	220	---	1090	1300	---	642	---	237	---	252	401	---
TOTAL	8088	12235	21014	34500	31660	23285	34824	11745	9563	15402	8971	15702
MEAN	261	408	678	1242	1131	751	1161	379	319	497	289	523
MAX	396	622	1090	1370	1280	1190	1930	701	495	831	401	782
MIN	190	337	411	1120	742	624	600	237	232	252	248	345

CAL YR 1974 TOTAL 280314 MEAN 768 MAX 2280 MIN 190
WTR YR 1975 TOTAL 230989 MEAN 633 MAX 1930 MIN 190

MERRIMACK RIVER BASIN

01081500 MERRIMACK RIVER AT FRANKLIN JUNCTION, N.H.

LOCATION.--Lat 43°25'26", long 71°39'12", Merrimack County, on right bank at Franklin Junction, 1 mi (1.6 km) downstream from confluence of Pemigewasset and Winnepesaukee 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 current year. Chemical analyses: Water years 1954-55 (partial-record station).

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.

REVISIONS (WATER YEARS).--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).

REMARKS.--Records excellent. Flow regulated by powerplants, by Franklin Falls Reservoir (4 mi or 6 km upstream) since 1942, and by Squam, Little Squam, Newfound, Winnepesaukee, Winnisquam, Wentworth, Merrymeeting, and other lakes. See page 59 for description and monthend contents of many of these reservoirs.

AVERAGE DISCHARGE.--70 years (1905-75) 2,753 ft³/s (77.96 m³/s), 24.81 in/yr (630 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 83,000 ft³/s (2,350 m³/s) Mar. 19, 1936 (gage height, 36.4 ft or 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 or 4.980 m). Current year: Maximum discharge, 13,800 ft³/s (391 m³/s) Mar. 21 (gage height, 11.74 ft or 3.578 m); minimum daily, 626 ft³/s (17.7 m³/s) Aug. 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3860	1070	1830	2580	2350	2450	3670	5710	1480	939	846	987
2	2610	1160	1960	2200	2280	2160	3250	6860	1670	1090	720	975
3	2110	1190	2570	2360	2320	2340	3330	7490	1910	1010	658	1250
4	1530	1200	2590	2250	2260	2270	3750	7270	1740	1100	646	1230
5	823	1310	2090	2190	2220	2000	3680	7310	1630	1070	758	1230
6	1290	2210	1870	2130	2120	1970	3240	6320	2080	1160	950	1360
7	1460	2430	1420	2180	2200	1850	3070	6270	3860	891	932	1380
8	1570	2150	1740	2090	2020	1870	3010	5710	3150	801	1140	1360
9	1520	1930	7270	2170	2200	1770	2920	4980	2740	844	1780	1400
10	1330	1560	9030	2270	2150	1620	2890	4690	2060	849	1000	1340
11	1130	1440	5300	2350	2050	1670	2950	4630	1680	900	992	1320
12	1010	1460	3830	2380	2000	1720	3170	4730	1710	870	1090	1330
13	968	1530	3320	2640	1940	1800	3390	5390	3940	1430	945	1450
14	1230	1760	2870	3190	2110	1870	3290	6060	7950	5660	880	1370
15	1310	2280	2810	2900	1970	1740	3250	5110	5380	5950	908	1280
16	1250	2070	2770	2610	1840	1690	3760	4520	3400	5380	741	1240
17	1660	1930	2360	2460	1820	1770	4720	4270	2980	4280	654	1630
18	1500	1860	2360	1850	1840	1990	6630	4040	2530	3110	637	1550
19	1850	1830	2450	1890	2000	2210	8700	2910	2250	2690	626	1450
20	1640	1600	2380	2210	2140	3920	12000	2960	1510	2450	640	1350
21	1490	3650	2310	2150	1890	11600	11900	2940	1860	2220	645	1760
22	1430	6260	2290	2290	1810	12200	9410	3090	1480	2140	699	2320
23	1360	4670	2330	2240	1740	8110	7720	2900	1370	2420	681	2580
24	1230	3080	2430	2150	2040	5680	8030	2440	1390	1830	680	1840
25	1320	2880	2450	2270	3260	5780	9770	2240	1220	1700	689	1960
26	970	2840	2270	2870	3350	6230	10400	1920	1100	1600	674	1950
27	1310	2740	2370	2550	3200	6640	10000	1520	764	1740	682	3500
28	1370	2640	2080	2510	2670	4730	7780	1400	972	1660	695	6020
29	1060	2130	2040	2560	---	4050	6840	1590	939	1400	680	3770
30	939	1730	2170	2440	---	3950	5680	1270	1180	1120	1030	3020
31	921	---	2470	2490	---	3860	---	1500	---	916	1280	---
TOTAL	45051	66590	88030	73420	61790	113510	172200	130040	67925	61220	25978	55202
MEAN	1453	2220	2840	2368	2207	3662	5740	4195	2264	1975	838	1840
MAX	3860	6260	9030	3190	3350	12200	12000	7490	7950	5950	1780	6020
MIN	823	1070	1420	1850	1740	1620	2890	1270	764	801	626	975
CFSM	.96	1.47	1.88	1.57	1.46	2.43	3.81	2.78	1.50	1.31	.56	1.22
IN.	1.11	1.64	2.17	1.81	1.53	2.80	4.25	3.21	1.68	1.51	.64	1.36

CAL YR 1974 TOTAL 1121287 MEAN 3072 MAX 13400 MIN 610 CFSM 2.04 IN 27.68
WTR YR 1975 TOTAL 960956 MEAN 2633 MAX 12200 MIN 626 CFSM 1.75 IN 23.72

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

MERRIMACK RIVER BASIN

39

01082000 CONTOOCOOK RIVER AT PETERBOROUGH, N.H.

LOCATION.--Lat 42°51'45", long 71°57'35", Hillsborough County, on left bank 1,100 ft (350 m) downstream from mill-dam, 1 mi (1.6 km) south of Peterborough, and 1.5 mi (2.4 km) upstream from Nubanusit Brook.

DRAINAGE AREA.--68.1 mi² (176.4 km²).

PERIOD OF RECORD.--Discharge: July 1945 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 740 ft (226 m) from topographic map.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Flow slightly regulated by mill and reservoirs above station; regulation greater prior to 1965.

AVERAGE DISCHARGE.--30 years, 116 ft³/s (3.285 m³/s), 23.13 in/yr (588 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 2,640 ft³/s (74.8 m³/s) Nov. 26, 1950 (gage height, 6.35 ft or 1.935 m), from rating curve extended above 1,700 ft³/s (48.1 m³/s); minimum daily, 0.8 ft³/s (0.023 m³/s) Sept. 15, 16, 1953.

Flood in September 1938 reached a stage of about 15 ft (4.6 m), from information by local residents.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 21	0030	735	20.8	3.69	1.125	Sept. 27	0700	*1,360	38.5	*4.74	1.445
Apr. 4	-	1,200	34.0	†4.50	1.372						

† From peak-stage indicator.

Minimum daily discharge, 13 ft³/s (0.37 m³/s) July 7, 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	34	75	75	110	186	215	138	32	20	31	92
2	56	32	119	72	100	150	200	130	37	19	27	73
3	48	30	181	69	96	140	350	124	34	17	24	59
4	42	35	148	71	92	130	1000	118	84	16	22	51
5	37	65	120	68	88	115	700	120	84	15	22	44
6	34	106	105	72	86	105	600	114	262	14	20	50
7	31	96	90	78	84	95	450	107	262	13	57	47
8	28	81	127	75	82	92	370	99	192	13	374	43
9	27	71	368	72	90	90	300	92	145	16	390	40
10	26	64	303	78	98	88	260	85	112	25	244	36
11	23	57	224	92	95	86	250	79	89	22	158	37
12	22	53	176	178	92	83	240	75	92	22	145	38
13	22	66	153	199	90	90	230	99	216	36	116	41
14	22	80	139	188	88	99	240	114	232	142	94	37
15	22	78	126	170	85	96	250	97	187	287	75	32
16	54	71	114	160	84	101	270	92	145	278	63	30
17	115	64	147	150	83	94	300	84	116	189	53	28
18	92	59	142	140	82	102	330	76	97	126	46	27
19	74	56	128	135	81	118	400	69	82	89	40	28
20	61	58	116	130	80	467	330	62	69	72	35	38
21	52	188	108	125	80	660	290	55	55	114	31	37
22	47	244	104	120	80	509	250	51	50	105	28	34
23	43	187	97	115	80	398	230	49	43	81	24	40
24	40	147	92	110	207	360	227	43	38	63	29	94
25	38	129	94	105	395	390	235	38	33	97	31	374
26	36	116	85	200	338	430	197	35	29	84	31	459
27	34	105	84	160	279	342	177	35	27	72	28	1120
28	30	92	82	145	224	287	160	35	24	58	25	830
29	30	86	80	130	---	244	145	30	23	49	30	533
30	29	77	76	125	---	262	136	28	24	41	170	362
31	33	---	74	120	---	271	---	31	---	35	122	---
TOTAL	1313	2627	4077	3727	3469	6680	9332	2404	2915	2230	2585	4754
MEAN	42.4	87.6	132	120	124	215	311	77.5	97.2	71.9	83.4	158
MAX	115	244	368	200	395	660	1000	138	262	287	390	1120
MIN	22	30	74	68	80	83	136	28	23	13	20	27
CFSM	.62	1.29	1.94	1.76	1.82	3.16	4.57	1.14	1.43	1.06	1.22	2.32
IN.	.72	1.43	2.23	2.04	1.89	3.65	5.10	1.31	1.59	1.22	1.41	2.60
CAL YR 1974	TOTAL	40153.7	MEAN 110	MAX 575	MIN 1120	MIN 13	CFSM 1.62	IN 21.93				
WTR YR 1975	TOTAL	46113.0	MEAN 126	MAX 1120	MIN 1120	MIN 13	CFSM 1.85	IN 25.19				

01083000 NUBANUSIT BROOK NEAR PETERBOROUGH, N.H.

LOCATION.--Lat 42°53'10", long 71°58'24", Hillsborough County, 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 mi² (121.5 km²).

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

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.

REVISIONS (WATER YEARS).--WSP 561: 1921(M). WSP 1051: Drainage area.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by mills and Nubanusit Lake, Edward MacDowell Reservoir since 1950 (see p. 59), and other reservoirs above station.

AVERAGE DISCHARGE.--41 years, 82.5 ft³/s (2.336 m³/s), 23.89 in/yr (607 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 1,130 ft³/s (32.0 m³/s) Apr. 11, 1931 (gage height, 5.59 ft or 1.704 m, site and datum then in use), from rating curve extended above 380 ft³/s (10.8 m³/s); minimum daily, 0.5 ft³/s (0.014 m³/s) Aug. 1, 1926. Maximum discharge since construction of Edward MacDowell Reservoir in 1950, 699 ft³/s (19.8 m³/s) Apr. 12, 1960 (gage height, 4.54 ft or 1.384 m).
Current year: Maximum discharge, 558 ft³/s (15.8 m³/s) Sept. 30 (gage height, 3.99 ft or 1.216 m); minimum daily, 8.3 ft³/s (0.24 m³/s) Oct. 14, 15.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	41	58	47	102	130	180	119	37	12	24	97
2	49	41	74	46	100	110	169	108	36	12	19	66
3	48	40	128	42	85	95	168	103	36	12	17	49
4	41	41	134	38	63	80	225	107	49	12	12	48
5	24	44	130	37	55	68	427	107	65	12	12	36
6	22	52	118	37	51	52	455	107	137	11	12	20
7	22	57	79	37	49	51	404	106	197	11	14	20
8	22	57	72	37	49	53	246	91	185	10	65	20
9	17	56	141	38	49	53	178	82	121	11	132	21
10	13	56	238	39	48	68	157	82	82	11	142	41
11	12	55	250	40	47	79	151	65	59	21	124	53
12	10	54	200	73	47	70	152	54	62	28	88	53
13	9.0	60	122	113	46	57	166	58	122	29	63	53
14	8.3	65	114	125	45	57	174	75	171	88	48	52
15	8.3	65	91	125	44	59	174	89	166	268	39	51
16	13	65	79	108	44	70	176	94	132	277	25	50
17	14	64	81	85	43	76	193	92	94	227	25	50
18	22	55	104	55	41	77	216	90	75	125	21	63
19	46	47	113	55	51	74	266	88	60	88	18	71
20	56	49	88	54	56	154	301	75	50	79	18	72
21	57	99	75	52	52	273	371	54	32	47	14	71
22	68	180	74	50	52	313	393	54	23	46	11	55
23	75	201	68	48	53	308	296	53	22	46	11	48
24	74	197	62	56	89	286	275	45	23	46	11	67
25	56	166	61	62	143	273	229	25	23	47	11	114
26	45	129	59	78	192	259	192	14	23	46	12	145
27	55	92	54	102	204	261	176	15	22	46	12	165
28	57	125	51	105	166	236	169	15	16	46	11	229
29	50	83	49	108	---	190	160	14	12	45	11	414
30	51	73	47	106	---	176	127	14	13	43	54	545
31	45	---	47	105	---	180	---	27	---	38	101	---
TOTAL	1138.6	2409	3061	2103	2066	4288	6966	2122	2145	1840	1177	2839
MEAN	36.7	80.3	98.7	67.8	73.8	138	232	68.5	71.5	59.4	38.0	94.6
MAX	75	201	250	125	204	313	455	119	197	277	142	545
MIN	8.3	40	47	37	41	51	127	14	12	10	11	20
CFSM	.78	1.71	2.10	1.45	1.57	2.94	4.95	1.46	1.52	1.27	.81	2.02
IN.	.90	1.91	2.43	1.67	1.64	3.40	5.53	1.68	1.70	1.46	.93	2.25
CAL YR 1974	TOTAL	32029.2	MEAN	87.8	MAX	491	MIN	4.6	CFSM	1.87	IN	25.40
WTR YR 1975	TOTAL	32154.6	MEAN	88.1	MAX	545	MIN	8.3	CFSM	1.88	IN	25.50

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

MERRIMACK RIVER BASIN

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01085000 CONTOOCOOK RIVER NEAR HENNIKER, N.H.

LOCATION.--Lat 43°09'10", long 71°51'24", Merrimack County, on right bank 1.6 mi (2.6 km) downstream from Sand Brook and 2.5 mi (4.0 km) southwest of Henniker.

DRAINAGE AREA.--368 mi² (953 km²).

PERIOD OF RECORD.--Discharge: October 1939 to current year.
Chemical analyses: Water years 1953-54 (partial-record station).

GAGE.--Water-stage recorder. Altitude of gage is 475 ft (145 m) from topographic map. Prior to Dec. 18, 1939, nonrecording gage at same site and datum.

REVISIONS (WATER YEARS).--WSP 1701: 1944(M).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants and by Nubanusit Lake, Edward MacDowell Reservoir (see p. 59) since March 1950, Highland Lake, Lake Franklin Pierce, and other reservoirs above station.

AVERAGE DISCHARGE.--36 years, 628 ft³/s (17.78 m³/s), 23.17 in/yr (589 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 9,460 ft³/s (268 m³/s) June 26, 1944 (gage height, 13.13 ft or 4.002 m); minimum daily, 19 ft³/s (0.54 m³/s) Oct. 29, 1940, July 17, 1965.
Maximum discharge since at least 1768, 22,200 ft³/s (629 m³/s) Sept. 21, 1938 (gage height, 21.3 ft or 6.49 m, from floodmarks), from rating curve extended above 7,500 ft³/s (212 m³/s) on basis of computations of flow over dams at gage heights 12.72 and 21.3 ft (3.877 and 6.49 m).
Current year: Maximum discharge, 3,940 ft³/s (112 m³/s) Apr. 5 (gage height, 10.08 ft or 3.072 m); minimum daily, 32 ft³/s (0.91 m³/s) July 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	283	325	384	400	630	1300	1370	1120	131	102	291	188
2	252	227	524	410	580	973	1360	1030	136	72	233	379
3	226	172	995	380	550	840	1430	871	248	56	116	398
4	209	181	946	350	520	720	3040	804	331	50	122	340
5	188	236	795	370	490	610	3590	788	332	35	272	331
6	170	427	688	350	480	560	2710	716	628	32	174	319
7	149	508	466	370	460	500	2270	567	1090	37	151	209
8	146	480	400	390	450	470	1980	568	1240	96	226	209
9	137	334	1160	410	460	450	1620	588	970	92	425	326
10	139	276	1670	430	480	430	1390	526	797	75	672	306
11	196	253	1510	400	420	420	1340	474	582	60	608	264
12	135	352	1290	370	370	410	1250	472	488	59	520	250
13	124	413	1120	550	330	410	1390	460	775	92	482	134
14	83	509	975	800	310	420	1240	524	1260	379	403	101
15	171	506	896	700	300	470	1230	555	1190	1100	347	114
16	209	484	853	600	280	460	1280	564	1030	1260	319	245
17	349	470	775	550	270	490	1450	512	634	1130	168	251
18	469	446	785	500	265	480	1680	397	474	757	182	137
19	441	407	804	460	260	600	1940	461	414	530	253	126
20	408	389	731	430	255	1130	2450	429	413	435	284	117
21	342	666	512	410	250	2390	2420	364	387	392	275	111
22	334	1350	438	390	250	2620	2170	386	302	468	260	114
23	324	1330	439	380	286	2320	1980	375	305	368	125	183
24	324	1130	424	380	509	2130	1950	303	288	313	105	173
25	318	1010	404	500	1150	2090	2120	206	270	329	114	338
26	223	918	390	700	1680	2270	2050	174	263	282	228	1070
27	176	692	380	1100	1700	2170	1830	234	234	148	174	2100
28	249	624	370	1000	1530	1820	1600	329	239	204	108	3360
29	288	554	370	840	---	1600	1430	309	164	323	110	2820
30	297	462	380	740	---	1390	1270	260	98	307	179	2110
31	305	---	390	660	---	1510	---	248	---	285	227	---
TOTAL	7664	16131	22264	16320	15515	34453	54830	15614	15713	9868	8153	17123
MEAN	247	538	718	526	554	1111	1828	504	524	318	263	571
MAX	469	1350	1670	1100	1700	2620	3590	1120	1260	1260	672	3360
MIN	83	172	370	350	250	410	1230	174	98	32	105	101
CFSM	.67	1.46	1.95	1.43	1.51	3.02	4.97	1.37	1.42	.86	.71	1.55
IN.	.77	1.63	2.25	1.65	1.57	3.48	5.54	1.58	1.59	1.00	.82	1.73
CAL YR 1974	TOTAL	234533	MEAN 643	MAX 3060	MIN 44	CFSM 1.75	IN 23.71					
WTR YR 1975	TOTAL	233648	MEAN 640	MAX 3590	MIN 32	CFSM 1.74	IN 23.62					

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

01085500 CONTOOCOOK RIVER BELOW HOPKINTON DAM, AT WEST HOPKINTON, N.H.

LOCATION.--Lat 43°11'31", long 71°44'51", Merrimack County, 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, 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 (see p. 59), and other reservoirs above station. Diversion from Hopkinton Lake to Everett Lake on Piscataquog River during periods of high flow in March 1968 and April 1969.

AVERAGE DISCHARGE.--12 years (1963-75), 679 ft³/s (19.23 m³/s), 21.59 in/yr (548 mm/yr), adjusted for storage and diversion.

EXTREMES.--Period of record: Maximum discharge, 5,260 ft³/s (149 m³/s) Apr. 24, 1969 (gage height, 8.66 ft or 2.640 m); minimum daily, 15 ft³/s (0.42 m³/s) July 22, 1965.
Current year: Maximum discharge, 3,560 ft³/s (101 m³/s) Apr. 5 (gage height, 6.67 ft or 2.033 m); minimum daily, 55 ft³/s (1.56 m³/s) July 7.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	304	424	430	660	1400	1570	1200	204	107	286	286
2	295	286	485	430	620	1100	1480	1040	150	119	286	435
3	237	171	1010	400	600	900	1400	962	200	82	206	563
4	196	196	996	370	560	800	3010	857	323	75	89	457
5	178	229	871	400	530	700	3520	884	347	69	192	337
6	182	362	765	380	510	630	3320	827	591	60	225	342
7	182	542	624	400	500	580	2680	670	1100	55	185	233
8	158	527	446	430	480	540	2190	680	1280	87	210	217
9	130	429	1050	450	500	510	1880	640	1010	114	409	309
10	139	295	1670	480	500	480	1570	560	868	102	676	314
11	145	269	1580	450	450	460	1510	540	559	82	706	286
12	207	286	1320	500	400	450	1360	540	548	80	592	269
13	130	429	1190	600	370	450	1560	540	723	125	544	217
14	110	537	1050	900	340	450	1430	600	1310	327	468	84
15	104	554	949	800	315	480	1400	650	1230	1070	403	149
16	221	522	880	700	295	520	1410	640	1080	1360	347	152
17	327	503	796	600	290	550	1560	593	735	1170	240	244
18	501	479	826	540	280	520	1810	479	558	850	210	203
19	462	435	838	500	280	600	2020	502	473	598	252	133
20	473	414	790	470	280	1100	2450	502	444	468	337	110
21	347	662	646	450	275	2070	2570	435	421	441	367	119
22	356	1310	485	440	270	2610	2250	429	347	479	372	119
23	323	1370	474	430	270	2740	2000	414	324	419	300	149
24	327	1190	463	430	521	2360	1960	372	336	377	158	206
25	318	1050	435	500	1100	2410	2090	248	295	393	182	257
26	291	956	403	800	1790	2490	2090	210	282	332	225	886
27	174	724	390	1250	2000	2380	1870	225	261	199	342	2050
28	174	676	390	1050	1700	1920	1680	337	265	178	221	2860
29	274	593	400	900	---	1800	1430	348	217	286	165	2940
30	309	558	410	800	---	1520	1370	272	136	300	244	2260
31	318	---	420	720	---	1560	---	280	---	282	367	---
TOTAL	7888	16858	23476	18000	16686	37080	58440	17476	16617	10686	9806	17186
MEAN	254	562	757	581	596	1196	1948	564	554	345	316	573
MAX	501	1370	1670	1250	2000	2740	3520	1200	1310	1360	706	2940
MIN	104	171	390	370	270	450	1360	210	136	55	89	84
MEAN†	252	564	758	582	641	1160	1947	564	550	344	314	560
CFSM†	.59	1.32	1.78	1.36	1.50	2.72	4.56	1.32	1.29	.81	.74	1.31
IN.†	.68	1.47	2.05	1.57	1.56	3.14	5.09	1.52	1.44	.93	.85	1.51
CAL YR 1974 TOTAL	253434		MEAN 694	MAX 3020	MIN 25		MEAN† 694	CFSM† 1.63	IN† 22.08			
WTR YR 1975 TOTAL	250199		MEAN 685	MAX 3520	MIN 55		MEAN† 686	CFSM† 1.61	IN† 21.83			

† Adjusted for change in contents in Hopkinton Lake.

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

01085800 WEST BRANCH WARNER RIVER NEAR BRADFORD, N.H.

LOCATION.--Lat 43°15'33", long 72°01'35", Merrimack County, 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 period of no gage-height record, which are fair.

AVERAGE DISCHARGE.--13 years, 10.9 ft³/s (0.309 m³/s) 25.74 in/yr (654 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 555 ft³/s (15.7 m³/s) June 30, 1973 (gage height, 8.30 ft or 2.530 m), from rating curve extended above 130 ft³/s (3.68 m³/s); minimum, about 0.06 ft³/s (0.002 m³/s) about Sept. 20, 1964.

Current year: Peak discharges above base of 110 ft³/s (3.12 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 9	0145	130 3.68	5.96 1.817	Apr. 19	1645	*318 9.01	7.19 2.192
Mar. 20	1415	241 6.83	6.73 2.051	Apr. 25	1645	170 4.81	6.26 1.908

Minimum discharge, 0.29 ft³/s (0.008 m³/s) Aug. 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	1.9	8.4	4.9	6.4	10	13	29	3.9	1.3	.70	2.2
2	4.9	1.9	8.2	4.8	6.0	9.5	13	27	2.7	.96	.66	1.5
3	4.3	1.9	11	4.4	5.6	8.4	17	26	2.0	.82	.70	1.3
4	3.1	2.4	10	4.0	5.2	7.6	26	24	5.8	.70	.74	1.2
5	2.5	3.7	7.2	3.7	4.9	7.2	16	23	3.9	.82	1.0	1.1
6	2.1	5.0	6.0	3.5	4.8	6.8	13	19	43	.78	1.0	.87
7	2.0	5.7	5.4	3.6	4.7	6.4	12	16	21	.82	1.9	.87
8	1.6	4.8	15	3.8	4.5	6.0	11	13	12	.91	6.8	.78
9	1.5	4.2	78	3.9	4.4	5.7	10	11	7.6	1.2	3.5	.96
10	1.5	3.9	27	3.9	4.2	5.5	11	14	5.0	2.1	1.8	.87
11	1.5	3.6	16	5.0	4.1	5.4	13	11	3.6	2.3	1.3	.74
12	1.4	3.6	13	15	4.0	5.4	15	9.0	8.6	2.0	1.0	1.0
13	1.5	8.0	11	12	4.0	5.6	14	15	45	23	.82	1.7
14	1.5	10	9.4	9.7	3.9	5.8	16	13	20	38	.70	1.1
15	1.7	9.4	8.6	7.4	3.8	6.0	21	11	12	22	.62	.91
16	6.6	8.8	7.8	6.2	3.7	6.2	34	9.7	8.8	16	.58	.91
17	14	7.8	9.0	5.4	3.9	6.4	58	8.6	7.2	18	.54	.91
18	7.0	7.0	9.0	5.2	4.3	7.4	74	7.6	5.0	6.6	.51	.91
19	4.7	6.0	8.0	5.6	4.6	10	203	6.4	3.5	3.4	.45	1.3
20	3.9	9.0	7.4	5.0	4.7	149	130	5.4	2.5	2.5	.36	3.4
21	3.3	17	7.2	4.6	4.3	83	73	4.3	2.3	2.2	.34	5.8
22	2.7	29	7.2	4.5	4.3	33	54	3.6	2.0	1.9	.54	3.3
23	2.6	24	7.0	4.3	6.2	26	71	3.3	1.7	1.4	.51	4.7
24	2.5	20	6.8	5.4	19	27	114	2.8	1.3	1.2	.48	7.0
25	2.4	17	6.4	9.0	35	46	125	2.3	1.2	4.6	.58	9.0
26	2.3	15	6.0	26	25	48	74	2.3	.96	2.2	.65	11
27	2.1	13	5.7	12	16	27	42	2.1	.87	1.4	.62	14
28	2.0	12	5.6	9.0	12	26	40	2.2	.82	1.1	.48	17
29	1.9	10	5.4	8.2	---	18	40	1.9	1.6	.96	.48	14
30	1.8	9.0	5.2	7.4	---	17	31	1.6	2.2	.82	15	11
31	1.8	---	5.0	6.8	---	16	---	1.9	---	.74	4.7	---
TOTAL	96.2	274.6	342.9	214.2	213.5	647.3	1384	327.0	238.05	162.73	50.06	121.33
MEAN	3.10	9.15	11.1	6.91	7.63	20.9	46.1	10.5	7.94	5.25	1.61	4.04
MAX	14	29	78	26	35	149	203	29	45	38	15	17
MIN	1.4	1.9	5.0	3.5	3.7	5.4	10	1.6	.82	.70	.34	.74
CFSM	.54	1.59	1.93	1.20	1.33	3.63	8.02	1.83	1.38	.91	.28	.70
IN.	.62	1.78	2.22	1.39	1.38	4.19	8.95	2.12	1.54	1.05	.32	.78
CAL YR 1974	TOTAL	4014.65	MEAN	11.0	MAX	154	MIN	.31	CFSM	1.91	IN	25.97
WTR YR 1975	TOTAL	4071.87	MEAN	11.2	MAX	203	MIN	.34	CFSM	1.95	IN	26.34

NOTE.--No gage-height record Oct. 22 to Dec. 3, Feb. 4-17, May 3-5, and Sept. 25-30.

MERRIMACK RIVER BASIN

01086000 WARNER RIVER AT DAVISVILLE, N.H.

LOCATION.--Lat 43°15'06", long 71°43'54", Merrimack County, 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 current year.
Chemical analyses: Water year 1954 (partial-record station).
Water temperatures: Water year 1954 (partial-record station).

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.

REVISIONS (WATER YEARS).--WSP 1901: 1960.

REMARKS.--Records good. Prior to 1948, slight diurnal fluctuation at low flow caused by mill above station.

AVERAGE DISCHARGE.--36 years, 234 ft³/s (6.627 m³/s), 21.77 in/yr (553 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 4,510 ft³/s (128 m³/s) Mar. 27, 1953 (gage height, 9.88 ft or 3.011 m); minimum, 2.6 ft³/s (0.074 m³/s) Aug. 17, 18, 1965.
Flood of September 1938 reached a stage of 12.8 ft, from information by local residents.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 21	1600	1,320 37.4	6.85 2.088	Apr. 20	1400	*1,590 45.0	*7.16 2.182
Apr. 4	1230	1,340 37.9	6.88 2.097				

Minimum discharge, 14 ft³/s (0.40 m³/s) Aug. 29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	39	150	160	240	456	524	536	56	32	38	92
2	63	39	165	153	220	404	476	500	62	29	32	69
3	68	38	259	132	190	360	496	476	54	36	27	56
4	63	41	255	148	183	319	1140	448	56	37	23	43
5	56	54	215	130	175	289	984	428	66	40	22	36
6	50	94	217	118	170	268	790	400	165	42	22	31
7	45	118	168	128	170	256	672	364	337	39	23	28
8	40	98	175	130	165	240	596	325	310	36	41	25
9	36	86	472	134	155	230	536	298	232	32	69	24
10	33	77	545	153	150	220	484	280	163	32	59	21
11	32	70	460	173	145	210	480	268	124	36	46	19
12	30	66	376	217	140	205	500	247	110	32	37	18
13	29	98	328	253	135	208	516	250	259	65	31	17
14	28	196	304	256	130	223	504	262	360	298	27	17
15	29	185	283	215	130	217	536	241	310	488	23	21
16	35	165	230	195	125	223	596	220	235	364	22	20
17	95	140	240	160	125	220	692	199	188	298	19	16
18	104	124	290	125	128	235	840	180	153	280	18	15
19	86	114	262	140	132	268	1050	165	120	205	16	16
20	73	110	238	130	138	500	1550	148	100	163	18	19
21	66	307	220	125	138	1210	1500	128	83	140	20	36
22	56	548	214	125	134	1020	1240	110	68	114	25	46
23	53	496	202	120	145	830	1010	98	62	87	21	46
24	49	384	196	115	202	780	910	84	50	73	17	60
25	47	325	190	150	436	790	991	71	44	98	21	104
26	46	289	170	313	584	900	964	63	38	94	19	173
27	43	250	160	396	560	765	874	59	32	76	18	420
28	40	215	168	364	504	670	770	62	29	64	16	524
29	38	190	168	331	---	628	676	54	29	56	15	376
30	36	170	173	300	---	576	596	48	35	51	48	256
31	36	---	160	270	---	572	---	47	---	44	116	---
TOTAL	1579	5126	7653	5859	5849	14292	23493	7059	3930	3481	949	2644
MEAN	50.9	171	247	189	209	461	783	228	131	112	30.6	88.1
MAX	104	548	545	396	584	1210	1550	536	360	488	116	524
MIN	28	38	150	115	125	205	476	47	29	29	15	15
CFSM	.35	1.17	1.69	1.29	1.43	3.16	5.36	1.56	.90	.77	.21	.60
IN.	.40	1.31	1.95	1.49	1.49	3.64	5.99	1.80	1.00	.89	.24	.67
CAL YR 1974	TOTAL	86822.9	MEAN 238	MAX 1300	MIN	7.5	CFSM 1.63	IN 22.12				
WTR YR 1975	TOTAL	81914.0	MEAN 224	MAX 1550	MIN	15	CFSM 1.53	IN 20.87				

01087000 BLACKWATER RIVER NEAR WEBSTER, N.H.

LOCATION.--Lat 43°17'45", long 71°41'46", Merrimack County, 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.
Chemical analyses: Water year 1957 (partial-record station).
Water temperatures: Water year 1957 (partial-record station).

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.

REVISIONS (WATER YEARS).--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).

REMARKS.--Records good. High flow regulated by Blackwater Reservoir since 1941 (see p. 59). Some regulation at low flow prior to 1953 by mill above station.

AVERAGE DISCHARGE.--50 years, 211 ft³/s (5.976 m³/s), 22.21 in/yr (564 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 11,000 ft³/s (312 m³/s) Mar. 19, 1936 (gage height, 11.78 ft or 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 or 2.188 m).
Maximum stage since at least 1733, that of Mar. 19, 1936.
Current year: Maximum discharge, 1,690 ft³/s (47.9 m³/s) Apr. 22 (gage height, 6.43 ft or 1.960 m); minimum, 22 ft³/s (0.62 m³/s) Aug. 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	53	121	115	170	305	395	555	69	49	49	116
2	80	49	125	111	153	265	365	557	76	44	47	97
3	76	42	135	97	139	234	425	567	78	41	44	75
4	70	41	147	110	124	210	532	545	80	37	40	62
5	64	46	103	101	117	191	534	513	85	34	38	55
6	58	64	135	94	115	177	445	482	127	32	37	53
7	51	97	122	97	115	168	446	439	245	30	39	51
8	46	117	122	98	115	168	403	385	315	29	47	49
9	42	103	257	99	110	158	372	318	248	28	69	46
10	40	87	408	107	105	155	350	281	189	29	100	43
11	36	76	419	117	105	153	356	259	151	29	94	41
12	33	70	307	136	100	146	384	231	131	31	80	40
13	31	76	241	169	97	148	405	222	190	49	68	41
14	30	115	210	183	95	158	409	234	339	186	58	41
15	31	162	189	170	92	160	424	233	445	412	47	41
16	34	157	167	150	90	156	477	212	365	544	41	39
17	40	134	145	137	88	153	546	194	270	531	37	39
18	90	116	184	117	87	168	654	179	219	486	33	38
19	100	105	181	110	87	183	823	163	183	423	30	39
20	80	102	162	105	87	290	1030	150	157	276	27	45
21	66	181	150	100	87	628	1220	137	136	213	25	57
22	62	378	145	98	88	1040	1520	124	119	181	25	74
23	57	534	137	97	90	1020	1140	113	106	136	23	94
24	54	428	136	96	110	766	817	103	87	105	23	106
25	52	282	131	100	208	674	908	94	69	105	24	131
26	50	229	98	158	299	737	1080	86	60	101	25	170
27	53	190	96	210	343	731	1040	81	54	94	26	289
28	53	171	122	235	337	616	912	76	48	82	26	334
29	50	158	128	216	---	524	751	72	46	70	25	336
30	48	139	123	196	---	453	616	67	52	60	44	341
31	46	---	113	182	---	426	---	65	---	54	84	---
TOTAL	1697	4502	5259	4111	3753	11361	19829	7737	4739	4521	1375	2983
MEAN	54.7	150	170	133	134	366	661	250	158	146	44.4	99.4
MAX	100	534	419	235	343	1040	1520	567	445	544	100	341
MIN	30	41	96	94	87	146	350	65	46	28	23	38
CFSM	.42	1.16	1.32	1.03	1.04	2.84	5.12	1.94	1.22	1.13	.34	.77
IN.	.49	1.30	1.52	1.19	1.08	3.28	5.72	2.23	1.37	1.30	.40	.86
CAL YR 1974 TOTAL	79011.4											
WTR YR 1975 TOTAL	71867.0											
MEAN 216												
MAX 1250												
MIN 1520												
9.6 CFSM												
1.67 IN												
22.78 CFSM												
1.53 IN												
20.72												

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent flow because of regulation.

MERRIMACK RIVER BASIN

01088000 CONTOOCOOK RIVER AT PENACOOK, N.H.

LOCATION.--Lat 43°17'12", long 71°35'56", Merrimack County, on right bank at Penacook, 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--766 mi² (1,984 km²).

PERIOD OF RECORD.--Discharge: October 1928 to current year. Monthly discharge only for October 1928, published in WSP 1301.

Chemical analyses: Water year 1954 (partial-record station).

Water temperatures: Water year 1954 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 273.09 ft (83.238 m) above mean sea level.

REVISIONS (WATER YEARS).--WSP 756: 1933(M), drainage area. WSP 1231: 1929, 1931. WSP 1901: 1960.

REMARKS.--Records good except period of no gage-height record, which are fair. Flow regulated by Nubanusit Lake, Edward MacDowell Reservoir since 1950, Highland Lake, Lake Franklin Pierce, Hopkinton Lake since 1962, Blackwater Reservoir since 1941 (see p. 59), and other reservoirs above station. Diversion from Hopkinton Lake to Everett Lake on Piscataquog River at times during periods of high flow in March 1968 and April 1969.

AVERAGE DISCHARGE.--47 years, 1,250 ft³/s (35.40 m³/s), 22.16 in/yr (563 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 46,800 ft³/s (1,330 m³/s) Mar. 20, 1936 (gage height, 14.26 ft or 4.346 m, from floodmarks); minimum, 18 ft³/s (0.51 m³/s) Sept. 7, 1968; minimum daily, 57 ft³/s (1.61 m³/s) Oct. 12, 1964, Aug. 16, 1965. Maximum discharge since construction of Hopkinton and Everett Dams in 1962, 10,300 ft³/s (292 m³/s) Apr. 25, 1969 (gage height, 6.29 ft or 1.917 m). Stage and discharge of flood of Mar. 20, 1936, are the greatest since at least 1725. Current year: Maximum discharge, not determined; maximum daily, 5,090 ft³/s (144 m³/s) Mar. 22; minimum discharge not determined; minimum daily, 141 ft³/s (3.99 m³/s) July 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	432	406	758	840	1170	2360	1870	1630	413	230	413	459
2	432	413	845	870	1040	1930	1670	1410	350	213	400	459
3	406	326	1530	800	1010	1630	1650	1240	326	185	326	579
4	368	305	1520	760	945	1450	3270	1080	480	175	243	531
5	338	350	1300	690	895	1290	4680	945	539	168	182	459
6	320	439	1220	645	865	1170	4580	865	723	164	332	452
7	310	587	1000	680	855	1100	4110	800	1710	150	280	419
8	300	624	810	720	830	1030	3420	723	2010	141	310	326
9	266	587	1940	745	835	980	2770	1010	1760	175	466	344
10	257	473	2860	805	825	935	2350	1260	1410	189	681	413
11	266	439	2680	805	765	900	2050	1130	960	171	789	400
12	300	419	2190	930	700	875	1900	1050	852	154	690	368
13	280	508	1920	1110	655	880	1850	1040	1080	230	605	344
14	239	633	1710	1460	615	905	1870	1100	1990	531	555	252
15	239	723	1550	1290	585	935	1710	1130	2230	1670	480	178
16	295	701	1390	1140	555	980	1670	1070	1940	2300	419	234
17	426	662	1290	980	550	1010	1760	1010	1460	2170	380	310
18	531	624	1420	855	540	1010	1940	878	1020	1800	257	320
19	555	595	1400	820	545	1150	2340	789	813	1380	266	252
20	547	571	1300	770	550	2060	3030	800	723	1010	310	213
21	480	800	1110	735	545	4260	3600	723	681	839	350	221
22	466	1780	920	725	540	5090	3600	652	605	756	350	270
23	445	2620	885	705	550	5010	3290	633	531	712	320	300
24	432	2180	865	700	910	4260	2730	595	508	579	225	400
25	426	1810	800	820	1900	4230	2650	487	459	571	157	480
26	419	1610	780	1390	2890	4500	2810	406	426	571	185	1010
27	344	1270	700	2020	3170	3990	2710	393	400	466	295	2610
28	305	1160	730	1800	2770	3400	2430	480	368	356	257	3490
29	368	1030	750	1580	---	2770	2140	494	374	400	175	3550
30	393	950	800	1410	---	2340	1870	459	305	459	285	2910
31	406	---	830	1280	---	1990	---	445	---	439	459	---
TOTAL	11591	25595	39803	30880	28645	66420	78320	26727	27446	19354	11442	22553
MEAN	374	853	1284	996	1023	2143	2611	862	915	624	369	752
MAX	555	2620	2860	2020	3170	5090	4680	1630	2230	2300	789	3550
MIN	239	305	700	645	540	875	1650	393	305	141	157	178
CFSM	.49	1.11	1.68	1.30	1.34	2.80	3.41	1.13	1.19	.81	.48	.98
IN.	.56	1.24	1.93	1.50	1.39	3.23	3.80	1.30	1.33	.94	.56	1.10
CAL YR 1974	TOTAL	453676	MEAN	1243	MAX	6100	MIN	50	CFSM	1.62	IN	22.03
WTR YR 1975	TOTAL	388776	MEAN	1065	MAX	5090	MIN	141	CFSM	1.39	IN	18.88

NOTE.--No gage-height record Nov. 23 to Mar. 26. Discharge in cubic feet per second per square mile and run-off in inches may not represent natural flow because of regulation.

MERRIMACK RIVER BASIN

47

01089000 SOUCCOOK RIVER NEAR CONCORD, N.H.

LOCATION.--Lat 43°14'22", long 71°27'44", Merrimack County, 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.

Chemical analyses: Water years 1971-74 (partial-record station).

Water temperatures: Water years 1967-69, 1971-74 (partial-record station).

Sediment records: Water years 1967-74 (partial-record station).

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

REVISIONS (WATER YEARS).--WSP 1331: 1952(M).

REMARKS.--Records good except those for winter period and period of backwater from rocks, which are fair.

AVERAGE DISCHARGE.--24 years, 109 ft³/s (3.087 m³/s), 19.27 in/yr (489 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 2,880 ft³/s (81.6 m³/s) Apr. 6, 1960 (gage height, 13.34 ft or 4.066 m); minimum, 1.5 ft³/s (0.042 m³/s) Aug. 7, 1965.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 21	1600	*1,310 37.1	*10.38 3.164	Apr. 4	1200	1,040 29.5	9.73 2.966

Minimum discharge, 6.5 ft³/s (0.18 m³/s) Aug. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	14	50	71	105	189	265	140	27	28	11	41
2	16	14	65	70	92	165	228	132	30	21	11	33
3	17	14	123	63	82	149	325	134	29	17	11	26
4	18	14	104	66	70	134	960	126	41	14	12	18
5	16	24	77	65	65	122	650	125	48	12	13	14
6	16	50	68	53	70	115	463	115	84	11	13	13
7	14	48	63	59	78	110	413	106	141	10	17	13
8	13	39	73	61	72	132	368	97	91	9.8	25	11
9	12	34	340	67	68	128	328	91	69	9.3	28	11
10	12	29	300	95	62	116	288	85	54	10	22	9.8
11	12	27	197	104	60	109	280	83	43	9.6	17	9.3
12	11	26	161	149	60	101	285	80	42	11	15	9.3
13	12	29	152	159	59	98	280	82	214	22	14	10
14	11	38	137	149	58	97	263	86	255	69	12	10
15	13	37	123	125	57	97	265	79	165	79	11	8.8
16	13	34	108	105	56	100	275	74	119	59	10	8.6
17	49	31	125	80	56	113	285	72	92	43	9.1	8.4
18	41	30	144	65	62	126	285	65	74	34	8.6	8.4
19	28	29	123	70	65	151	325	60	61	25	8.2	8.6
20	23	31	110	75	73	495	418	56	51	23	7.6	9.6
21	19	134	101	70	72	1020	343	51	42	34	6.9	11
22	17	235	100	63	68	689	273	48	35	32	8.4	12
23	16	146	96	59	71	488	228	44	32	24	9.3	12
24	15	109	95	58	97	458	226	40	28	19	9.6	20
25	14	96	100	70	224	488	323	35	22	27	11	29
26	14	88	89	182	330	590	263	32	20	34	11	37
27	14	80	61	214	288	443	218	31	16	23	11	289
28	13	65	74	178	226	365	193	31	15	19	9.6	257
29	14	60	77	140	---	305	172	26	16	18	7.8	141
30	13	55	78	130	---	295	154	24	43	14	26	101
31	14	---	69	115	---	325	---	26	---	12	54	---
TOTAL	530	1660	3583	3030	2746	8313	9642	2276	1999	772.7	440.1	1189.8
MEAN	17.1	55.3	116	97.7	98.1	268	321	73.4	66.6	24.9	14.2	39.7
MAX	49	235	340	214	330	1020	960	140	255	79	54	289
MIN	11	14	50	53	56	97	154	24	15	9.3	6.9	8.4
CFSM	.22	.72	1.51	1.27	1.28	3.49	4.18	.96	.87	.32	.18	.52
IN.	.26	.80	1.74	1.47	1.33	4.03	4.67	1.10	.97	.37	.21	.58

CAL YR 1974 TOTAL 39369.8 MEAN 108 MAX 793 MIN 3.8 CFSM 1.41 IN 19.07
WTR YR 1975 TOTAL 36181.6 MEAN 99.1 MAX 1020 MIN 6.9 CFSM 1.29 IN 17.53

NOTE.--Backwater from rocks July 20 to Aug. 31, Sept. 3-26.

WATER QUALITY RECORDS

MERRIMACK RIVER BASIN

01090100 MERRIMACK RIVER AT HOOKSETT, N.H.

LOCATION.--Lat 43°05'45", long 71°27'49", Merrimack County, on upstream side of railroad bridge at Hooksett.

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

PERIOD OF RECORD.--CHEMICAL ANALYSES: May 1974 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	CHLORO-PHYLL A (UG/L)	CHLORO-PHYLL B (UG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)
OCT.												
21...	1030	60	6.9	6.5	11.6	3800	210	1.50	6.00	.09	.13	.13
NOV.												
05...	0945	66	6.6	8.5	10.6	8100	81600	1.20	.000	.11	.11	.24
DEC.												
16...	1515	51	6.4	1.0	--	2300	1200	--	--	.14	.09	.17
31...	0815	67	6.8	.5	--	13000	1700	1.20	.800	.13	.05	.25
JAN.												
16...	0930	59	6.7	.0	--	3000	830	.800	3.20	.14	.10	.29
30...	1100	80	6.8	1.0	13.3	2600	1300	2.60	1.20	.15	.08	.18
FEB.												
11...	1230	74	6.4	.5	--	3100	1000	.800	.600	.11	.05	.29
27...	1100	69	6.3	.0	12.0	3400	940	.000	.000	.12	.09	.13
MAR.												
13...	1100	78	6.4	1.0	12.4	1800	440	.200	.400	.14	.07	.21
APR.												
01...	1100	58	6.4	3.0	13.2	1600	250	.000	1.20	.18	.04	.07
15...	1145	60	6.3	5.0	9.5	1200	270	.000	.000	.12	.05	.07
MAY												
06...	1130	37	6.1	8.0	8.6	1500	160	.000	.000	.24	.01	.24
22...	1030	52	--	19.0	8.6	9700	720	.000	.000	.24	.03	.26
JUNE												
10...	1100	52	6.0	15.5	9.5	3400	1600	.000	.000	.14	.03	.34
30...	1030	73	6.9	25.0	7.6	83200	1200	3.80	.000	.44	.04	.40
JULY												
14...	1030	78	6.3	25.5	8.0	8800	1600	.000	.000	.18	.08	.57
28...	1100	65	5.5	25.0	8.8	7700	1600	.000	.000	.14	.02	.38
AUG.												
14...	1100	76	6.8	27.0	7.4	4600	380	.000	.000	.15	.04	.33
SEP.												
02...	0900	81	6.9	18.0	5.0	3500	750	.000	.000	.13	.05	.19
16...	1030	76	6.1	18.5	9.3	7600	1500	.000	.000	.17	.02	.23

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	SUSPENDED SOLIDS (MG/L)	TOTAL RESIDUE (MG/L)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (UG/L)	TOTAL CHROMIUM (CR) (UG/L)
OCT.												
21...	.35	.26	.02	1	55	8	2	17	--	1	--	20
NOV.												
05...	.46	.35	.04	4	50	7	2	11	--	0	--	20
DEC.												
16...	.40	.26	.02	1	40	10	2	13	3.8	1	1	7
31...	.43	.30	.03	2	38	7	2	13	--	0	--	<10
JAN.												
16...	.53	.39	.04	4	44	5	2	10	--	0	--	0
30...	.41	.26	.03	6	35	30	2	8	--	0	--	0
FEB.												
11...	.45	.34	.02	14	53	10	2	11	--	0	--	0
27...	.34	.22	.03	14	61	20	4	11	--	0	--	10
MAR.												
13...	.42	.28	.04	4	44	10	3	9	--	--	--	10
APR.												
01...	.29	.11	.02	3	54	11	3	12	--	0	--	10
15...	.24	.12	.02	1	55	7	1	11	--	0	--	10
MAY												
06...	.49	.25	.03	5	36	9	2	17	3.8	0	0	3
22...	.53	.29	.03	4	51	8	1	19	--	0	--	10
JUNE												
10...	.51	.37	.03	9	48	27	1	23	--	0	--	10
30...	.88	.44	.04	2	47	11	1	20	1.6	0	--	4
JULY												
14...	.83	.65	.04	2	59	8	8	22	--	0	--	0
28...	.54	.40	.04	6	52	16	1	34	--	0	--	0
AUG.												
14...	.52	.37	.03	2	55	14	1	21	--	--	--	<10
SEP.												
02...	.37	.24	.03	2	44	3	1	22	--	0	--	10
16...	.42	.25	.04	2	62	1	2	27	--	0	--	<10

B NON-IDEAL COLONY COUNT.

MERRIMACK RIVER BASIN

01090800 PISCATAQUOG RIVER BELOW EVERETT DAM, NEAR EAST WEARE, N.H.

LOCATION.--Lat 43°05'29", long 71°39'36", Hillsborough County, 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.--Discharge: 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. Flow regulated by Everett Lake (see p. 59). Diversion from Hopkinton Lake on Contoocook River to Everett Lake during periods of high flow in the spring of 1968 and 1969. Occasional regulation by small reservoirs above station.

AVERAGE DISCHARGE.--12 years, 90.6 ft³/s (2.566 m³/s), 19.50 in/yr (495 mm/yr), adjusted for storage and diversion.EXTREMES.--Period of record: Maximum discharge, 1,530 ft³/s (43.3 m³/s) May 1, 1969 (gage height, 8.73 ft or 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.
Current year: Maximum discharge, 960 ft³/s (27.2 m³/s) Apr. 7 (gage height, 7.82 ft or 2.384 m); minimum daily, 4.3 ft³/s (0.12 m³/s) Aug. 5, 6.DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	48	40	59	110	244	215	110	13	11	6.5	43
2	19	42	44	57	67	237	187	105	14	9.3	5.8	31
3	15	37	77	52	79	227	212	100	15	8.1	6.2	24
4	13	34	83	53	84	159	69	95	23	7.7	4.6	20
5	13	37	72	50	84	118	397	90	27	6.9	4.3	16
6	12	47	63	45	63	104	611	88	58	5.5	4.3	14
7	11	49	57	49	76	97	808	85	106	5.2	6.9	14
8	10	44	56	50	89	100	640	80	80	4.9	19	13
9	8.8	40	157	53	88	95	459	76	84	4.6	42	11
10	8.1	36	185	61	86	90	228	73	85	6.5	40	11
11	8.1	33	156	69	62	87	215	68	73	13	30	9.3
12	7.3	32	129	90	51	81	224	66	65	10	22	9.0
13	7.2	35	112	109	69	86	223	65	121	14	19	11
14	6.7	39	101	116	57	95	220	63	160	32	15	9.8
15	7.0	38	92	106	45	97	220	61	134	83	13	9.0
16	20	36	83	94	45	90	235	58	100	70	10	8.2
17	110	33	92	83	46	91	250	54	79	45	8.9	8.1
18	99	31	102	85	47	98	260	47	62	30	7.7	7.7
19	127	30	98	81	72	110	270	40	52	22	7.3	7.8
20	105	30	89	76	85	195	300	34	43	19	6.5	10
21	78	74	82	64	66	385	280	28	34	22	5.5	12
22	96	120	79	57	58	468	250	20	28	21	5.8	13
23	81	106	76	58	58	454	210	13	26	17	5.8	13
24	68	86	72	59	68	436	180	12	23	14	5.8	18
25	60	75	71	59	134	400	190	11	21	15	6.2	47
26	74	68	67	61	154	344	170	10	13	15	6.2	82
27	68	59	59	130	161	308	150	10	12	13	6.6	71
28	59	53	62	165	220	262	140	10	12	8.9	6.5	207
29	54	48	61	164	---	248	130	10	12	8.9	6.2	489
30	57	44	60	163	---	225	120	11	12	8.5	31	442
31	54	---	57	160	---	238	---	13	---	7.7	56	---
TOTAL	1381.2	1484	2634	2578	2324	6269	8063	1606	1587	558.7	420.6	1680.9
MEAN	44.6	49.5	85.0	83.2	83.0	202	269	51.8	52.9	18.0	13.6	56.0
MAX	127	120	185	165	220	468	808	110	160	83	56	489
MIN	6.7	30	40	45	45	81	69	10	12	4.6	4.3	7.7
MEAN†	44.8	49.2	85.6	82.3	91.9	196	269	49.5	53.1	18.0	14.8	58.9
CFSM†	.71	.78	1.36	1.30	1.46	3.11	4.26	.78	.84	.28	.23	.93
IN.†	.82	.87	1.56	1.50	1.52	3.58	4.75	.90	.94	.33	.27	1.04
CAL YR 1974 TOTAL	32258.5											
MEAN 88.4												
MAX 433												
MIN 2.8												
WTR YR 1975 TOTAL	30586.4											
MEAN 83.8												
MAX 808												
MIN 4.3												
MEAN† 88.1												
CFSM† 1.40												
IN† 18.96												
MEAN† 84.1												
CFSM† 1.33												
IN† 18.09												

† Adjusted for change in contents in Everett Lake.

NOTE.--No gage-height record Apr. 15 to June 3.

MERRIMACK RIVER BASIN

51

01091000 SOUTH BRANCH PISCATAQUOG RIVER NEAR GOFFSTOWN, N.H.

LOCATION.--Lat 43°00'49", long 71°38'31", Hillsborough County, 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 current year.

Chemical analyses: Water year 1957 (partial-record station).

Water temperatures: Water year 1957 (partial-record station).

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

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Prior to 1954, some regulation at low flow by mill above station.

AVERAGE DISCHARGE.--35 years, 163 ft³/s (4.616 m³/s), 21.28 in/yr (541 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 4,100 ft³/s (116 m³/s) June 25, 1944 (gage height, 9.47 ft or 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.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 21	0300	1,410 39.9	6.69 2.039	Sept. 27	1330	1,250 35.4	6.46 1.969
Apr. 4	0300	*3,000 85.0	*8.50 2.591				

Minimum discharge, 10 ft³/s (0.28 m³/s) Aug. 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	25	95	100	150	270	372	158	38	21	15	61
2	40	25	90	90	140	240	316	149	41	19	13	45
3	35	25	125	80	130	220	833	147	39	18	13	35
4	32	30	150	90	120	200	2240	139	94	17	14	28
5	30	35	130	78	115	180	1040	159	99	16	14	23
6	29	45	120	72	110	170	711	152	274	15	12	21
7	28	70	100	75	110	160	593	138	417	14	22	20
8	27	60	150	80	105	155	507	128	229	14	89	19
9	26	54	250	85	105	145	438	116	160	14	165	17
10	25	48	350	95	97	140	380	105	117	16	86	15
11	24	44	250	110	93	135	374	105	92	17	57	20
12	24	40	210	130	89	130	378	110	88	18	41	18
13	23	70	190	150	85	130	372	131	317	25	33	19
14	23	120	170	160	83	140	343	177	355	65	26	20
15	26	105	160	140	81	130	350	145	216	141	21	18
16	33	95	150	110	80	135	366	126	155	103	18	16
17	45	85	160	90	80	140	377	110	123	64	16	16
18	60	75	180	80	80	150	384	93	102	46	15	16
19	52	70	160	90	94	200	419	83	92	36	14	17
20	45	65	150	84	93	789	462	76	75	30	13	21
21	39	150	135	80	90	1220	359	68	58	43	12	27
22	35	280	125	77	88	762	290	59	49	49	12	23
23	33	240	115	74	100	555	255	55	42	36	11	24
24	31	210	110	72	150	546	255	50	37	29	11	44
25	29	180	105	100	250	608	304	44	34	34	13	187
26	28	160	100	180	350	722	270	41	31	43	14	264
27	27	140	98	230	330	527	235	42	27	32	14	1030
28	26	125	100	215	300	419	213	43	24	27	12	758
29	25	110	105	200	---	377	201	39	24	23	11	339
30	24	100	105	180	---	405	171	36	23	20	88	298
31	24	---	100	160	---	469	---	36	---	19	102	---
TOTAL	996	2881	4538	3557	3698	10569	13808	3060	3472	1064	997	3369
MEAN	32.1	96.0	146	115	132	341	460	98.7	116	34.3	32.2	112
MAX	60	280	350	230	350	1220	2240	177	417	141	165	1030
MIN	23	25	90	72	80	130	171	36	23	14	11	15
CFSM	.31	.92	1.40	1.11	1.27	3.28	4.42	.95	1.12	.33	.31	1.08
IN.	.36	1.03	1.62	1.27	1.32	3.78	4.94	1.09	1.24	.38	.36	1.21
CAL YR 1974	TOTAL	51748.9	MEAN	142	MAX	825	MIN	5.8	CFSM	1.37	IN	18.51
WTR YR 1975	TOTAL	52009.0	MEAN	142	MAX	2240	MIN	11	CFSM	1.37	IN	18.60

NOTE.--No gage-height record Oct. 4-29, Nov. 2 to Dec. 2, Dec. 4 to Jan. 6.

01091500 PISCATAQUOG RIVER NEAR GOFFSTOWN, N.H.

LOCATION.--Lat 43°00'58", long 71°33'03", Hillsborough County, 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 mi² (523 km²).

PERIOD OF RECORD.--Discharge: October 1939 to current year.

Chemical analyses: Water years 1955, 1957 (partial-record station).

Water temperatures: Water year 1957 (partial-record station).

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 (see p. 59) 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 and 1969.

AVERAGE DISCHARGE.--36 years, 303 ft³/s (8.581 m³/s), 20.37 in/yr (517 mm/yr), adjusted for storage and diversion.

EXTREMES.--Period of record: Maximum discharge, 6,840 ft³/s (194 m³/s) Apr. 5, 1960 (gage height, 10.85 ft or 3.307 m); minimum daily, 2.2 ft³/s (0.062 m³/s) Sept. 7, 1962.
Maximum discharge since at least 1733, 21,900 ft³/s (620 m³/s) Sept. 21, 1938 (gage height, 17.52 ft or 5.340 m, from floodmarks), by computation of flow over dam. Flood of Mar. 19, 1936, reached a discharge of 19,900 ft³/s (564 m³/s), by computation of flow over dam.
Current year: Maximum discharge, 4,220 ft³/s (120 m³/s) Apr. 4 (gage height, 9.08 ft or 2.768 m); minimum, 18 ft³/s (0.510 m³/s) Oct. 1-3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	70	123	214	465	765	816	395	70	47	36	127
2	18	69	182	211	400	777	798	383	73	46	34	93
3	19	69	388	183	345	661	942	367	70	44	34	77
4	46	69	346	188	290	540	3090	351	142	42	34	62
5	44	70	249	171	277	450	1590	332	163	41	34	57
6	39	102	209	150	264	400	1460	297	379	39	34	53
7	39	147	184	163	245	378	1430	311	630	36	34	49
8	32	129	236	169	240	366	1430	205	403	34	36	46
9	31	114	799	181	245	365	1090	64	304	34	123	42
10	32	100	718	214	250	360	906	70	256	33	158	38
11	26	92	527	258	255	354	816	70	205	33	111	36
12	27	89	431	305	250	332	810	70	194	33	87	36
13	27	119	376	383	245	322	804	64	491	36	77	32
14	28	142	335	475	235	343	792	53	642	54	69	30
15	52	133	319	430	220	356	780	220	460	144	54	29
16	94	118	278	410	200	352	768	231	339	211	52	29
17	162	107	407	365	185	349	762	208	269	146	48	29
18	261	100	449	305	185	327	750	178	217	113	43	28
19	291	94	506	295	190	387	750	158	186	93	34	28
20	288	101	538	290	237	668	756	140	153	80	34	28
21	259	307	516	265	254	1500	744	125	123	80	34	28
22	179	461	495	245	228	1420	726	115	106	93	33	28
23	121	351	470	225	228	1190	678	104	93	83	32	28
24	85	270	428	210	285	1120	624	93	83	73	32	33
25	63	237	364	224	554	1190	580	83	76	67	32	234
26	60	224	320	322	821	1280	550	77	69	66	32	387
27	108	184	246	445	830	1030	510	73	62	64	32	1160
28	135	184	221	505	780	864	491	79	57	58	32	1000
29	96	163	223	500	---	828	473	70	52	51	32	774
30	70	139	223	505	---	816	431	64	51	46	31	816
31	70	---	217	500	---	822	---	66	---	40	57	---
TOTAL	2822	4554	11323	9306	9203	20912	27147	5116	6418	2060	1545	5437
MEAN	91.0	152	365	300	329	675	905	165	214	66.5	49.8	181
MAX	291	461	799	505	830	1500	3090	395	642	211	158	1160
MIN	18	69	123	150	185	322	431	53	51	33	31	28
MEAN†	91.3	152	366	299	338	668	905	163	214	66.5	51.1	184
CFSM†	.45	.75	1.81	1.48	1.67	3.31	4.48	.81	1.06	.33	.25	.91
IN.†	.52	.84	2.09	1.71	1.74	3.82	5.00	.93	1.18	.38	.29	1.02
CAL YR 1974 TOTAL	107110											
WTR YR 1975 TOTAL	105843											
MEAN 293												
MAX 1340												
MIN 13												
MEAN† 290												
CFSM† 1.45												
IN† 19.71												
MEAN† 290												
CFSM† 1.44												
IN† 19.51												

† Adjusted for change in contents in Everett Lake.

01092000 MERRIMACK RIVER NEAR GOFFS FALLS, BELOW MANCHESTER, N.H.

LOCATION.--Lat 42°56'54", long 71°27'52", Hillsborough County, 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.

Chemical analyses: Water years 1952-53, 1957, 1971 (partial-record station).

Water temperatures: Water years 1952, 1957 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 109.27 ft (33.305 m) above mean sea level.

REVISIONS (WATER YEARS).--WSP 1231: 1937. WSP 1271: 1937(M, m).

REMARKS.--Records excellent except those for period of intermittent gage-height record, which are fair. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Newfound, Winnepesaukee, Winnisquam, and other lakes and reservoirs above station. See page 59 for description and monthend contents of many of these reservoirs.

AVERAGE DISCHARGE.--39 years, 5,212 ft³/s (147.6 m³/s), 22.89 in/yr (581 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 102,500 ft³/s (2,900 m³/s) Sept. 23, 1938 (gage height, 25.87 ft or 7.885 m), from rating curve extended above 48,000 ft³/s (1,360 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.

Maximum discharge since at least 1722, 150,000 ft³/s (4,250 m³/s) Mar. 20, 1936 (gage height, 35.19 ft or 10.726 m, from floodmarks), from rating curve extended above 48,000 ft³/s (1,360 m³/s) by method explained above.

Current year: Peak discharges above base of 22,000 ft³/s (623 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 22	About 1400	*24,100 683	*9.42 2.871				

Minimum daily discharge, 165 ft³/s (4.67 m³/s) Aug. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3570	1710	3040	3870	4540	7730	9600	9550	2380	1510	1440	2180
2	3950	1760	3660	4280	5160	6930	8890	9600	2160	1530	748	1600
3	2970	1780	3820	3970	4310	5860	8940	10600	2460	1370	1220	2080
4	3280	1630	4820	3660	4110	5290	17300	10400	2610	954	1850	2180
5	1460	2190	4780	3560	4000	5040	17300	10500	2880	1250	1240	1820
6	1440	2510	3930	3530	3710	4630	14900	9550	3430	1360	1150	1950
7	1770	3080	3580	3260	4030	4280	13100	8620	5160	1450	1390	1780
8	1520	3510	3690	3430	3630	4170	11700	8260	6290	1420	1590	2160
9	1570	3210	5870	3730	3970	3330	10300	7370	5990	738	1630	1930
10	1820	2670	14100	3810	3580	4570	9140	6710	5070	1070	2400	1750
11	1620	2910	11900	4170	3680	3900	8420	6360	3790	1320	2550	1790
12	2200	1940	9150	4340	3480	3800	8380	5820	3580	1160	2120	1850
13	1330	2400	7150	4930	3430	3700	8500	6320	4060	1840	1960	1860
14	1030	2880	6490	5350	3210	4100	8620	7150	9020	3660	1990	1870
15	1490	3010	5800	5410	3190	4000	8340	7370	11100	6490	1270	1900
16	1690	3360	5360	5040	3050	4200	8460	6600	8070	8040	1420	1430
17	2100	3360	5580	4510	3010	3890	9140	6020	6190	8110	1480	1560
18	2810	2760	4790	4340	3120	3930	10700	5760	5190	6080	1260	2070
19	2790	2820	5220	3330	3140	3610	13200	5130	4280	4830	1160	2080
20	2980	3140	5470	3870	3330	7010	16800	3970	3610	4310	919	1850
21	2620	4170	5040	2700	3510	17500	19900	3680	2910	4840	857	1870
22	2200	7150	4910	3800	3610	22300	18400	3710	2590	2980	1250	2440
23	2350	9470	4060	4100	3240	19300	15700	4110	2190	2890	1060	2850
24	2230	7770	4360	4000	2800	15500	13900	3610	1830	3730	1250	3350
25	2330	6180	4170	3800	5180	14400	14800	3260	2220	2620	1200	3130
26	2070	5550	4140	4400	7930	15600	16100	3240	1950	2420	1060	3420
27	1770	5080	3680	4810	8690	15300	16500	2160	1500	2460	825	6410
28	2060	4810	3310	6050	8460	13600	14500	2120	696	3300	1090	11200
29	1760	4090	3580	6220	---	11100	12500	2060	1430	1430	688	11500
30	1730	3590	3970	5950	---	10400	11000	2010	1480	2210	2400	9480
31	1580	---	4000	5320	---	10100	---	1500	---	1600	1140	---
TOTAL	66090	110490	163420	133540	117100	259070	375030	183120	116116	88972	43607	93340
MEAN	2132	3683	5272	4308	4182	8357	12500	5907	3871	2870	1407	3111
MAX	3950	9470	14100	6220	8690	22300	19900	10600	11100	8110	2550	11500
MIN	1030	1630	3040	2700	2800	3330	8340	1500	696	738	688	1430
CFSM	.69	1.19	1.71	1.39	1.35	2.70	4.04	1.91	1.25	.93	.46	1.01
IN.	.80	1.33	1.97	1.61	1.41	3.12	4.51	2.20	1.40	1.07	.52	1.12
CAL YR 1974 TOTAL	2034304	MEAN	5573	MAX	22300	MIN	695	CFSM	1.80	IN	24.47	
WTR YR 1975 TOTAL	1749895	MEAN	4794	MAX	22300	MIN	688	CFSM	1.55	IN	21.05	

NOTE.--Intermittant gage-height record Mar. 11-25. Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

MERRIMACK RIVER BASIN

01093800 STONY BROOK TRIBUTARY NEAR TEMPLE, N.H.

LOCATION.--Lat 42°51'36", long 71°50'00", Hillsborough County, 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.--Discharge: May 1963 to current year.

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

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair.

AVERAGE DISCHARGE.--12 years, 6.71 ft³/s (0.190 m³/s), 25.31 in/yr (643 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 222 ft³/s (6.29 m³/s) Sept. 27, 1975 (gage height, 6.51 ft or 1.984 m), from rating curve extended above 90 ft³/s (2.55 m³/s); maximum gage height, 7.81 ft (2.380 m) Feb. 3, 1970, Dec. 21, 1973 (backwater from ice); minimum discharge, 0.02 ft³/s (0.001 m³/s) Aug. 21, 1966.

Current year: Peak discharges above base of 110 ft³/s (3.12 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 3	1730	204 5.78	6.39 1.948	Sept. 27	0130	†222 6.29	6.51 1.984

† From rating curve extended above 90 ft³/s (2.55 m³/s).

Minimum discharge, 0.10 ft³/s (0.003 m³/s) July 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.5	5.2	4.4	7.4	13	15	8.7	2.1	.83	.90	3.7
2	1.5	2.3	13	4.5	6.8	12	14	8.4	2.1	.76	.62	2.8
3	1.2	2.2	15	4.0	6.2	11	48	8.1	2.1	.72	.62	2.7
4	1.1	2.6	9.8	3.7	5.8	10	50	7.8	7.3	.69	.76	2.1
5	1.0	6.3	13	4.0	5.4	9.0	25	7.8	4.2	.55	.83	1.7
6	.92	9.2	6.8	3.5	5.0	8.4	20	7.1	23	.48	.76	1.9
7	.88	5.2	6.3	3.4	4.8	7.8	18	6.3	12	.62	5.8	2.5
8	.84	3.8	17	3.4	4.7	7.4	16	6.1	8.1	.62	41	1.9
9	.80	3.3	35	3.8	4.6	7.0	15	5.6	6.1	1.3	18	1.7
10	.76	3.0	16	4.0	4.5	6.6	15	5.1	4.6	2.0	8.1	1.1
11	.74	2.6	12	4.5	4.3	6.4	14	4.9	3.2	1.6	4.8	1.1
12	.72	2.8	10	5.0	4.2	6.0	14	4.9	5.1	1.4	5.6	1.3
13	.72	10	10	6.0	4.0	5.8	14	10	19	3.2	3.5	1.9
14	.71	7.3	9.2	6.8	3.9	5.8	15	11	12	8.1	2.5	1.4
15	.71	5.4	7.8	5.6	3.8	5.4	16	7.6	8.1	8.4	2.0	1.4
16	8.3	4.6	7.0	4.7	3.7	5.2	19	6.8	6.3	6.6	1.7	1.3
17	10	4.0	13	4.0	3.6	5.1	22	5.8	4.8	3.2	1.7	.83
18	4.8	3.6	9.5	3.5	3.6	8.7	24	4.9	4.0	2.4	1.6	.83
19	3.3	3.5	8.1	4.2	4.4	9.5	39	4.6	3.4	1.7	1.3	1.0
20	2.8	5.4	7.0	4.0	4.3	76	29	3.9	2.9	1.6	1.1	1.7
21	2.6	12	6.4	3.8	4.2	44	20	3.5	2.5	9.8	1.0	1.7
22	2.5	10	5.9	3.6	4.2	30	16	3.4	2.2	4.9	.83	1.4
23	2.3	8.9	5.6	3.4	4.5	22	14	3.1	2.0	2.7	.83	1.6
24	2.2	7.5	5.3	3.3	5.6	22	16	2.8	1.7	2.2	1.0	8.4
25	1.9	7.3	5.0	5.4	6.0	30	17	2.7	1.6	5.1	1.5	34
26	1.7	6.5	4.8	7.4	16	30	14	2.5	1.4	3.7	1.6	34
27	1.7	6.1	4.6	11	16	27	12	2.5	1.3	2.4	1.0	80
28	1.7	5.0	4.4	10	15	25	11	2.5	1.1	1.6	.76	27
29	1.7	4.6	4.2	9.4	---	16	10	2.0	1.1	1.4	.69	18
30	1.7	4.2	4.1	8.8	---	22	9.3	1.9	1.0	1.4	15	14
31	2.2	---	4.6	8.0	---	20	---	2.4	---	1.1	7.8	---
TOTAL	66.10	161.7	285.6	161.1	168.5	514.1	581.3	164.7	156.3	83.07	135.20	254.96
MEAN	2.13	5.30	9.21	5.20	6.02	16.6	19.4	5.31	5.21	2.68	4.36	8.50
MAX	10	12	35	11	16	76	50	11	23	9.8	41	80
MIN	.71	2.2	4.1	3.3	3.6	5.1	9.3	1.9	1.0	.48	.62	.83
CFSM	.59	1.50	2.56	1.44	1.67	4.61	5.39	1.48	1.45	.74	1.21	2.36
IN.	.68	1.67	2.95	1.66	1.74	5.31	6.01	1.70	1.61	.86	1.40	2.63
CAL YR 1974	TOTAL	2384.69	MEAN	6.53	MAX	44	MIN	.13	CFSM	1.81	IN	24.63
WTR YR 1975	TOTAL	2732.63	MEAN	7.49	MAX	80	MIN	.48	CFSM	2.08	IN	28.23

NOTE.--No gage-height record Feb. 10 to Mar. 17.

01094000 SOUHEGAN RIVER AT MERRIMACK, N.H.

LOCATION.--Lat 42°51'27", long 71°30'24", Hillsborough County, on left bank at head of Wildcat Falls at Merrimack, 0.4 mi (0.6 km) upstream from bridge on Everett Turnpike, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--171 mi² (443 km²).

PERIOD OF RECORD.--Discharge: July 1909 to current year.

Chemical analyses: Water year 1953, 1971-74 (partial-record station).

Water temperatures: Water years 1967-69, 1971-74 (partial-record station).

Sediment records: Water years 1967-74 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 160.58 ft (48.945 m) above mean sea level (levels by Corps of Engineers). Prior to Apr. 12, 1911, nonrecording gage at site 300 ft (90 m) downstream at datum 0.38 ft (0.116 m) lower. Apr. 12, 1911, to Oct. 14, 1913, nonrecording gage at present site and datum.

REVISIONS (WATER YEARS).--WSP 431: 1909-14. WSP 726: Drainage area. WSP 781: 1924(M). WSP 1231: 1914-15(M), 1917(M), 1919-23(M), 1927-28(M), 1929, 1930-34(M).

REMARKS.--Records good except those for winter period, which are fair. Slight diurnal fluctuation at times caused by mill above station. Diversion to Pennichuck Brook basin for municipal supply of Nashua during periods of low flow from August 1965 to October 1966, July 1969 to November 1971, October 1972, October 1973, July to September 1974, June to August 1975. High flow slightly affected by retarding reservoirs since 1963.

AVERAGE DISCHARGE.--66 years, 283 ft³/s (8.01 m³/s), 22.47 in/yr (571 mm/yr), adjusted for diversion.

EXTREMES.--Period of record: Maximum discharge, 16,900 ft³/s (479 m³/s) Mar. 19, 1936 (gage height, 16.2 ft or 4.94 m), from rating curve extended above 7,300 ft³/s (207 m³/s) on basis of velocity-area studies and computation of flow over dam at gage height 12.78 ft (3.895 m); minimum, 3.8 ft³/s (0.11 m³/s) Aug. 17, Sept. 8, Oct. 1, 1965.

Stage and discharge of the flood of March 19, 1936, are the greatest since 1830.

Current year: Peak discharges above base of 2,250 ft³/s (63.7 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 21	0930	2,260 64.0	6.47 1.972	Apr. 4	1500	*3,140 88.9	*7.39 2.252
Minimum discharge, 23 ft ³ /s (0.65 m ³ /s) Aug. 6, 7.							

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	80	137	220	386	640	762	289	94	53	40	178
2	111	73	171	219	325	530	674	277	99	44	36	127
3	92	63	443	184	282	450	755	273	95	42	32	97
4	81	67	417	203	236	400	2730	272	144	39	32	82
5	71	106	290	183	231	370	2050	280	222	29	33	71
6	61	208	230	157	247	350	1380	268	321	30	24	65
7	59	235	224	167	266	347	1170	249	670	31	36	62
8	62	190	235	191	230	340	1020	232	481	39	128	67
9	54	154	700	200	210	320	895	219	363	25	441	63
10	53	139	800	251	195	315	781	198	279	27	345	56
11	52	127	580	269	190	310	708	195	215	39	229	52
12	53	121	468	397	185	299	657	191	175	41	153	48
13	47	139	411	548	180	326	621	196	353	50	126	50
14	43	208	366	550	180	403	576	431	553	86	102	48
15	51	196	345	400	180	379	544	366	444	151	84	51
16	54	167	313	350	201	336	549	284	348	157	69	48
17	164	154	393	280	194	359	550	235	277	126	64	46
18	214	145	508	260	194	388	553	213	228	94	65	44
19	158	137	450	250	203	441	577	194	202	74	63	43
20	130	143	380	240	234	1070	648	173	168	68	43	47
21	116	228	329	235	240	2090	579	156	139	75	32	54
22	103	434	316	230	217	1460	511	142	120	110	39	58
23	93	372	309	230	237	1140	451	134	103	100	28	61
24	88	303	282	235	371	1090	429	124	98	75	39	82
25	83	266	250	244	1170	1140	458	112	88	67	28	426
26	79	243	230	536	1270	1210	436	98	80	77	39	796
27	73	203	210	669	964	1010	397	98	73	75	31	1500
28	73	168	241	541	764	849	366	99	64	70	41	1750
29	73	160	232	452	---	761	330	92	57	71	28	1040
30	70	150	235	506	---	761	305	83	49	48	83	787
31	69	---	217	457	---	906	---	86	---	50	248	---
TOTAL	2671	5379	10712	9854	9782	20790	22462	6259	6602	2063	2781	7899
MEAN	86.2	179	346	318	349	671	749	202	220	66.5	89.7	263
MAX	214	434	800	669	1270	2090	2730	431	670	157	441	1750
MIN	43	63	137	157	180	299	305	83	49	25	24	43
MEAN†	86.2	179	346	318	349	671	749	202	220	71.9	92.8	263
CFSM†	.50	1.05	2.02	1.86	2.04	3.92	4.38	1.18	1.29	.42	.54	1.54
IN.†	.58	1.17	2.33	2.14	2.13	4.52	4.89	1.36	1.44	.48	.63	1.72
CAL YR 1974 TOTAL	101780	MEAN 279	MAX 1320	MIN 15	MEAN† 280	CFSM† 1.64	IN† 22.20					
WTR YR 1975 TOTAL	107254	MEAN 294	MAX 2730	MIN 24	MEAN† 295	CFSM† 1.73	IN† 23.39					

† Adjusted for diversion to Pennichuck Brook basin for municipal supply of Nashua. Record of diversion furnished by Pennichuck Water Works.

MERRIMACK RIVER BASIN

01096508 MERRIMACK RIVER AT NASHUA, N.H.

LOCATION.--Lat 42°45'48", long 71°26'36", Hillsborough County, on upstream side of Taylor Falls Bridge, Hudson, 50 ft (15 m) from left bank, and at east limits of Nashua.

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

PERIOD OF RECORD.--CHEMICAL ANALYSES: May 1974 to current year.

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	
DATE	TIME												
OCT.													
21...	1230	74	6.8	8.0	10.0	13000	1500	.400	1.60	.11	.22	.21	
NOV.													
05...	1130	83	6.5	10.0	8.6	54000	4400	2.40	.000	.20	.31	.32	
DEC.													
16...	1330	52	6.4	1.5	--	17000	3900	--	--	.16	.12	.29	
31...	0930	74	6.8	.5	--	10000	3100	1.60	1.20	.16	.09	.37	
JAN.													
16...	1330	74	6.6	.0	--	--	1000	.800	2.00	.11	.07	.28	
30...	1400	98	6.6	.0	11.3	2200	1000	2.20	1.40	.17	.09	.35	
FEB.													
11...	0930	96	6.2	2.0	--	2000	1500	.000	.000	.18	.11	.12	
27...	0900	81	6.7	.0	12.6	12000	1700	.000	.000	.17	.10	.25	
MAR.													
13...	0900	85	6.1	4.0	13.0	810000	3000	.600	2.40	.20	.15	.26	
APR.													
01...	0900	64	6.6	2.0	11.1	7400	400	.600	2.00	.18	.06	.15	
15...	0900	67	6.6	5.0	10.1	8100	520	.000	.000	.00	.09	.10	
MAY													
06...	0900	50	6.1	8.0	10.1	812000	900	.000	--	.24	.02	.25	
22...	0900	64	--	17.0	8.9	15000	2900	.800	.000	.28	.06	.29	
JUNE													
10...	0910	64	6.2	14.5	9.0	89200	2300	.000	.000	.18	.08	.45	
30...	0900	91	6.4	24.5	7.6	85200	85600	12.0	.000	.34	.23	.63	
JULY													
14...	0900	91	6.0	25.0	6.9	856000	2200	1.80	.000	.25	.17	.36	
28...	0930	68	6.1	25.0	9.1	810000	2400	.200	.000	.21	.09	.49	
AUG.													
14...	0900	84	6.3	26.0	6.7	8800	840	3.20	.000	.27	.13	.36	
SEP.													
02...	1145	100	6.2	18.0	4.3	1900	480	.000	.000	.24	.17	.32	
16...	0830	86	6.5	16.0	7.6	18000	700	.000	.000	.20	.13	.26	
		TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	SUS- PENDED SOLIDS (MG/L)	TOTAL RESI- DUE (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	OIL AND GREASE (MG/L)	PHENOLS (UG/L)	TOTAL CHROMI- UM (CR) (UG/L)	
DATE													
OCT.													
21...		.54	.43	.05	3	53	10	2	23	--	0	--	10
NOV.													
05...		.83	.63	.09	1	59	10	2	12	--	0	--	20
DEC.													
16...		.57	.41	.04	3	47	20	2	15	4.5	1	2	8
31...		.62	.46	.07	2	45	10	2	11	--	1	--	10
JAN.													
16...		.46	.35	.02	4	49	4	2	11	--	1	--	0
30...		.61	.44	.05	4	44	30	2	13	--	1	--	0
FEB.													
11...		.41	.23	.06	6	60	20	3	13	--	0	--	10
27...		.52	.35	.05	12	60	20	3	14	--	0	--	10
MAR.													
13...		.61	.41	.06	4	45	20	2	9	--	0	--	20
APR.													
01...		.39	.21	.04	5	52	12	3	15	--	0	--	10
15...		.19	.19	.05	5	60	10	2	14	--	0	--	10
MAY													
06...		.51	.27	.04	4	41	12	4	16	5.1	0	0	5
22...		.63	.35	.06	3	59	16	2	15	--	0	--	30
JUNE													
10...		.71	.53	.07	10	67	27	1	28	--	0	--	<10
30...		1.2	.86	.13	3	65	--	1	19	7.6	0	0	5
JULY													
14...		.78	.53	.10	3	69	3	8	21	--	--	--	10
28...		.79	.58	.05	5	41	10	1	22	--	0	--	<10
AUG.													
14...		.76	.49	.05	10	65	9	1	17	--	0	--	10
SEP.													
02...		.73	.49	.08	4	60	3	2	29	--	0	--	10
16...		.59	.39	.08	2	79	2	2	17	--	0	--	10

B NON-IDEAL COLONY COUNT.

MERRIMACK RIVER BASIN

01096508 MERRIMACK RIVER AT NASHUA, N.H.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

DATE	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 10...	<.5	.0	<.5	0	0	0	<80	0	20
APR. 29...	<.5	.0	<.5	0	0	0	10	0	10
JUNE 09...	<.5	.0	<.5	0	0	0	10	0	20
SEP. 09...	--	--	--	--	--	--	10	--	--

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL ALDRIN (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL TOX- APHENE (UG/L)	TOTAL PCB (UG/L)
DEC. 10...	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0	.0
APR. 29...	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0	.0
SEP. 09...	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0	.0

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	SUS- PENDE GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDE GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDE GROSS BETA AS CS-137 (PC/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
NOV. 04...	3.8	3.3	3.5	170	1.9	1.6	1.7	8
DEC. 10...	<.4	2.2	2.8	53	2.6	1.5	1.6	10
JAN. 22...	1.4	2.5	3.1	62	<.4	<.6	<.7	3
FEB. 05...	<.8	2.4	3.0	61	<.4	<.5	<.6	2
MAR. 21...	1.1	2.5	3.2	56	.9	4.6	5.2	19
APR. 29...	<.4	1.8	2.2	--	<.4	<.6	<.6	10
JUNE 09...	1.1	2.1	2.7	52	.6	.7	.8	10
JULY 09...	<1.0	2.4	3.0	66	.5	<.4	.4	6
AUG. 04...	<1.1	2.6	3.3	69	.6	.4	.5	8
SEP. 09...	3.5	1.9	2.3	130	<.4	<.4	<.4	5

Reservoirs in Merrimack River basin

- 01077500 NEWFOUND LAKE on Newfound River, 1.7 mi (2.7 km) north of Bristol, N.H., 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 Public Service Co. of New Hampshire.
- 01078500 FRANKLIN FALLS RESERVOIR on Pemigewasset River, 2 mi (3 km) north of Franklin, N.H., 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.
- 01079000 MERRYMEETING LAKE on Merrymeeting River, 2.5 mi (4.0 km) northeast of Alton, N.H., used for recreation and for storage of water for power, has usable capacity of 368,000,000 ft³ (10,400,000 m³). Records furnished by New Hampshire Fish and Game Department.
- 01079500 LAKE WENTWORTH above Lake Winnepesaukee at Wolfeboro Falls, N.H., used for recreation and for storage of water for power, has usable capacity of 854,000,000 ft³ (24,200,000 m³).
- 01080000 LAKE WINNIPESAUKEE on Winnepesaukee River (see p. 35).
- 01082500 EDWARD MACDOWELL RESERVOIR on Nubanusit Brook, at West Peterborough, N.H., 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, N.H., 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, N.H., 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, N.H., 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.
- 01092500 TOWER HILL POND on Maple Falls Brook, 2.3 mi (3.7 km) north of Auburn, N.H., completed in 1939, used for storage of water for municipal supply and for power, has usable capacity of 182,000,000 ft³ (5,150,000 m³). Records furnished by Manchester Water Works.
- 01093500 MASSABESIC LAKE on Cohas Brook, 2.5 mi (4.0 km) southeast of Manchester, N.H., used for storage of water for municipal supply, has usable capacity of 724,000,000 ft³ (20,500,000 m³). Records furnished by Manchester Water Works.

MONTHEND USABLE CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	Newfound Lake	Franklin Falls Reservoir	Merrymeeting Lake	Lake Wentworth *	Edward MacDowell Reservoir
Sept. 30, 1974.....	1,083	156.8	220	595	13.0
Oct. 31.....	773	115.4	186	480	14.4
Nov. 30.....	1,132	122.0	185	395	14.4
Dec. 31.....	1,094	113.3	198	430	12.2
Jan. 31, 1975.....	1,105	119.8	214	480	20.8
Feb. 28.....	1,092	115.4	225	520	16.7
Mar. 31.....	1,204	162.0	284	755	15.9
Apr. 30.....	1,461	235.2	312	780	4.9
May 31.....	1,354	117.6	325	825	9.4
June 30.....	1,513	111.1	330	800	9.4
July 31.....	1,411	45.3	309	750	5.6
Aug. 31.....	1,263	61.0	287	700	13.0
Sept. 30.....	1,065	145.9	274	690	112.8
	Hopkinton Lake	Blackwater Reservoir	Everett Lake	Tower Hill Pond	Massabesic Lake
Sept. 30, 1974.....	27.9	0.4	48.1	169	298
Oct. 31.....	21.8	0.3	48.7	92	329
Nov. 30.....	26.1	1.0	48.1	47	422
Dec. 31.....	27.0	0.9	49.8	57	545
Jan. 31, 1975.....	30.7	1.4	47.5	58	519
Feb. 28.....	139.5	3.0	69.0	58	683
Mar. 31.....	43.7	3.9	52.6	103	824
Apr. 30.....	41.8	6.1	52.1	130	532
May 31.....	41.3	0.5	45.8	147	436
June 30.....	30.1	0.4	46.4	173	470
July 31.....	28.3	0.3	46.4	174	466
Aug. 31.....	21.8	0.3	49.8	173	403
Sept. 30.....	36.8	3.4	57.2	175	449

* Estimated on basis of monthly observations.

CONNECTICUT RIVER BASIN

01127880 BIG BROOK NEAR PITTSBURG, N.H.

LOCATION---Lat 45°08'06", long 71°12'23", Coos County, 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---Discharge: 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, which are poor.

AVERAGE DISCHARGE---11 years (1964-75), 15.0 ft³/s (0.425 m³/s), 32.03 in/yr (814 mm/yr).

EXTREMES---Period of record: Maximum discharge, 441 ft³/s (12.5 m³/s) May 3, 1967 (gage height, 3.61 ft or 1.100 m), from rating curve extended above 110 ft³/s (3.12 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.

Current year: Peak discharges above base of 180 ft³/s (5.10 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Sept. 27	0600	*184 5.21	*3.29 1.003				

Minimum discharge, about 0.90 ft³/s (0.025 m³/s) about Aug. 20, 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	36	8.5	4.2	2.5	1.8	7.2	66	18	1.9	4.0	7.0
2	5.7	32	9.0	3.7	2.3	1.7	6.6	98	17	2.8	2.7	9.0
3	6.0	19	13	3.5	2.3	1.7	6.2	123	13	5.3	2.0	20
4	5.3	16	10	3.4	2.3	1.6	5.8	107	15	3.1	11	12
5	4.4	14	8.4	3.3	2.2	1.6	6.4	116	14	2.8	8.0	10
6	4.2	13	7.2	3.3	2.1	1.6	6.0	119	22	2.2	6.0	7.0
7	4.2	11	6.7	3.3	2.0	1.6	6.0	103	26	1.9	4.6	5.6
8	3.9	10	14	3.2	1.9	1.6	6.0	84	20	1.7	2.8	5.0
9	3.7	8.9	48	3.2	1.8	1.6	5.0	87	17	10	2.2	7.0
10	3.7	8.2	32	3.2	1.7	1.5	5.3	90	14	6.4	1.8	6.0
11	4.2	7.5	21	3.2	1.6	1.6	5.0	86	11	6.0	1.5	5.0
12	4.4	6.7	17	6.0	1.5	1.6	5.3	79	10	5.6	1.7	14
13	6.4	8.9	14	5.7	1.5	1.7	5.0	90	17	5.2	1.5	60
14	6.0	8.9	12	4.5	1.5	1.6	5.0	63	15	4.6	1.3	35
15	15	14	10	3.8	1.4	1.5	6.7	49	12	8.8	1.2	20
16	18	11	9.5	3.3	1.4	1.4	11	51	11	7.6	1.1	14
17	13	8.9	9.0	3.0	1.3	1.4	17	45	13	4.0	1.0	11
18	12	8.5	8.6	3.0	1.3	1.4	26	32	9.6	3.0	1.0	10
19	8.9	8.5	8.2	3.5	1.3	2.5	73	27	8.8	2.3	1.0	15
20	7.8	8.9	7.5	4.0	1.3	6.0	109	23	9.2	2.0	.90	19
21	6.4	18	6.7	3.5	1.3	43	49	19	6.8	24	.90	15
22	6.0	13	6.7	3.2	1.3	35	39	16	6.0	9.2	5.0	12
23	5.7	10	6.0	3.1	1.6	22	33	13	4.9	6.8	3.5	14
24	5.7	9.4	6.0	2.9	1.5	15	42	11	4.6	5.2	2.5	16
25	4.7	17	5.7	3.2	1.7	12	38	9.2	3.8	4.0	3.5	16
26	5.7	17	5.5	3.7	2.3	18	37	10	3.1	3.5	4.0	27
27	7.1	14	5.4	3.0	2.1	15	33	38	2.8	2.8	25	130
28	8.5	11	5.3	2.6	1.9	13	26	74	2.6	16	10	101
29	4.7	9.5	5.0	2.7	---	11	22	33	2.4	14	6.0	54
30	4.4	8.8	5.0	3.3	---	9.5	31	22	2.2	9.0	20	33
31	22	---	4.4	2.9	---	8.2	---	19	---	6.5	14	---
TOTAL	225.2	387.6	335.3	108.4	48.9	238.7	673.5	1802.2	331.8	188.2	151.70	709.6
MEAN	7.26	12.9	10.8	3.50	1.75	7.70	22.5	58.1	11.1	6.07	4.89	23.7
MAX	22	36	48	6.0	2.5	43	109	123	26	24	25	130
MIN	3.7	6.7	4.4	2.6	1.3	1.4	5.0	9.2	2.2	1.7	.90	5.0
CFSM	1.14	2.03	1.70	.55	.28	1.21	3.54	9.14	1.75	.95	.77	3.73
IN.	1.32	2.27	1.96	.63	.29	1.40	3.94	10.54	1.94	1.10	.89	4.15

CAL YR 1974 TOTAL 6195.40 MEAN 17.0 MAX 262 MIN 1.2 CFSM 2.67 IN 36.23
WTR YR 1975 TOTAL 5201.10 MEAN 14.2 MAX 130 MIN .90 CFSM 2.23 IN 30.42

NOTE---No gage-height record July 10 to Aug. 6, Aug. 10 to Sept. 17.

01128500 CONNECTICUT RIVER AT FIRST CONNECTICUT LAKE, NEAR PITTSBURG, N.H.

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

DRAINAGE AREA.--83.0 mi² (215.0 km²).

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

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.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1001: 1931-39. WSP 1231: 1921-23(M), 1925-26.

REMARKS.--Records good. Flow completely regulated by First Connecticut and Second Connecticut Lakes (see p. 110).

AVERAGE DISCHARGE.--58 years, 196 ft³/s (5.551 m³/s), 32.07 in/yr (815 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 7,200 ft³/s (204 m³/s) June 16, 1943 (gage height, 6.25 ft or 1.905 m), from rating curve extended above 1,900 ft³/s (53.8 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.
Current year: Maximum discharge, 613 ft³/s (17.4 m³/s) Sept. 27 (gage height, 3.13 ft or 0.954 m); minimum daily, 5.6 ft³/s (0.16 m³/s) Apr. 11.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	357	101	151	324	310	539	6.1	7.5	11	16	101	153
2	356	101	151	320	309	528	6.1	8.0	12	17	101	154
3	355	101	151	324	308	517	6.1	8.2	12	18	101	154
4	355	103	217	324	306	510	6.1	8.3	12	47	101	154
5	353	103	312	320	304	496	6.1	8.7	12	58	101	154
6	351	103	312	320	304	525	6.0	8.7	12	58	101	154
7	350	103	312	320	301	539	6.1	8.9	13	29	101	153
8	350	120	310	315	300	525	6.0	9.0	18	18	141	153
9	348	148	149	315	300	511	6.1	9.4	20	18	157	154
10	348	148	45	311	299	381	6.7	9.4	16	18	157	154
11	348	148	45	311	303	220	5.6	9.4	13	18	157	153
12	348	148	45	311	315	217	6.1	10	12	19	157	153
13	348	148	99	311	315	215	5.7	10	13	19	157	154
14	344	148	254	307	313	213	5.8	10	13	19	157	154
15	244	148	312	307	312	213	6.1	10	13	20	156	154
16	99	148	312	305	311	211	6.1	11	14	19	156	154
17	99	148	312	305	309	210	6.1	11	15	20	155	154
18	99	148	312	304	308	208	6.1	11	15	20	154	311
19	99	148	312	303	307	206	7.0	11	16	20	154	432
20	99	148	312	302	305	540	6.9	11	16	20	154	429
21	99	148	310	301	305	599	6.7	11	16	22	154	428
22	99	151	308	299	303	520	6.7	11	17	24	154	427
23	99	151	449	299	300	430	6.7	11	17	25	154	426
24	99	151	524	296	299	360	6.7	11	17	20	154	423
25	99	151	522	295	298	208	6.7	11	17	75	154	423
26	99	151	522	294	310	6.1	6.9	11	17	101	152	489
27	99	151	517	304	319	6.1	7.3	12	17	101	153	613
28	99	151	512	316	439	6.0	7.3	12	17	101	154	541
29	99	151	507	313	-----	6.1	7.3	12	17	101	154	422
30	99	151	414	313	-----	6.1	7.3	12	16	101	154	521
31	101	-----	324	312	-----	6.1	-----	11	-----	101	153	-----
TOTAL	6,741	4,118	9,334	9,601	8,712	9,677.5	192.5	315.5	446	1,263	4,409	8,498
MEAN	217	137	301	310	311	312	6.42	10.2	14.9	40.7	142	283
MAX	357	151	524	324	439	599	7.3	12	20	101	157	613
MIN	99	101	45	294	298	6.0	5.6	7.5	11	16	101	153
MEAN†	91.8	198	159	59.5	41.5	72.2	268	765	153	82.3	76.4	259
CFSM†	1.11	2.39	1.92	.72	.50	.87	3.23	9.22	1.84	.99	.92	3.12
IN.†	1.28	2.66	2.21	.83	.52	1.00	3.60	10.62	2.05	1.14	1.06	3.48
CAL YR 1974	TOTAL 99,371.8	MEAN 272	MAX 990	MIN 6.7	MEAN† 236	CFSM† 2.84	IN† 38.59					
WTR YR 1975	TOTAL 63,307.5	MEAN 173	MAX 613	MIN 5.6	MEAN† 186	CFSM† 2.24	IN† 30.45					

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes.

CONNECTICUT RIVER BASIN

01129200 CONNECTICUT RIVER BELOW INDIAN STREAM, NEAR PITTSBURG, N.H.

LOCATION.--Lat 45°02'25", long 71°26'37", Coos County, 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 (kilometre 605.8).

DRAINAGE AREA.--254 mi² (658 km²).

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

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

REVISIONS.--WRD Mass., N.H., R.I., Vt., 1973: 1958, 1960(M), 1969(M).

REMARKS.--Records excellent. Flow regulated by First Connecticut and Second Connecticut Lakes and Lake Francis 3.7 mi (6.0 km) upstream (see p. 110).

AVERAGE DISCHARGE.--19 years, 564 ft³/s (15.97 m³/s) 30.15 in/yr (766 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 4,080 ft³/s or 116 m³/s Nov. 29, 1959 (gage height, 7.07 ft or 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.

Current year: Maximum discharge, 1,930 ft³/s (54.7 m³/s) Apr. 20 (gage height, 4.93 ft or 1.503 m); minimum daily, 31 ft³/s (0.88 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	621	715	450	1050	699	1020	285	733	253	46	54	90
2	587	774	429	1040	720	1030	275	1220	246	54	49	77
3	589	585	466	1050	732	1030	275	1340	190	61	52	175
4	581	529	554	1080	739	1030	325	1270	176	51	63	178
5	567	494	681	1070	741	1020	300	1210	167	51	72	125
6	560	470	689	1060	746	1030	265	1090	213	48	64	90
7	592	453	688	801	853	1030	240	1050	315	45	55	79
8	656	439	720	642	937	1030	225	795	253	46	51	70
9	655	427	870	502	935	1020	216	752	210	52	47	176
10	663	417	588	358	937	1020	214	712	170	61	45	276
11	666	412	387	360	942	1030	395	668	140	64	44	257
12	669	405	325	388	945	1030	572	596	119	64	44	298
13	716	352	398	441	952	1020	571	585	171	58	43	497
14	724	324	651	560	952	856	561	470	182	231	41	484
15	734	384	713	675	957	543	471	376	138	596	38	438
16	788	386	709	663	962	538	296	381	124	650	35	342
17	302	352	719	668	976	532	275	463	131	572	35	311
18	269	342	719	668	988	418	436	307	115	446	36	441
19	238	349	702	660	995	332	1050	253	100	148	35	610
20	220	361	702	655	989	362	1770	229	108	142	34	690
21	206	607	685	656	995	511	899	199	94	479	31	646
22	327	529	690	684	1000	607	511	173	81	396	33	622
23	419	424	931	698	999	651	480	163	74	128	32	620
24	414	397	1100	729	993	634	670	141	66	90	32	664
25	404	576	1090	658	975	550	712	113	63	80	34	684
26	404	601	1070	632	987	482	647	102	56	72	34	716
27	425	527	1080	649	1000	410	551	325	54	66	357	1310
28	414	483	1100	709	1010	375	435	974	54	61	174	940
29	409	468	1100	765	---	350	363	442	51	59	86	913
30	404	471	1070	788	---	338	436	277	49	58	112	1180
31	494	---	1050	716	---	317	---	247	---	54	143	---
TOTAL	15717	14053	23126	22075	25656	22146	14721	17656	4163	5029	2005	13999
MEAN	507	468	746	712	916	714	491	570	139	162	64.7	467
MAX	788	774	1100	1080	1010	1030	1770	1340	315	650	357	1310
MIN	206	324	325	358	699	317	214	102	49	45	31	70
MEAN†	287	545	447	201	163	350	974	1891	380	199	143	643
CFSM†	1.13	2.15	1.76	.79	.64	1.38	3.83	7.44	1.50	.78	.56	2.53
IN.†	1.30	2.39	2.03	.91	.67	1.59	4.28	8.59	1.67	.90	.65	2.82
CAL YR 1974	TOTAL	276932	MEAN 759	MAX 3250	MIN 120	MEAN† 702	CFSM† 2.76	IN† 37.51				
WTR YR 1975	TOTAL	180346	MEAN 494	MAX 1770	MIN 31	MEAN† 520	CFSM† 2.05	IN† 27.81				

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

CONNECTICUT RIVER BASIN

63

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.

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

AVERAGE DISCHARGE.--27 years, 169 ft³/s (4.786 m³/s), 27.00 in/yr (686 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 4,500 ft³/s (127 m³/s) June 30, 1973 (gage height, 13.07 ft or 3.984 m); minimum daily, 4 ft³/s (0.11 m³/s) Sept. 10, 1960.

Flood in June 1943 reached a discharge of 21,000 ft³/s (595 m³/s), by slope-area method at site 0.5 mi (0.8 km) downstream.

Current year: Maximum discharge, 3,300 ft³/s (93.5 m³/s) Apr. 19 (gage height, 11.35 ft or 3.459 m); minimum daily, 6.2 ft³/s (0.18 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	448	116	50	52	34	229	783	160	17	15	47
2	72	398	107	43	50	31	232	949	151	15	14	38
3	87	212	121	39	48	29	197	965	111	18	12	103
4	73	176	102	50	48	34	198	763	103	17	18	83
5	59	151	109	49	50	36	191	693	95	18	22	56
6	50	124	98	65	54	35	182	566	163	16	18	40
7	44	108	82	41	52	30	174	518	286	15	15	39
8	40	95	242	35	51	28	167	412	204	16	16	33
9	38	84	815	34	49	29	159	323	133	19	16	71
10	35	74	392	33	49	32	158	272	101	28	14	62
11	39	70	253	40	46	30	164	229	75	27	13	38
12	39	65	198	241	44	29	167	193	68	33	14	125
13	100	89	170	188	41	28	180	209	198	27	13	177
14	74	129	147	112	37	27	177	177	161	25	10	271
15	148	200	99	75	36	25	233	139	93	135	9.9	152
16	187	155	96	63	35	26	378	180	75	107	9.0	86
17	115	120	97	55	34	26	609	222	113	50	9.2	70
18	103	121	95	53	29	28	892	144	73	33	8.4	67
19	88	149	86	52	23	32	2110	116	61	27	7.1	108
20	88	162	75	55	20	288	1900	101	80	24	6.4	197
21	118	551	74	56	16	654	812	92	60	127	6.2	120
22	80	300	74	56	17	439	489	81	46	126	6.8	94
23	73	199	71	54	17	377	594	82	39	53	7.1	110
24	50	183	72	52	21	300	782	74	34	35	6.7	137
25	47	526	64	48	32	365	766	63	29	29	7.2	143
26	50	297	53	45	37	585	595	59	28	29	12	187
27	76	183	53	44	36	442	487	342	26	21	294	1330
28	64	172	54	44	36	389	386	742	24	21	77	753
29	56	150	54	42	---	330	326	267	23	20	42	453
30	52	137	53	44	---	303	534	174	20	19	97	270
31	236	---	47	53	---	254	---	184	---	18	86	---
TOTAL	2481	5828	4169	1911	1050	5295	14468	10114	2833	1165	902.0	5460
MEAN	80.0	194	134	61.6	37.9	171	482	326	94.4	37.6	29.1	182
MAX	236	551	815	241	54	654	2110	965	286	135	294	1330
MIN	35	65	47	33	16	25	158	59	20	15	6.2	33
CFSM	.94	2.28	1.58	.72	.45	2.01	5.67	3.84	1.11	.44	.34	2.14
IN.	1.09	2.55	1.82	.84	.46	2.32	6.33	4.43	1.24	.51	.39	2.39
CAL YR 1974	TOTAL	78819.0	MEAN	216	MAX	2900	MIN	15	CFSM	2.54	IN	34.49
WTR YR 1975	TOTAL	55686.0	MEAN	153	MAX	2110	MIN	6.2	CFSM	1.80	IN	24.37

CONNECTICUT RIVER BASIN

01129500 CONNECTICUT RIVER AT NORTH STRATFORD, N.H.

LOCATION.--Lat 44°44'56", long 71°37'50", Coos County, 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.

Chemical analyses: Water year 1957 (partial-record station).

Water temperatures: Water year 1957 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 880.17 ft (268.276 m) above mean sea level.

REVISIONS (WATER YEARS).--WSP 781: 1934(M). WSP 891: Drainage area.

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 (see p. 110) 36 miles (58 km) upstream.

AVERAGE DISCHARGE.--45 years, 1,570 ft³/s (44.46 m³/s), 26.68 in/yr (678 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 28,700 ft³/s (813 m³/s) June 16, 1943 (gage height, 14.67 ft or 4.471 m) from rating curve extended above 15,000 ft³/s (425 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.

Current year: Maximum discharge, 11,300 ft³/s (320 m³/s) Apr. 20 (gage height, 9.27 ft or 2.825 m); minimum daily, 111 ft³/s (3.14 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1450	1150	1130	1400	900	1450	1050	4350	1350	214	262	465		
2	1100	1840	1090	1350	900	1450	981	6140	1320	198	232	363		
3	1070	1780	1330	1300	880	1350	958	6540	1050	272	325	500		
4	1060	1390	1140	1500	830	1200	846	6640	945	293	675	651		
5	959	1270	1080	1400	860	1250	892	6050	924	245	477	512		
6	880	1240	1500	1200	910	1250	820	5590	1080	228	353	421		
7	828	1160	1440	1350	1050	1250	783	5080	1980	201	293	380		
8	853	1050	1570	1050	1100	1250	749	4430	1610	185	296	337		
9	862	956	4760	1000	1100	1200	719	3770	1300	358	255	262		
10	863	886	3540	798	1100	1200	699	3370	980	877	216	432		
11	870	837	2160	708	1050	1200	714	3110	759	527	192	450		
12	886	802	1640	1100	1050	1250	992	2810	697	667	198	883		
13	906	787	1390	1300	1050	1250	1110	2780	1170	457	207	1720		
14	1030	904	1430	1150	1050	1100	1090	2520	1460	425	176	1420		
15	1130	1060	1400	1050	1050	900	1240	2010	1050	903	157	1360		
16	1780	1320	1320	1000	1100	826	1500	1960	807	1460	145	924		
17	1470	1260	1480	1050	1150	858	1880	2280	888	986	136	728		
18	1050	1110	1430	900	1200	818	3020	1740	744	802	133	665		
19	855	1050	1340	860	1200	727	6030	1420	608	573	123	979		
20	711	1060	1280	900	1200	1100	10800	1310	557	349	114	1790		
21	625	1880	1240	900	1200	2670	8030	1130	523	1150	111	1480		
22	548	2320	1220	860	1150	2460	4240	971	453	1790	136	1190		
23	650	1580	1220	900	1200	2290	3530	965	405	897	162	1100		
24	743	1370	1580	1000	1250	2010	4710	896	363	536	148	1240		
25	711	2250	1580	840	1350	1950	5010	744	320	556	155	1400		
26	722	2260	1410	880	1400	2620	4470	653	244	410	172	1580		
27	757	1560	1250	900	1500	1910	3870	2670	248	340	744	7810		
28	754	1290	1500	940	1500	1660	3120	5700	260	313	897	6070		
29	722	1320	1450	960	---	1530	2460	3020	245	583	450	3870		
30	708	1250	1400	1000	---	1420	2820	1750	236	394	465	2760		
31	731	---	1400	920	---	1200	---	1510	---	305	743	---		
TOTAL	28284	39992	48700	32466	31280	44599	79133	93909	24576	17494	9148	43742		
MEAN	912	1333	1571	1047	1117	1439	2638	3029	819	564	295	1458		
MAX	1780	2320	4760	1500	1500	2670	10800	6640	1980	1790	897	7810		
MIN	548	787	1080	708	830	727	699	653	236	185	111	262		
MEAN†	692	1410	1272	536	364	1074	3121	4351	1060	601	373	1634		
CFSM†	.87	1.76	1.59	.67	.46	1.34	3.91	5.45	1.33	.75	.47	2.05		
IN.†	1.00	1.97	1.84	.77	.47	1.55	4.36	6.28	1.48	.87	.54	2.28		
CAL YR 1974	TOTAL	726848	MEAN	1991	MAX	17500	MIN	307	MEAN†	1934	CFSM†	2.42	IN†	32.87
WTR YR 1975	TOTAL	493323	MEAN	1352	MAX	10800	MIN	111	MEAN†	1378	CFSM†	1.72	IN†	23.41

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

CONNECTICUT RIVER BASIN

65

01150000 UPPER AMMONOOSUC RIVER NEAR GROVETON, N.H.

LOCATION.--Lat 44°37'30", long 71°28'10", Coos County, 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 mi² (601 km²).

PERIOD OF RECORD.--Discharge: August 1940 to current year.

Chemical analyses: Water year 1955 (partial-record station).

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

REMARKS.--Records good except those for winter period, which are fair. Prior to May 21, 1969, some regulation by pond 9 mi (14 km) upstream on Nash Stream. Small diversion above station for municipal supply of Berlin.

AVERAGE DISCHARGE.--35 years, 476 ft³/s (13.48 m³/s), 27.86 in/yr (708 mm/yr), adjusted for diversion.

EXTREMES.--Period of record: Maximum discharge, 24,100 ft³/s (683 m³/s) May 20, 1969 (gage height, 12.01 ft or 3.661 m in gage well, 12.85 ft or 3.917 m, from floodmarks), from rating curve extended above 5,600 ft³/s (159 m³/s) on basis of contracted-opening measurement of peak flow, caused by failure of dam on Nash Stream; minimum, 32 ft³/s (0.91 m³/s) Sept. 14, 1948.

Flood in March 1936 reached a stage of about 10.6 ft (3.23 m), from information by local residents.

Current year: Peak discharges above base of 2,900 ft³/s (82.1 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	1415	*3,320 94.0	*6.00 1.829	May 4	2115	2,900 82.1	5.74 1.750

Minimum discharge, 57 ft³/s (1.61 m³/s) Aug. 20-22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	387	170	310	220	190	190	300	1650	537	133	82	104
2	279	170	300	210	175	180	280	2160	571	123	77	88
3	279	170	370	205	165	170	270	2490	469	139	77	129
4	258	180	350	205	155	160	271	2650	423	145	90	133
5	220	250	310	200	150	155	287	2640	438	139	95	104
6	200	400	280	200	155	155	282	2640	596	123	90	88
7	190	350	270	200	155	160	261	2530	1100	114	86	93
8	185	280	800	195	150	155	247	2230	846	109	88	93
9	150	240	1300	195	145	140	243	2030	622	133	88	114
10	142	220	1000	190	140	145	243	1950	503	216	82	126
11	135	210	720	200	135	155	243	1990	423	175	73	109
12	135	200	545	293	130	145	261	1990	379	172	71	208
13	135	258	460	304	130	150	265	2060	445	172	75	379
14	131	379	408	298	130	160	265	1860	537	353	75	238
15	265	414	350	240	125	150	315	1570	423	304	67	165
16	540	405	310	210	125	150	415	1530	359	282	64	129
17	449	337	380	180	125	155	648	1500	340	212	62	109
18	449	307	400	170	120	160	940	1130	304	172	62	104
19	396	293	379	210	120	168	2000	990	265	145	61	130
20	322	293	340	250	120	265	3190	920	247	129	59	445
21	279	558	309	210	120	783	2470	837	225	158	57	346
22	240	641	293	205	120	864	1530	729	197	209	66	225
23	225	475	282	200	120	729	1340	648	182	179	75	175
24	210	423	276	215	140	605	1690	579	168	148	71	186
25	200	590	276	230	190	562	1660	494	158	201	71	190
26	195	540	240	220	250	801	1610	445	142	179	73	212
27	190	440	230	210	260	650	1490	920	136	142	90	792
28	180	380	270	200	220	540	1210	1730	129	129	98	765
29	175	350	250	210	---	430	1000	1010	129	123	82	537
30	170	330	240	230	---	350	1120	630	145	95	98	385
31	170	---	230	210	---	320	---	545	---	84	126	---
TOTAL	7481	10253	12478	6715	4260	9902	26346	47077	11438	5137	2431	6901
MEAN	241	342	403	217	152	319	878	1519	381	166	78.4	230
MAX	540	641	1300	304	260	864	3190	2650	1100	353	126	792
MIN	131	170	230	170	120	140	243	445	129	84	57	88
MEAN†	244	344	405	219	155	322	881	1522	384	169	81.7	233
CFSM†	1.05	1.48	1.75	.94	.67	1.39	3.80	6.56	1.66	.73	.35	1.00
IN.†	1.21	1.66	2.01	1.09	.70	1.60	4.24	7.56	1.85	.84	.41	1.12
CAL YR 1974 TOTAL	207553			MEAN 569	MAX 5000	MIN 60		MEAN† 571	CFSM† 2.46	IN† 33.43		
WTR YR 1975 TOTAL	150419			MEAN 412	MAX 3190	MIN 57		MEAN† 415	CFSM† 1.79	IN† 24.28		

† Adjusted for diversion for municipal supply of Berlin. Records of diversion furnished by city of Berlin.

CONNECTICUT RIVER BASIN

01131500 CONNECTICUT RIVER NEAR DALTON, N.H.

LOCATION.--Lat 44°24'36", long 71°43'16", Coos County, 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.
Chemical analyses: Water years 1953, 1971 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 799.89 ft (243.806 m) above mean sea level. 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.

REVISIONS (WATER YEARS).--WSP 891: Drainage area. WSP 1231: 1935. WSP 1301: 1928-35(M).

REMARKS.--Records good. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis (see p. 110), and other reservoirs. These reservoirs have a combined usable capacity of about 8,300,000,000 ft³ (240,000,000 m³).

AVERAGE DISCHARGE.--48 years, 2,868 ft³/s (81.22 m³/s), 25.72 in/yr (653 mm/yr), adjusted to drainage area at present site and for storage.

EXTREMES.--Period of record: Maximum discharge, 48,300 ft³/s (1,370 m³/s) Mar. 20, 1936 (gage height, 25.6 ft or 7.80 m); minimum daily, 115 ft³/s (3.26 m³/s) Oct. 3, 1937.
Current year: Maximum discharge, 16,200 ft³/s (459 m³/s) Apr. 21 (gage height, 16.45 ft or 5.014 m); minimum daily, 136 ft³/s (3.85 m³/s) June 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3360	1060	2120	2110	1350	2270	2330	6620	2850	304	588	1100
2	2430	1900	1910	2050	1200	2170	2100	8820	2840	465	510	819
3	2190	2360	2140	2100	1250	1950	2020	10700	2490	510	497	770
4	2080	2110	2400	1400	1050	1650	1570	11400	2180	575	666	882
5	2210	2170	1970	2080	1100	1700	1830	11500	2100	595	903	1080
6	1690	2010	1870	1800	1220	1700	1870	11000	2180	510	705	903
7	1510	2260	2090	1620	1330	1700	1780	10400	3660	491	757	784
8	1430	2190	2170	1910	1370	1800	1640	9420	4200	420	679	725
9	1370	2120	4480	1750	1480	1770	1570	8300	3310	426	660	812
10	1350	1790	7120	1860	1450	1670	1490	7440	2600	1100	582	784
11	1340	1220	6070	1300	1450	1630	1480	6960	2100	1290	458	770
12	1340	1070	4280	1280	1400	1710	1540	6690	1890	1160	420	896
13	1340	1380	3430	2410	1350	1700	1820	6590	1880	1180	458	1480
14	1420	1640	3030	2340	1350	1700	1940	6520	2670	1450	471	1860
15	1620	2140	2740	1820	1300	1690	2120	5700	2750	1310	452	1910
16	2630	2680	2420	1400	1450	1530	2710	4980	2220	1790	452	1770
17	3130	2450	2210	1450	1540	1420	3570	5140	1850	2010	445	1650
18	2630	2100	2380	1200	1610	1380	5300	4720	1740	1580	491	1440
19	2220	1960	2390	1150	1600	1390	8750	3900	1470	1220	653	1100
20	1850	1970	2300	1350	1600	1480	14400	3390	1340	896	513	1520
21	1580	2990	2190	1350	1600	3370	15800	3150	1080	777	287	2420
22	1400	4740	2170	1150	1520	4670	13500	2780	1020	1870	238	2200
23	1290	3540	2110	1200	1690	4610	8940	2430	924	2150	394	1830
24	1310	2860	2080	1790	1850	4240	8280	2300	868	1590	371	1690
25	1290	3230	2290	1130	2030	3980	9380	2000	854	1270	203	1750
26	1220	4670	2100	1300	2150	4600	9300	1730	847	1030	441	1900
27	1380	3360	1510	1400	2450	4510	8540	1650	784	833	401	4540
28	1350	2390	2100	1350	2440	3540	7390	5970	575	666	980	8960
29	1360	2270	2320	1300	---	3300	6050	7010	222	525	1070	7420
30	1190	2290	2250	1400	---	3020	5490	4520	136	980	847	5170
31	1260	---	2200	1300	---	2730	---	3160	---	660	882	---
TOTAL	53770	70920	82840	49050	43180	76580	154500	186890	55630	31633	17474	60935
MEAN	1735	2364	2672	1582	1542	2470	5150	6029	1854	1020	564	2031
MAX	3360	4740	7120	2410	2450	4670	15800	11500	4200	2150	1070	8960
MIN	1190	1060	1510	1130	1050	1380	1480	1650	136	304	203	725
MEAN†	1514	2440	2373	1071	789	2106	5633	7350	2096	1057	642	2207
CFSM†	1.00	1.61	1.57	.71	.52	1.39	3.72	4.85	1.38	.70	.42	1.46
IN.†	1.15	1.80	1.81	.82	.54	1.60	4.15	5.60	1.54	.81	.49	1.63

CAL YR 1974 TOTAL 1292946 MEAN 3542 MAX 25800 MIN 484 MEAN† 3485 CFSM† 2.30 IN† 31.26
WTR YR 1975 TOTAL 883402 MEAN 2420 MAX 15800 MIN 136 MEAN† 2446 CFSM† 1.62 IN† 21.94

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes and Lake Francis.

01133000 EAST BRANCH PASSUMPSIC RIVER NEAR EAST HAVEN, VT.

LOCATION.--Lat 44°38'02", long 71°53'53", Caledonia County, 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.

Chemical analyses: Water year 1957 (partial-record station).
Water temperatures: Water year 1957 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 945.88 ft (288.304 m) above mean sea level (levels by Corps of Engineers).

REVISIONS.--WSP 1141: Drainage area.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--33 years, 104 ft³/s (2.945 m³/s), 26.25 in/yr (667 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 4,450 ft³/s (126 m³/s) June 30, 1973 (gage height, 9.45 ft or 2.880 m, from floodmarks in gage well), from rating curve extended above 1,300 ft³/s (36.8 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.
Flood in November 1927 reached a stage of about 12.6 ft (3.84 m), from information by local resident.

Current year: Peak discharges above base of 800 ft³/s (22.7 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Sept. 27	-	†900 25.5	- -				

† About.

Minimum discharge, 13 ft³/s (0.37 m³/s) Aug. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	47	52	45	40	64	63	382	122	30	30	35
2	85	44	54	43	36	57	69	392	131	27	27	31
3	70	44	70	40	33	52	61	443	100	31	28	49
4	59	44	57	49	30	47	63	408	94	32	40	40
5	51	80	40	48	29	42	55	397	102	30	44	33
6	44	78	48	44	30	40	55	379	108	27	29	29
7	42	64	52	45	31	42	54	347	191	26	27	33
8	42	55	70	47	31	43	50	302	168	24	29	31
9	42	49	270	46	30	39	44	273	121	94	26	35
10	42	45	220	48	32	36	35	252	98	99	23	31
11	38	43	140	50	29	40	34	234	83	113	20	25
12	35	41	100	96	31	38	41	215	77	105	20	56
13	35	71	90	92	31	37	48	202	183	61	20	108
14	38	102	80	76	29	35	49	183	202	61	20	85
15	92	137	72	58	28	33	68	159	128	124	17	65
16	120	107	56	47	28	33	102	183	103	98	17	49
17	92	83	72	48	29	34	150	183	109	59	15	43
18	87	72	72	46	30	36	213	149	91	44	15	38
19	72	71	67	46	30	39	344	131	81	37	15	50
20	60	75	62	53	29	183	429	122	76	33	15	130
21	54	240	60	50	29	309	349	108	70	144	13	105
22	49	200	60	47	29	200	226	99	61	94	20	79
23	46	130	60	45	29	131	258	93	55	56	24	66
24	44	100	56	38	33	94	390	84	50	45	17	58
25	42	130	50	38	50	95	405	75	42	92	22	55
26	43	135	44	43	100	137	328	71	39	55	36	100
27	41	90	42	50	90	110	286	105	36	39	86	600
28	38	76	64	45	76	94	240	113	34	35	48	400
29	36	72	48	41	---	79	209	128	34	66	35	220
30	36	65	52	48	---	74	286	100	33	44	65	130
31	38	---	49	50	---	66	---	116	---	35	53	---
TOTAL	1723	2590	2329	1562	1052	2359	5004	6428	2822	1860	896	2809
MEAN	55.6	86.3	75.1	50.4	37.6	76.1	167	207	94.1	60.0	28.9	93.6
MAX	120	240	270	96	100	309	429	443	202	144	86	600
MIN	35	41	40	38	28	33	34	71	33	24	13	25
CFSM	1.03	1.60	1.40	.94	.70	1.41	3.10	3.85	1.75	1.12	.54	1.74
IN.	1.19	1.79	1.61	1.08	.73	1.63	3.46	4.44	1.95	1.29	.62	1.94

CAL YR 1974	TOTAL	48250	MEAN 132	MAX 986	MIN 27	CFSM 2.45	IN 33.36
WTR YR 1975	TOTAL	31434	MEAN 86.1	MAX 600	MIN 13	CFSM 1.60	IN 21.73

NOTE.--No gage-height record Oct. 1-6, 12, Oct. 16 to Nov. 7, Nov. 21 to Mar. 4, Mar. 16-19, Sept. 19-30.

CONNECTICUT RIVER BASIN

01134500 MOOSE RIVER AT VICTORY, VT.

LOCATION.--Lat 44°30'42", long 71°50'13", Essex County, 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.--Discharge: January 1947 to current year.

Chemical analyses: Water year 1957 (partial-record station).

Water temperatures: Water year 1957 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 1,103.99 ft (336.496 m) above mean sea level (levels by Corps of Engineers).

REVISIONS.--WSP 1381: Drainage area.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair.

AVERAGE DISCHARGE.--28 years, 139 ft³/s (3.936 m³/s), 25.10 in/yr (638 mm/yr).EXTREMES.--Period of record: Maximum discharge, 4,340 ft³/s (123 m³/s) July 1, 1973 (gage height, 12.04 ft or 3.670 m); minimum, 2.6 ft³/s (0.10 m³/s) Aug. 21, 22, 1975.Current year: Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	-	*1,250 35.4	†8.09 2.466	Sept. 27	2200	1,080 30.6	7.76 2.365

† From peak-stage indicator.

Minimum discharge, 2.6 ft³/s (0.074 m³/s) Aug. 21, 22.DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	50	80	58	47	92	106	390	81	16	13	27
2	103	54	80	55	44	77	98	400	105	13	11	18
3	93	48	87	52	41	66	92	370	68	14	9.1	32
4	79	50	80	54	38	59	89	380	64	15	40	34
5	64	90	74	52	37	56	84	390	93	13	33	26
6	56	130	69	50	38	52	78	360	133	11	23	19
7	50	105	62	49	39	51	74	350	272	9.3	16	21
8	43	81	74	49	38	50	70	370	179	8.2	22	23
9	39	69	334	49	37	49	68	350	118	9.1	22	18
10	37	60	422	50	37	48	66	310	87	54	14	17
11	37	56	221	50	36	48	73	270	67	32	9.9	14
12	36	54	145	74	36	47	81	250	57	31	9.1	38
13	38	71	127	119	36	46	90	260	203	26	9.1	143
14	40	125	113	84	35	45	100	232	280	45	8.8	72
15	84	161	99	65	35	43	120	188	152	56	7.4	48
16	167	149	90	57	35	44	180	188	103	86	5.9	34
17	142	109	90	53	35	43	250	197	104	44	4.9	26
18	143	96	89	51	35	46	320	145	82	28	4.6	22
19	106	94	82	50	35	51	400	129	66	19	4.2	35
20	82	105	78	49	34	81	900	119	63	16	3.5	196
21	70	296	75	48	34	300	600	104	52	101	2.8	132
22	61	321	74	48	34	380	480	89	41	129	4.2	96
23	60	164	70	47	38	288	380	81	35	56	13	62
24	57	132	68	47	47	236	450	71	30	34	9.3	59
25	53	218	67	46	62	200	400	59	26	77	9.6	59
26	55	213	66	47	99	237	410	54	22	62	14	95
27	53	149	65	49	111	227	400	81	19	32	44	612
28	44	130	64	47	112	194	380	124	17	25	35	744
29	44	110	62	46	---	161	330	73	16	24	18	321
30	45	92	61	50	---	138	360	54	16	19	35	160
31	47	---	60	50	---	121	---	68	---	16	49	---
TOTAL	2234	3582	3228	1695	1285	3576	7529	6506	2651	1120.6	504.4	3203
MEAN	72.1	119	104	54.7	45.9	115	251	210	88.4	36.1	16.3	107
MAX	206	321	422	119	112	380	900	400	280	129	49	744
MIN	36	48	60	46	34	43	66	54	16	8.2	2.8	14
CFSM	.96	1.58	1.38	.73	.61	1.53	3.34	2.79	1.18	.48	.22	1.42
IN.	1.11	1.77	1.60	.84	.64	1.77	3.72	3.22	1.31	.55	.25	1.58

CAL YR 1974 TOTAL 61405.5 MEAN 168 MAX 1930 MIN 8.1 CFSM 2.23 IN 30.38
WTR YR 1975 TOTAL 37114.0 MEAN 102 MAX 900 MIN 2.8 CFSM 1.36 IN 18.36

NOTE.--No gage-height record Jan. 31 to Feb. 19, Apr. 13 to May 13.

01135000 MOOSE RIVER AT ST. JOHNSBURY, VT.

LOCATION.--Lat 44°25'22", long 72°00'02", Caledonia County, 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.
Chemical analyses: Water year 1955 (partial-record station).

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.

REVISIONS (WATER YEARS).--WSP 1231: 1929-30, 1931-34(M). WSP 1381: Drainage area. WSP 1701: 1959.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair.

AVERAGE DISCHARGE.--47 years, 220 ft³/s (6.230 m³/s), 23.34 in/yr (593 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 5,820 ft³/s (165 m³/s) May 5, 1972 (gage height, 4.23 ft or 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.

Current year: Peak discharges above base of 1,700 ft³/s (48.1 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 22	0930	- -	†*4.54 1.384	Apr. 20	1530	*1,180 33.4	3.93 1.198

† Ice jam.

Minimum discharge, 9.6 ft³/s (0.27 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	350	78	116	94	82	125	175	641	154	32	24	48
2	200	80	123	94	77	120	167	663	175	27	21	37
3	160	80	153	89	72	115	162	610	120	36	21	52
4	140	78	135	90	67	104	157	631	167	30	35	54
5	110	115	97	88	64	103	159	641	232	26	52	42
6	98	202	112	86	63	102	152	589	311	23	38	34
7	88	182	110	84	65	97	145	569	506	21	31	34
8	76	146	190	82	66	99	140	600	349	19	40	36
9	68	121	550	84	64	99	132	589	224	19	37	36
10	65	105	603	100	63	96	126	496	159	48	28	31
11	64	96	370	112	62	90	136	439	122	53	23	26
12	63	93	243	126	61	86	149	391	108	43	33	61
13	63	110	206	140	61	84	159	391	332	47	24	193
14	65	183	184	115	60	84	167	355	506	61	22	121
15	82	260	149	105	60	80	217	271	290	73	19	78
16	215	272	120	97	60	80	311	262	187	120	16	55
17	218	200	145	92	59	79	453	290	175	71	14	44
18	211	174	149	88	59	85	560	213	147	44	13	37
19	181	165	145	86	59	97	732	184	116	33	12	69
20	139	175	134	84	58	230	1010	167	106	27	11	249
21	117	432	132	82	57	500	785	149	92	84	10	218
22	103	492	130	81	56	600	708	126	72	193	18	152
23	96	291	126	81	58	450	663	109	59	93	23	101
24	93	230	118	80	64	380	708	97	53	54	23	89
25	88	294	118	78	105	385	652	81	43	100	22	90
26	86	347	90	79	175	418	674	72	38	103	23	152
27	85	221	81	80	155	367	663	140	33	53	51	632
28	79	165	99	80	135	327	631	253	31	43	64	673
29	73	151	102	78	---	276	531	138	36	39	36	516
30	74	149	105	84	---	236	579	96	41	33	44	267
31	76	---	100	84	---	206	---	108	---	28	69	---
TOTAL	3626	5687	5235	2827	2087	6205	12003	10363	4984	1676	897	4227
MEAN	117	190	169	91.2	74.5	200	400	334	166	54.1	28.9	141
MAX	350	492	603	140	175	600	1010	663	506	193	69	673
MIN	63	78	81	78	56	79	126	72	31	19	10	26
CFSM	.91	1.48	1.32	.71	.58	1.56	3.13	2.61	1.30	.42	.23	1.10
IN.	1.05	1.65	1.52	.82	.61	1.80	3.49	3.01	1.45	.49	.26	1.23

CAL YR 1974	TOTAL	104166	MEAN 285	MAX 3300	MIN 16	CFSM 2.23	IN 30.27
WTR YR 1975	TOTAL	59817	MEAN 164	MAX 1010	MIN 10	CFSM 1.28	IN 17.38

NOTE.--No gage-height record Oct. 1-9, Jan. 19 to Feb. 20.

CONNECTICUT RIVER BASIN

01135500 PASSUMPSIC RIVER AT PASSUMPSIC, VT.

LOCATION.--Lat 44°21'56", long 72°02'23", Caledonia County, 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.

Chemical analyses: Water years 1953, 1967-74 (partial-record station).

Water temperatures: Water years 1953, 1967-69, 1971-74 (partial-record station).

Sediment records: Water years 1967-74 (partial-record station).

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

REVISIONS (WATER YEARS).--WSP 781: 1933(M). WSP 871: Drainage area. WSP 1231: 1929, 1930-31(M).

REMARKS.--Records excellent except those for winter period, which are fair. Low flow regulated by powerplants above station.

AVERAGE DISCHARGE.--47 years, 726 ft³/s (20.56 m³/s), 22.61 in/yr (574 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 18,200 ft³/s (515 m³/s) July 1, 1973 (gage height, 23.49 ft or 7.160 m), from rating curve extended above 14,000 ft³/s (396 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.
Maximum stage since at least 1780, about 31.5 ft (9.60 m) in November 1927, from information by local residents (discharge not determined).

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	0345	*6,400 181	*10.78 3.286	Sept. 27	1330	5,390 153	9.65 2.941

Minimum daily discharge, 64 ft³/s (1.81 m³/s) Aug. 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	877	347	400	350	320	500	604	2500	618	217	145	179
2	533	319	410	330	290	450	621	3020	693	157	98	222
3	480	321	541	310	260	410	627	3150	493	154	110	212
4	432	321	450	375	240	370	609	2920	485	135	328	216
5	355	481	310	370	230	340	688	2600	658	173	204	215
6	322	646	370	340	235	320	526	2440	815	128	203	185
7	320	532	405	350	250	330	488	2190	1340	173	186	84
8	298	428	549	362	250	340	461	1890	984	130	191	242
9	278	378	1980	354	235	310	450	1630	711	87	174	203
10	263	339	1590	363	250	280	439	1430	536	368	186	151
11	258	330	1000	386	230	300	486	1290	443	289	128	162
12	268	328	764	736	240	300	519	1170	411	338	158	166
13	261	396	684	697	240	300	558	1150	847	317	127	652
14	286	712	617	581	230	290	563	1070	1250	286	123	458
15	358	855	560	450	225	300	752	917	826	289	75	365
16	740	809	440	360	220	290	1030	898	628	540	99	302
17	648	601	553	370	230	310	1530	967	567	338	64	214
18	606	538	554	350	235	320	2160	779	524	197	132	200
19	500	521	506	350	240	350	4030	686	426	208	94	242
20	392	563	482	410	230	1500	5790	621	413	144	84	811
21	380	1740	457	380	230	3500	3790	577	377	307	75	655
22	326	1420	459	350	230	2460	2340	522	302	583	94	490
23	326	803	457	350	230	2020	2200	501	305	382	141	383
24	335	686	426	300	260	1630	3050	460	262	215	73	340
25	307	930	410	300	400	1580	3290	391	234	302	176	339
26	299	974	340	330	800	2140	2810	361	223	371	149	507
27	309	640	320	380	700	1300	2430	533	217	209	235	4210
28	298	560	490	350	600	1130	2020	941	143	210	361	2460
29	263	560	370	320	---	1000	1610	546	144	232	217	1330
30	264	510	410	370	---	912	1880	442	241	211	165	821
31	281	---	380	390	---	741	---	476	---	188	373	---
TOTAL	11863	18588	17684	12014	8330	26323	48351	39068	16116	7878	4968	17016
MEAN	383	620	570	388	298	849	1612	1260	537	254	160	567
MAX	877	1740	1980	736	800	3500	5790	3150	1340	583	373	4210
MIN	258	319	310	300	220	280	439	361	143	87	64	84
CFSM	.88	1.42	1.31	.89	.68	1.95	3.70	2.89	1.23	.58	.37	1.30
IN.	1.01	1.59	1.51	1.03	.71	2.25	4.13	3.33	1.38	.67	.42	1.45

CAL YR 1974 TOTAL 360762 MEAN 988 MAX 3280 MIN 141 CFSM 2.27 IN 30.78
WTR YR 1975 TOTAL 228199 MEAN 625 MAX 5790 MIN 64 CFSM 1.43 IN 19.47

01137500 AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, N.H.

LOCATION.--Lat 44°16'08", long 71°37'52", Grafton County, 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 mi² (226.9 km²).

PERIOD OF RECORD.--Discharge: August 1939 to current year.

Chemical analyses: Water years 1967-74 (partial-record station).

Water temperatures: Water years 1967-69, 1971-74 (partial-record station).

Sediment records: Water years 1967 to 1974 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 1,180.74 ft (359.890 m) above mean sea level (levels by Corps of Engineers).

REVISIONS (WATER YEARS).--WSP 1701: 1951(M), 1953-54(M).

REMARKS.--Records excellent except those for winter period, which are fair.

AVERAGE DISCHARGE.--36 years, 206 ft³/s (5.834 m³/s), 31.93 in/yr (811 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 10,800 ft³/s (306 m³/s) Oct. 24, 1959 (gage height, 12.09 ft or 3.685 m), from rating curve extended above 4,100 ft³/s (116 m³/s) on basis of slope-area measurement of peak flow; minimum, 16 ft³/s (0.45 m³/s) Nov. 14, 1952 (caused by anchor ice upstream).

Current year: Peak discharges above base of 2,700 ft³/s (76.5 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 9	0200	*4,510 128	*8.01 2.441				

Minimum discharge, 34 ft³/s (0.96 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	90	127	106	78	77	129	544	339	70	57	48
2	194	92	225	97	75	69	131	745	328	60	53	50
3	185	86	531	84	74	71	115	914	245	64	53	94
4	157	88	235	112	74	68	125	811	250	59	56	88
5	139	131	161	94	77	63	119	797	241	54	73	74
6	134	210	166	91	82	65	113	860	334	50	62	61
7	123	164	146	115	78	65	108	824	407	52	60	66
8	113	131	846	100	72	65	104	720	394	55	120	56
9	108	115	2170	94	69	57	102	745	298	67	82	74
10	104	107	620	92	66	56	100	777	238	130	60	66
11	102	101	380	115	62	56	101	835	201	164	52	55
12	97	98	300	290	60	57	103	883	182	100	49	114
13	95	161	260	175	60	62	101	1130	268	620	47	174
14	92	193	230	125	60	63	100	845	271	445	45	114
15	133	170	200	90	58	61	118	805	200	317	42	99
16	187	145	180	92	56	58	151	825	176	270	40	82
17	199	127	200	80	54	61	196	673	161	180	39	76
18	200	122	180	73	54	63	257	580	141	134	39	75
19	154	125	171	110	56	68	917	624	130	110	36	79
20	130	129	160	135	54	950	959	628	124	97	35	154
21	117	402	151	130	52	870	469	640	111	127	35	133
22	109	268	147	105	52	370	327	570	100	126	51	105
23	111	180	138	80	53	294	342	466	92	95	50	95
24	107	179	133	90	58	228	559	396	86	86	42	106
25	102	372	131	90	89	263	708	304	79	106	45	114
26	104	278	106	88	145	319	620	260	74	85	42	114
27	99	195	102	80	98	206	461	325	69	74	42	530
28	89	167	127	78	82	185	345	622	66	68	38	344
29	90	157	112	78	---	175	292	323	79	66	37	296
30	89	151	115	100	---	168	345	252	111	62	74	195
31	90	---	102	86	---	146	---	289	---	59	66	---
TOTAL	3983	4934	8852	3275	1948	5379	8617	20012	5795	4052	1622	3731
MEAN	128	164	286	106	69.6	174	287	646	193	131	52.3	124
MAX	230	402	2170	290	145	950	959	1130	407	620	120	530
MIN	89	86	102	73	52	56	100	252	66	50	35	48
CFSM	1.46	1.87	3.26	1.21	.79	1.99	3.28	7.37	2.20	1.50	.60	1.42
IN.	1.69	2.10	3.76	1.39	.83	2.28	3.66	8.50	2.46	1.72	.69	1.58

CAL YR 1974 TOTAL 84093 MEAN 230 MAX 2170 MIN 49 CFSM 2.63 IN 35.71
WTR YR 1975 TOTAL 72200 MEAN 198 MAX 2170 MIN 35 CFSM 2.26 IN 30.66

CONNECTICUT RIVER BASIN

01138000 AMMONOOSUC RIVER NEAR BATH, N.H.

LOCATION---Lat 44°09'14", long 71°59'10", Grafton County, on left bank 0.4 mi (0.6 km) downstream from Wild Ammonoosuc River and 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.
Chemical analyses: Water year 1953 (partial-record station).

GAGE---Water-stage recorder. Datum of gage is 454.14 ft (138.422 m) above mean sea level (levels by Connecticut River Power Co.).

REVISIONS---WSP 871: Drainage area.

REMARKS---Records good except those for winter period, which are fair. Occasional diurnal fluctuation at low flow caused by small powerplants above station; greater fluctuation prior to 1968.

AVERAGE DISCHARGE---40 years, 652 ft³/s (18.46 m³/s), 22.42 in/yr (569 mm/yr).

EXTREMES---Period of record: Maximum discharge, 27,900 ft³/s (790 m³/s) Mar. 18, 1936 (gage height, 15.40 ft or 4.694 m), from rating curve extended above 13,000 ft³/s (368 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.

Current year: Peak discharges above base of 6,500 ft³/s (184 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 9	0545	8,040 228	9.58 2.920				
Mar. 20	1930	*10,700 303	*10.95 3.338				
Apr. 19	2245	6,870 195	8.92 2.719				

Minimum daily discharge, 65 ft³/s (1.84 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	825	301	441	418	370	410	511	1460	928	189	105	132
2	624	304	533	415	350	360	531	1920	1010	137	97	110
3	603	301	1300	321	340	340	540	2240	675	127	94	213
4	531	296	832	338	330	320	600	2100	685	122	144	231
5	466	402	478	428	340	300	547	1940	988	113	132	189
6	432	821	601	329	350	290	497	1890	1020	102	125	150
7	411	695	541	356	340	280	464	1880	1450	98	113	144
8	376	541	1190	393	330	280	442	1570	1270	93	202	139
9	351	465	5650	396	310	280	421	1570	966	98	261	189
10	339	421	2280	386	290	270	411	1590	840	261	154	211
11	334	399	1360	410	280	260	464	1660	555	246	115	148
12	321	380	1050	880	270	260	500	1770	485	291	119	144
13	310	438	917	850	260	264	508	2450	955	364	109	442
14	299	647	821	614	260	271	489	1900	1270	1320	100	339
15	336	760	710	444	260	269	641	1670	775	730	89	276
16	564	725	601	450	250	264	862	1730	636	750	83	222
17	705	579	642	410	240	266	1270	1530	560	467	78	184
18	670	541	638	345	240	277	1780	1170	531	339	76	177
19	551	521	587	440	240	324	4200	1200	400	255	73	202
20	464	501	558	470	230	2600	4760	1200	358	205	68	467
21	424	1430	533	450	230	3940	2490	1190	316	194	65	493
22	389	1370	521	410	230	1730	1650	1110	273	298	71	377
23	380	821	489	350	240	1410	1560	922	240	231	87	295
24	371	700	475	400	260	1090	2200	790	213	179	89	288
25	356	1210	471	400	500	1370	2780	641	181	261	87	323
26	350	1220	371	380	670	1750	2300	531	159	246	86	377
27	341	780	307	360	680	939	1820	543	146	165	91	1860
28	318	610	485	340	480	805	1480	1140	135	142	87	1150
29	304	575	471	340	---	770	1170	745	141	132	77	840
30	304	587	471	450	---	735	1180	543	234	124	122	587
31	301	---	396	400	---	636	---	543	---	113	189	---
TOTAL	13350	19341	26720	13373	9170	23360	39068	43138	18395	8392	3388	10899
MEAN	431	645	862	431	328	754	1302	1392	613	271	109	363
MAX	825	1430	5650	880	680	3940	4760	2450	1450	1320	261	1860
MIN	299	296	307	321	230	260	411	531	135	93	65	110
CFSM	1.09	1.63	2.18	1.09	.83	1.91	3.30	3.52	1.55	.69	.28	.92
IN.	1.26	1.82	2.52	1.26	.86	2.20	3.68	4.06	1.73	.79	.32	1.03

CAL YR 1974 TOTAL 301723 MEAN 827 MAX 6830 MIN 152 CFSM 2.09 IN 28.42
WTR YR 1975 TOTAL 228594 MEAN 626 MAX 5650 MIN 65 CFSM 1.58 IN 21.53

NOTE---No gage-height record Jan. 21 to Feb. 26.

01138500 CONNECTICUT RIVER AT WELLS RIVER, VT.

LOCATION.--Lat 44°09'13", long 72°02'34", Orange County, 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.

Chemical analyses: Water years 1952, 1957 (partial-record station).

Water temperatures: Water years 1952, 1957 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 399.75 ft (121.844 m) above mean sea level.

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 (see p. 110), and other reservoirs (combined usable capacity, about 14,800,000,000 ft³ or 419,000,000 m³).

AVERAGE DISCHARGE.--26 years, 4,794 ft³/s (135.8 m³/s), 24.62 in/yr (625 mm/yr), adjusted for storage.

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

Current year: Peak discharges above base of 23,000 ft³/s (651 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	0400	*26,500 750	*9.02 2.749				

Minimum daily discharge, 511 ft³/s (14.5 m³/s) July 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5340	2930	2580	1560	1800	4500	5860	9490	3640	675	3200	650
2	3700	1750	3980	4050	1800	2530	5260	13800	5140	807	1390	1550
3	5180	1010	5960	4450	4000	4720	5770	17200	4480	656	535	1600
4	5650	3280	5100	2950	4300	4950	4850	16300	4750	520	2720	1750
5	5370	4520	4600	2020	4000	4870	4640	17600	4910	550	2250	2200
6	1620	4770	4260	3020	3000	4640	2560	16200	4690	511	1760	1100
7	2630	3630	3650	3460	3500	3940	4720	15500	6130	1570	1770	1250
8	3380	3550	3550	3530	2300	3530	4740	14400	7200	1410	1350	2200
9	2950	3340	11700	3630	1000	2170	4140	12900	6180	1350	962	1700
10	2730	2100	8960	4380	2300	3780	3550	9300	5100	1040	845	1300
11	3830	4230	7600	3500	3500	4350	4910	4970	4240	773	1320	1250
12	1630	3960	7750	3530	2800	4470	2840	6640	5050	711	1360	2500
13	818	3260	7570	4870	3200	3700	2850	9300	5440	1510	1710	1570
14	1250	3780	7420	5470	2700	3850	5070	9600	6400	2840	693	1300
15	2390	4210	3760	3850	1700	3440	6560	9620	4360	2790	714	3450
16	4420	3890	5500	5150	950	1920	6200	8490	5530	4020	802	3220
17	5000	3480	6080	4100	1050	3830	6140	5980	5140	3490	724	2630
18	3890	4400	5530	1800	1700	3780	10200	5140	4120	3320	1340	2400
19	3140	4740	4420	900	4200	4280	14600	6440	4840	2540	865	3290
20	2730	4640	4400	3000	3700	7710	24900	7720	5140	795	845	3090
21	3940	6240	3360	4000	3000	12800	21100	7740	1690	2040	680	2940
22	3380	7420	2130	3100	2000	11000	18000	7540	1160	2640	899	4540
23	3420	5710	3890	3300	1650	9040	13800	5980	2690	2940	691	3850
24	3020	3570	3980	2200	3800	9400	13000	5540	3580	2680	694	3770
25	3850	5990	3260	1200	3600	12300	18000	2290	2640	3290	1030	3260
26	1950	7930	3890	1200	3900	11200	17100	1770	1960	1080	836	3430
27	951	7040	4470	2100	4100	9690	12200	3070	1070	1040	3250	9650
28	1890	5050	2730	2200	4800	6970	9890	4660	628	1440	1890	14600
29	2970	5080	1670	2900	---	7010	9330	4580	598	2050	621	11400
30	2750	4190	3940	2000	---	4520	8230	4870	1160	1050	1010	8040
31	2560	---	3480	2200	---	5130	---	5270	---	1860	763	---
TOTAL	98329	129690	151170	95620	80350	180020	271010	271900	119656	53988	39519	105480
MEAN	3172	4323	4876	3085	2870	5807	9034	8771	3989	1742	1275	3516
MAX	5650	7930	11700	5470	4800	12800	24900	18300	7200	4020	3250	14600
MIN	818	1010	1670	900	950	1920	2560	1770	598	511	535	650
MEAN†	2912	4457	4522	2387	1719	4427	10160	11160	4007	1889	1251	3778
CFSM†	1.10	1.69	1.71	.90	.65	1.67	3.84	4.22	1.52	.71	.47	1.43
IN.†	1.27	1.88	1.97	1.04	.68	1.93	4.29	4.87	1.69	.82	.55	1.59
CAL YR 1974 TOTAL	2329507			6382	MAX 31200	MIN 608		MEAN† 6313	CFSM† 2.39	IN† 32.42		
WTR YR 1975 TOTAL	1596732			4375	MAX 24900	MIN 511		MEAN† 4398	CFSM† 1.66	IN† 22.58		

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes, Lake Francis, and Moore and Comerford Reservoirs.

CONNECTICUT RIVER BASIN

01139000 WELLS RIVER AT WELLS RIVER, VT.

LOCATION.--Lat 44°09'03", long 72°03'55", Orange County, 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.

Chemical analyses: Water years 1957-58 (partial-record station).

Water temperatures: Water years 1957-58 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 505.53 ft (154.086 m) above mean sea level (levels by Connecticut River Power Co.).

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

REMARKS.--Records good except those for winter period, which are fair, and those for period of no gage-height record, which are poor. Some diurnal fluctuation at low flow prior to 1958 caused by small powerplant above station. Flow partly regulated by Groton and Ricker Ponds.

AVERAGE DISCHARGE.--35 years, 139 ft³/s (3.936 m³/s), 19.18 in/yr (487 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 5,970 ft³/s (169 m³/s) June 30, 1973 (gage height, 9.82 ft or 2.993 m), from rating curve extended above 1,400 ft³/s (39.6 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.

Current year: Peak discharges above base of 980 ft³/s (27.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	0100	*1,260 35.7	*4.87 1.484				

Minimum discharge, 14 ft³/s (0.40 m³/s) Aug. 20-22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	59	108	88	75	90	146	529	257	37	18	51
2	104	60	113	86	70	100	145	591	194	34	17	43
3	99	56	120	84	65	92	152	565	143	31	30	97
4	85	65	105	82	62	90	157	522	143	28	50	63
5	75	104	105	82	59	100	140	473	147	27	35	41
6	71	185	106	82	66	84	133	436	205	25	28	35
7	66	134	92	82	70	83	126	398	260	24	50	34
8	62	107	132	82	62	80	121	365	213	23	180	29
9	59	93	393	82	60	84	116	326	161	25	100	103
10	57	82	244	84	60	87	119	294	130	29	45	59
11	57	76	178	96	59	82	130	272	109	40	32	38
12	55	73	157	162	99	77	138	251	109	30	28	56
13	54	110	147	127	58	73	141	279	266	40	26	124
14	53	131	138	105	58	75	147	246	301	50	23	120
15	69	160	119	98	57	70	149	200	191	38	20	99
16	100	142	115	94	56	72	240	189	155	56	18	111
17	135	117	129	90	56	74	340	178	159	37	17	113
18	131	106	124	88	55	78	427	163	128	28	16	99
19	96	100	115	86	54	82	775	155	111	24	15	130
20	90	99	111	84	54	397	1020	145	99	22	14	203
21	83	294	107	82	54	706	766	133	86	26	14	176
22	73	262	105	80	58	383	519	130	75	60	15	132
23	71	170	102	80	70	320	494	124	70	32	18	109
24	67	143	100	80	110	264	679	114	66	40	17	103
25	64	224	99	80	350	305	714	99	60	50	20	109
26	66	205	91	110	170	369	641	94	54	32	20	135
27	64	149	110	96	120	249	564	95	51	25	32	571
28	58	132	100	88	100	223	501	109	49	30	27	240
29	58	133	94	80	---	197	423	90	46	23	36	165
30	59	119	92	100	---	186	458	82	47	20	111	135
31	59	---	90	82	---	167	---	101	---	19	84	---
TOTAL	2387	3890	3946	2822	2247	5339	10661	7748	4085	1005	1156	3523
MEAN	77.0	130	127	91.0	80.3	172	355	250	136	32.4	37.3	117
MAX	147	294	398	162	350	706	1020	591	301	60	180	571
MIN	53	56	90	80	54	70	116	82	46	19	14	29
CFSM	.78	1.32	1.29	.92	.82	1.75	3.61	2.54	1.38	.33	.38	1.19
IN.	.90	1.47	1.49	1.07	.85	2.02	4.03	2.93	1.54	.38	.44	1.33

CAL YR 1974 TOTAL 71260 MEAN 195 MAX 1200 MIN 31 CFSM 1.98 IN 26.94
WTR YR 1975 TOTAL 48809 MEAN 134 MAX 1020 MIN 14 CFSM 1.36 IN 18.45

NOTE.--No gage-height record July 3 to Aug. 20.

CONNECTICUT RIVER BASIN

75

01139800 EAST ORANGE BRANCH AT EAST ORANGE, VT.

LOCATION.--Lat 44°05'34", long 72°20'10", Orange County, 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.--Discharge: June 1958 to current year.

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

REVISIONS (WATER YEARS).--WRD Mass., N.H., R.I., Vt. 1972: 1960-64(P), 1969-71(P).

REMARKS.--Records good except those for winter period, which are fair and those for period of no gage-height record, which are poor. Occasional diurnal fluctuation at low flow caused by mill upstream.

AVERAGE DISCHARGE.--17 years, 14.5 ft³/s (0.411 m³/s), 22.00 in/yr (559 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 672 ft³/s (19.0 m³/s) June 30, 1973 (gage height, 5.55 ft or 1.692 m), from rating curve extended above 130 ft³/s (3.68 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.

Current year: Peak discharges above base of 140 ft³/s (3.96 m³/s) and maximums(*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 20	1045	- -	†*4.41 1.344	Sept. 27	-	†*130 3.68	- -

† Ice jam.
‡ About.

Minimum discharge, 0.78 ft³/s (0.022 m³/s) Aug. 20-22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	6.0	12	9.2	8.0	8.9	16	71	34	5.6	1.9	2.5
2	7.9	5.7	13	9.1	7.6	10	16	71	17	5.0	1.6	8.8
3	7.6	5.5	15	9.0	7.2	8.9	18	77	15	4.6	10	7.2
4	6.9	8.3	13	8.7	7.6	8.6	19	74	17	4.4	5.0	3.8
5	6.6	22	12	8.4	8.4	9.8	15	76	15	3.8	3.5	2.6
6	6.3	20	11	8.2	8.2	8.6	15	75	35	3.6	2.5	2.8
7	6.3	10	11	8.2	7.5	7.9	15	71	25	3.5	8.5	2.6
8	6.3	8.3	40	8.0	7.0	7.6	15	68	21	3.3	15	2.3
9	6.3	7.6	50	8.0	6.6	7.4	14	62	15	3.3	4.4	10
10	6.3	7.3	20	8.0	6.3	8.3	15	57	13	3.5	3.0	3.0
11	6.3	6.9	17	15	6.4	7.9	15	52	11	5.0	2.5	2.3
12	6.0	6.9	17	22	6.0	7.6	17	49	17	4.0	3.0	4.5
13	6.0	20	17	13	6.0	7.3	15	53	29	11	3.0	9.0
14	6.0	11	17	12	6.0	6.9	16	45	24	6.0	2.3	8.0
15	15	16	15	11	6.0	6.9	20	42	16	9.4	1.9	4.5
16	13	10	14	10	6.0	6.9	24	43	15	5.6	1.6	3.3
17	14	9.3	13	9.5	6.0	6.9	33	37	15	4.4	1.4	3.0
18	9.3	9.8	13	9.2	6.0	7.6	36	34	12	3.5	1.4	3.5
19	7.6	9.8	13	9.0	5.8	8.5	69	32	11	3.0	1.2	7.0
20	7.3	18	12	8.8	5.6	8.0	51	29	12	3.0	1.0	16
21	6.6	45	12	8.6	5.4	33	43	25	9.7	12	.78	20
22	6.6	15	12	8.5	5.6	33	42	29	8.5	5.4	.90	11
23	6.9	13	11	8.4	7.0	20	52	26	8.0	3.5	1.2	7.5
24	6.3	14	11	8.4	15	18	67	22	7.2	4.6	1.3	7.0
25	6.6	29	10	8.4	40	29	64	18	6.5	12	2.2	10
26	7.3	16	9.2	13	15	25	61	18	6.2	4.0	1.9	17
27	6.3	14	11	8.5	11	22	57	19	6.0	3.0	4.4	80
28	6.0	13	10	8.0	10	19	52	19	5.8	2.8	2.0	35
29	6.0	13	9.8	9.0	---	17	57	14	9.1	2.5	1.7	15
30	6.0	12	9.6	12	---	16	66	14	8.5	2.2	13	8.5
31	6.0	---	9.4	9.0	---	15	---	17	---	2.0	3.8	---
TOTAL	229.9	402.4	460.0	306.1	243.2	480.0	1015	1339	444.5	149.5	107.88	317.7
MEAN	7.42	13.4	14.8	9.87	8.69	15.5	33.8	43.2	14.8	4.82	3.48	10.6
MAX	15	45	50	22	40	80	69	77	35	12	15	80
MIN	6.0	5.5	9.2	8.0	5.4	6.9	14	14	5.8	2.0	.78	2.3
CFSM	.83	1.50	1.65	1.10	.97	1.73	3.78	4.83	1.65	.54	.39	1.18
IN.	.96	1.67	1.91	1.27	1.01	1.99	4.22	5.56	1.85	.62	.45	1.32

CAL YR 1974 TOTAL 7947.70 MEAN 21.8 MAX 116 MIN 2.0 CFSM 2.44 IN 33.03
WTR YR 1975 TOTAL 5495.18 MEAN 15.1 MAX 80 MIN .78 CFSM 1.69 IN 22.84

NOTE.--No gage-height record Sept. 12-30.

CONNECTICUT RIVER BASIN

01141500 OMPOMPANOOSUC RIVER AT UNION VILLAGE, VT.

LOCATION.--Lat 43°47'23", long 72°15'19", Orange County, 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.

Chemical analyses: Water years 1955, 1957-58 (partial-record station).

Water temperatures: Water years 1957-58 (partial-record station).

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

REMARKS.--Records fair except those for April and May, which are good. Flow regulated by Union Village Reservoir (see p. 110) since October 1949. Some regulation by Lake Fairlee.

AVERAGE DISCHARGE.--35 years, 193 ft³/s (5.466 m³/s), 20.16 in/yr (512 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 4,800 ft³/s (136 m³/s) June 3, 1947 (gage height, 9.65 ft or 2.941 m), from rating curve extended above 2,400 ft³/s (68.0 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 or 2.323 m); maximum gage height, 7.67 ft (2.338 m) Mar. 22, 1968. Maximum stage since at least 1869, about 14.5 ft (4.420 m) in November 1927, from information by local resident (discharge not determined). Current year: Maximum discharge, 1,540 ft³/s (43.6 m³/s) Apr. 19 (gage height, 7.01 ft or 2.137 m); minimum, 23 ft³/s (0.65 m³/s) Aug. 29; minimum daily, 24 ft³/s (0.68 m³/s) Aug. 29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	234	102	111	98	125	181	255	575	272	78	38	47
2	202	95	155	97	120	162	250	565	182	65	36	45
3	195	88	204	89	115	151	272	512	143	59	31	63
4	169	115	159	102	98	149	320	478	137	54	32	49
5	151	182	100	105	100	125	278	472	132	51	37	38
6	141	278	106	72	96	130	249	412	257	47	32	33
7	131	200	123	88	110	145	240	370	249	44	39	35
8	113	178	184	111	120	147	223	336	206	43	182	30
9	106	167	379	113	105	100	213	307	170	53	97	42
10	100	153	273	108	92	115	212	282	149	127	63	35
11	95	125	180	109	94	142	231	260	131	68	52	28
12	89	123	182	165	92	111	257	241	169	55	47	27
13	88	147	167	173	90	115	269	331	410	109	47	39
14	84	197	165	109	85	121	248	260	381	121	39	36
15	95	239	153	123	90	121	354	231	276	140	35	32
16	127	227	129	115	95	105	442	230	234	125	31	28
17	191	180	159	110	95	115	603	211	230	97	29	29
18	163	157	169	90	90	117	835	193	173	78	30	30
19	131	165	119	94	94	138	1220	181	151	66	29	35
20	121	178	119	115	98	517	1330	168	138	60	27	98
21	111	423	139	90	98	997	1280	149	124	83	25	102
22	106	419	145	105	92	776	795	158	104	109	26	68
23	104	267	113	110	102	540	767	136	94	71	27	60
24	97	249	125	110	149	484	1030	128	86	62	27	76
25	93	251	129	95	254	507	1020	109	77	117	32	86
26	97	270	106	150	301	600	872	104	71	81	30	123
27	91	186	80	160	219	409	755	104	66	63	29	408
28	84	169	108	125	176	352	628	96	62	56	27	211
29	86	182	105	120	---	364	557	84	76	52	24	153
30	88	159	133	145	---	323	586	82	128	45	93	123
31	100	---	93	170	---	286	---	112	---	41	63	---
TOTAL	3783	5871	4612	3566	3395	8645	16591	7877	5078	2320	1356	2209
MEAN	122	196	149	115	121	279	553	254	169	74.8	43.7	73.6
MAX	234	423	379	173	301	997	1330	575	410	140	182	408
MIN	84	88	80	72	85	100	212	82	62	41	24	27
MEAN†	122	200	150	115	121	278	551	252	169	74.9	43.7	74.1
CFSM†	.94	1.54	1.15	.88	.93	2.14	4.24	1.94	1.30	.58	.34	.57
IN.†	1.08	1.72	1.33	1.02	.97	2.47	4.73	2.24	1.45	.66	.39	.64
CAL YR 1974 TOTAL	86993		MEAN 238	MAX 1570	MIN 18		MEAN† 238	CFSM† 1.83	IN† 24.90			
WTR YR 1975 TOTAL	65303		MEAN 179	MAX 1330	MIN 24		MEAN† 179	CFSM† 1.38	IN† 18.69			

† Adjusted for change in contents in Union Village Reservoir.

01141800 MINK BROOK NEAR ETNA, N.H.

LOCATION.--Lat 43°42'08", long 72°11'15", Grafton County, 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.--Discharge: August 1962 to current year.

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

AVERAGE DISCHARGE.--13 years, 6.47 ft³/s (0.183 m³/s), 19.10 in/yr (485 mm/yr).

REMARKS.--Records fair except those for winter period and periods of no gage-height record, which are poor.

EXTREMES.--Period of record: Maximum discharge, 535 ft³/s (15.2 m³/s) June 30, 1973 (gage height, 3.75 ft or 1.143 m), from rating curve extended above 130 ft³/s (3.68 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 4.19 ft (1.277 m) Mar. 26, 1963 (backwater from ice); minimum discharge, 0.01 ft³/s (<0.001 m³/s) Aug. 11, 1964.

Current year: Peak discharges above base of 55 ft³/s (156 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Nov. 11	0800	55 1.56	2.21 0.674	Apr. 19	1600	*122 3.46	2.62 0.799
Mar. 20	1045	Ice jam	3.09 .942	Apr. 24	1530	58 1.64	2.29 .698
Mar. 20	-	†100 2.83	-				

† About.

Minimum discharge, not determined; minimum daily, 0.36 ft³/s (0.010 m³/s) Aug. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	4.8	11	4.3	5.0	7.0	8.3	19	2.8	1.0	.52	1.4
2	4.4	4.6	11	4.1	4.4	6.9	8.3	18	2.5	.70	.50	1.0
3	7.7	4.5	14	3.9	4.0	6.8	8.8	16	2.4	.58	.48	1.3
4	7.2	6.0	10	3.8	3.6	6.2	9.3	15	2.5	.52	.70	1.0
5	6.0	17	8.7	3.8	3.3	5.7	7.0	15	2.7	.47	.55	.82
6	4.4	13	7.7	3.6	3.4	5.3	6.6	12	8.0	.46	.46	.76
7	4.3	9.0	7.4	3.5	3.6	5.0	6.6	11	6.0	.45	.70	.74
8	4.2	6.8	20	3.7	3.5	4.9	6.6	10	4.0	.43	3.2	.76
9	4.1	6.0	20	3.9	3.3	4.4	6.6	9.0	3.1	.50	2.2	1.2
10	4.0	5.5	13	4.2	3.2	4.7	7.9	8.0	2.7	.90	1.3	1.0
11	4.0	5.5	11	4.5	3.1	4.3	7.4	7.4	2.1	.80	.90	.66
12	3.9	5.2	10	8.2	2.9	4.3	7.9	6.8	7.9	.80	.72	1.0
13	3.9	15	10	7.4	2.8	5.0	7.4	9.0	22	10	.68	.90
14	3.7	14	10	6.8	2.7	4.5	8.3	8.0	12	20	.60	.82
15	4.4	15	9.4	5.4	2.7	4.3	12	7.0	7.4	11	.56	.75
16	9.4	12	8.2	5.0	2.8	4.2	14	6.2	5.8	7.0	.50	.80
17	9.4	7.8	7.6	4.8	2.8	4.2	24	5.6	5.2	4.5	.46	.84
18	7.5	8.3	7.1	4.2	2.8	4.4	29	4.7	4.3	3.0	.45	1.2
19	6.2	9.4	6.8	3.8	2.9	6.0	80	3.9	3.1	2.3	.40	1.1
20	5.2	15	6.4	3.5	3.0	5.5	53	3.4	2.3	2.0	.38	1.9
21	4.5	36	6.8	3.3	3.0	3.8	36	3.0	1.7	2.8	.36	4.3
22	4.3	19	6.4	3.1	3.0	2.5	27	2.8	1.4	3.4	.36	3.5
23	4.1	18	6.0	3.0	3.2	1.9	34	2.7	1.3	2.4	.40	2.7
24	3.9	13	5.4	2.9	8.0	1.8	52	2.5	1.2	1.9	.44	3.5
25	3.8	18	5.2	2.8	20	2.5	48	2.3	1.1	5.5	.66	4.0
26	3.7	19	4.9	9.0	13	23	38	2.0	1.0	2.7	.60	3.7
27	3.6	17	5.4	7.5	7.4	17	30	1.8	.90	1.4	.52	14
28	3.5	14	5.2	6.5	7.1	14	23	1.6	.80	.80	.47	10
29	3.5	13	4.9	6.0	---	11	20	1.4	.90	.53	.42	6.4
30	4.2	11	4.7	7.0	---	9.0	20	1.3	1.5	.53	3.5	4.0
31	4.5	---	4.5	6.0	---	8.3	---	2.0	---	.53	3.0	---
TOTAL	152.7	362.5	269.5	149.5	130.5	360.4	647.0	218.4	120.60	89.90	26.99	76.05
MEAN	4.93	12.1	8.69	4.82	4.66	11.6	21.6	7.05	4.02	2.90	.87	2.54
MAX	9.4	36	20	9.0	20	55	80	19	22	20	3.5	14
MIN	3.5	4.5	4.5	2.8	2.7	4.2	6.6	1.3	.80	.43	.36	.66
CFSM	1.07	2.63	1.89	1.05	1.01	2.52	4.70	1.53	.87	.63	.19	.55
IN.	1.23	2.93	2.18	1.21	1.06	2.91	5.23	1.77	.98	.73	.22	.61

CAL YR 1974 TOTAL 3173.45 MEAN 8.64 MAX 70 MIN .08 CFSM 1.89 IN 25.66
WTR YR 1975 TOTAL 2604.04 MEAN 7.13 MAX 80 MIN .36 CFSM 1.55 IN 21.05

NOTE.--No gage-height record Oct. 17 to Nov. 15, Dec. 26 to Feb. 20, May 7 to June 9, June 21 to July 28, Aug. 1 to Sept. 30.

CONNECTICUT RIVER BASIN

01142500 AYERS BROOK AT RANDOLPH, VT.

LOCATION.--Lat 43°56'03", long 72°39'30", Orange County, on right bank 55 ft (17 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.--Discharge: July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 631.75 ft (192.557 m) above mean sea level (levels by Corps of Engineers); prior to Oct. 1, 1964, datum was 1.00 ft (0.305 m) higher.

REVISIONS (WATER YEARS).--WRD Mass., N.H., R.I., Vt. 1972: 1949(M), 1952(M), 1953(P), 1958(P), 1960(M), 1967(M).

REMARKS.--Records good except those for winter period, which are fair; and those for period of no gage-height record, which are poor.

AVERAGE DISCHARGE.--36 years, 45.8 ft³/s (1.297 m³/s), 20.39 in/yr (518 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 2,600 ft³/s (73.6 m³/s) June 30, 1973 (gage height, 9.12 ft or 2.780 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.
Maximum stage since at least 1830, about 17 ft or 5.2 m (present datum) in November 1927.

Current year: Peak discharges above base of 350 ft³/s (9.91 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 24	1400	*407 11.5	*3.94 1.201				

Minimum discharge not determined; minimum daily, 4.2 ft³/s (0.12 m³/s) Aug. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	23	41	33	27	39	75	207	105	16	6.3	8.7
2	39	22	43	30	25	37	73	208	50	15	6.0	10
3	36	21	43	27	22	36	73	190	36	15	6.8	12
4	33	26	41	33	21	34	79	180	34	13	8.5	9.4
5	31	37	49	28	22	31	75	168	31	13	7.8	8.3
6	30	54	37	23	22	33	67	146	79	11	7.1	7.8
7	29	35	36	30	21	34	63	129	72	10	16	7.6
8	27	31	67	30	21	34	61	114	62	9.8	24	7.2
9	26	29	112	29	20	28	58	102	55	8.9	14	13
10	26	28	66	30	21	33	57	91	50	10	9.8	11
11	25	27	56	38	20	33	62	81	44	8.6	8.5	11
12	24	27	53	53	19	29	66	72	44	8.4	9.0	15
13	24	56	50	39	19	34	66	72	91	10	7.8	18
14	24	43	49	39	19	31	63	63	109	13	7.0	15
15	29	40	45	36	18	31	83	56	64	14	6.2	12
16	33	36	46	33	18	29	97	56	58	15	5.8	10
17	39	34	46	27	18	31	135	50	59	12	5.5	9.9
18	32	34	44	23	18	32	173	46	52	8.8	5.3	9.8
19	28	33	41	34	18	34	227	43	44	8.0	5.0	25
20	27	43	40	30	18	151	340	41	42	7.8	4.4	50
21	25	148	39	24	19	183	300	37	37	13	4.2	48
22	28	85	39	30	21	128	259	51	34	11	4.2	31
23	26	67	40	27	23	106	268	40	30	8.9	4.5	24
24	24	60	36	27	30	99	357	34	28	9.5	5.1	23
25	25	83	36	26	108	125	327	31	25	11	5.7	30
26	26	66	34	28	73	156	294	29	23	8.7	7.0	98
27	24	62	33	26	49	108	247	29	22	7.6	11	274
28	22	70	38	24	42	135	222	27	20	7.4	8.1	130
29	23	49	32	24	---	105	190	25	19	6.8	8.4	68
30	22	46	34	28	---	87	197	24	18	6.6	14	54
31	23	---	30	29	---	83	---	30	---	6.4	12	---
TOTAL	873	1415	1396	938	772	2089	4654	2472	1437	324.2	255.0	1050.7
MEAN	28.2	47.2	45.0	30.3	27.6	67.4	155	79.7	47.9	10.5	8.23	35.0
MAX	43	148	112	53	108	183	357	208	109	16	24	274
MIN	22	21	30	23	18	28	57	24	18	6.4	4.2	7.2
CFSM	.92	1.55	1.48	.99	.90	2.21	5.08	2.61	1.57	.34	.27	1.15
IN.	1.06	1.73	1.70	1.14	.94	2.55	5.68	3.01	1.75	.40	.31	1.28

CAL YR 1974 TOTAL 21930.0 MEAN 60.1 MAX 453 MIN 11 CFSM 1.97 IN 26.75
WTR YR 1975 TOTAL 17675.9 MEAN 48.4 MAX 357 MIN 4.2 CFSM 1.59 IN 21.56

NOTE.--No gage-height record July 17 to Sept. 30.

CONNECTICUT RIVER BASIN

79

01144000 WHITE RIVER AT WEST HARTFORD, VT.

LOCATION.--Lat 43°42'51", long 72°25'07", Windsor County, 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.

Chemical analyses: Water years 1953, 1967-74 (partial-record station).

Water temperatures: Water years 1967-69, 1971-74 (partial-record station).

Sediment records: Water years 1967-74 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 374.53 ft (114.157 m) above mean sea level. Prior to Oct. 30, 1927, nonrecording gage at same site and datum.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 781: 1928(M). WSP 1031: 1916(m), 1923. WSP 1301: 1916-26(M), 1929(M).

REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation at low flow during period 1934-50 caused by powerplant above station.

AVERAGE DISCHARGE.--60 years, 1,170 ft³/s (33.13 m³/s), 23.03 in/yr (585 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 120,000 ft³/s (3,400 m³/s) Nov. 4, 1927 (gage height, 29.3 ft or 8.93 m, from floodmarks), from rating curve extended above 29,000 ft³/s (821 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.

Current year: Peak discharges above base of 11,600 ft³/s (329 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	0330	*14,200 402	*11.69 3.563				

Minimum discharge, 134 ft³/s (3.79 m³/s) Aug. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1650	565	800	798	760	1350	1710	4810	1440	352	164	314
2	1300	538	960	784	680	1210	1620	5100	1430	302	159	264
3	1160	512	1000	582	600	1100	1740	4400	932	275	145	318
4	1040	548	850	847	550	980	1690	4450	833	257	173	369
5	948	791	600	770	520	890	1700	4000	819	250	210	283
6	882	1520	740	520	550	930	1520	3700	1260	232	229	236
7	812	1220	800	645	580	1010	1450	3340	2010	219	223	219
8	750	1000	1000	805	560	1000	1390	3080	1610	213	1200	207
9	712	882	3450	798	520	764	1340	2720	1270	262	770	207
10	675	812	2280	777	500	780	1300	2440	1020	264	415	302
11	651	757	1730	798	520	910	1400	2220	854	264	302	236
12	622	731	1520	1350	500	800	1470	2000	791	223	260	223
13	593	1030	1400	1240	490	903	1510	2000	1300	275	268	540
14	576	1350	1320	1010	480	910	1440	1800	1870	396	236	452
15	604	1310	1200	833	480	800	1650	1580	1340	347	207	387
16	910	1250	1000	780	470	750	1880	1560	1100	428	182	310
17	1120	1080	1050	630	470	875	2440	1540	1080	339	170	275
18	1060	1040	1220	430	480	918	3660	1320	932	275	167	268
19	861	1000	1100	750	480	978	7130	1200	819	229	159	302
20	777	1000	1040	860	490	3300	10700	1120	750	200	145	1680
21	712	3850	1020	570	500	5000	6410	1010	687	238	139	1500
22	681	3020	992	660	540	2910	4810	1000	622	457	139	1140
23	657	1980	932	660	640	2720	4860	932	570	331	145	770
24	633	1740	940	640	800	2650	7320	889	522	257	147	784
25	610	2240	932	620	2300	2870	8540	770	481	343	159	875
26	633	2150	630	1000	2920	4040	7070	724	443	396	170	1440
27	604	1550	560	960	1880	2620	5250	705	415	272	167	5790
28	565	1250	1000	760	1500	2300	4400	693	387	226	179	2620
29	548	1250	819	720	---	2220	3760	616	374	197	167	1620
30	543	1000	896	1050	---	2080	4060	582	396	185	456	1220
31	560	---	705	960	---	1880	---	633	---	176	519	---
TOTAL	24449	38966	34486	24607	21760	52448	105220	62934	28357	8680	8171	25151
MEAN	789	1299	1112	794	777	1692	3507	2030	945	280	264	838
MAX	1650	3850	3450	1350	2920	5000	10700	5100	2010	457	1200	5790
MIN	543	512	560	430	470	750	1300	582	374	176	139	207
CFSM	1.14	1.88	1.61	1.15	1.13	2.45	5.08	2.94	1.37	.41	.38	1.21
IN.	1.32	2.10	1.86	1.33	1.17	2.83	5.67	3.39	1.53	.47	.44	1.36
CAL YR 1974	TOTAL	530229	MEAN	1453	MAX	12700	MIN	232	CFSM	2.11	IN	28.59
WTR YR 1975	TOTAL	435229	MEAN	1192	MAX	10700	MIN	139	CFSM	1.73	IN	23.46

CONNECTICUT RIVER BASIN

01144500 CONNECTICUT RIVER AT WHITE RIVER JUNCTION, VT.

LOCATION.--Lat 43°38'49", long 72°18'53", Windsor County, on right bank 50 ft (15 m) downstream from railroad bridge at White River Junction, 500 ft (150 m) downstream from White River, and at mile 215.0 (345.9 km).

DRAINAGE AREA.--4,092 mi² (10,598 km²).

PERIOD OF RECORD.--Discharge: October 1911 to current year.

Chemical analyses: Water year 1954 (partial-record station).

Water temperatures: Water year 1954 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 321.52 ft (97.999 m) above mean sea level. Prior to June 16, 1918, nonrecording gage on downstream side of pier of railroad bridge 50 ft (15 m) upstream at same datum. June 16, 1918, to Nov. 2, 1930, nonrecording gage at various locations on upstream and downstream sides of railroad bridge at same datum.

REVISIONS (WATER YEARS).--WSP 741: 1932 (adjusted monthly and yearly figures only). WSP 781: 1928(M). WSP 891: Drainage area. WSP 1301: 1922-26(M).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated by power-plants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs, Union Village Reservoir (see p.110), and other reservoirs (combined usable capacity, about 17,200,000,000 ft³ or 487,000,000 m³).

AVERAGE DISCHARGE.--64 years, 7,099 ft³/s (201.0 m³/s), 23.56 in/yr (598 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 136,000 ft³/s (3,850 m³/s) Nov. 4, 1927 (gage height, 35.0 ft or 10.67 m, present site), from rating curve extended above 70,000 ft³/s (1,980 m³/s); minimum daily, 82 ft³/s (2.32 m³/s) Aug. 8, 1965.

Stage and discharge of the flood of Nov. 4, 1927, are the greatest since at least 1760.

Current year: Peak discharges above base of 34,000 ft³/s (963 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	0515	*42,000 1,190	*17.18 5.236				

Minimum daily discharge, 410 ft³/s (11.6 m³/s) July 11.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	7610	4440	3420	2360	3100	5930	8140	16100	4950	1250	3430	954		
2	7110	1270	5480	4110	2500	3350	7870	21300	8800	2010	685	1690		
3	6910	706	7160	4930	5100	7900	8550	25600	6740	2190	687	2230		
4	6060	4710	8140	3410	5000	6770	9880	26100	6200	740	4610	2460		
5	4460	6500	6270	3440	4900	5840	8200	25700	5680	1240	3000	2170		
6	1350	5760	6060	4220	5000	5450	5030	23800	8450	1170	1810	1950		
7	3900	6360	4890	4400	3200	5640	6810	22400	10300	3370	1710	1400		
8	4030	5890	5730	4540	2300	4220	7170	21000	9680	1870	3490	2660		
9	3330	4580	12900	5270	750	2840	6240	16600	9280	777	4140	2740		
10	3300	2880	13400	5760	5500	6600	6320	14300	7580	474	714	1990		
11	3190	5360	10700	5390	4600	4870	6600	7800	6550	410	1480	1900		
12	1980	5460	8970	5250	3900	5500	6740	10700	6380	1560	1410	1350		
13	1360	6020	10300	7050	3800	5810	3470	12600	7420	4240	2160	1420		
14	2210	6920	9670	7050	3100	6420	8360	13200	9280	1980	1810	1150		
15	3980	7000	5760	5190	2100	3400	8550	13000	6520	4760	1030	3800		
16	6410	6720	6940	6220	1650	1950	10300	12600	9090	4750	1080	3500		
17	6840	3180	8510	5740	1400	5430	11500	9940	7650	4530	875	2600		
18	5940	6660	6650	2230	4100	5750	15500	6860	7020	4990	1880	4200		
19	2200	6790	5960	839	4800	6360	23800	8770	5650	1580	878	4000		
20	3590	6270	5790	4500	3900	11400	40100	10700	5300	1310	834	5500		
21	4970	9930	4910	5600	3600	24400	35800	9060	2670	3250	874	4600		
22	3780	13300	3330	3400	2100	17100	29700	9010	1710	3240	797	4500		
23	3940	7010	4940	2500	2740	14500	25300	9950	4970	4260	1270	5700		
24	4410	6900	5400	4400	6810	13900	25100	7290	4580	3200	976	5800		
25	4540	8150	4170	2900	8800	16800	30400	4020	2550	3150	1160	5400		
26	2630	9890	6720	2700	9460	18500	29700	2950	2230	2440	1270	5000		
27	1710	10800	6460	4000	7860	14900	24700	4690	1690	1010	5160	15500		
28	3510	9140	3160	3800	7740	13300	16900	6640	1350	2670	1420	16500		
29	3880	6260	1780	3600	---	12100	15600	6990	898	1950	891	13000		
30	3860	4880	6750	3700	---	8260	15800	4240	1870	1730	3450	12500		
31	3910	---	4320	4200	---	8410	---	5080	---	2740	1580	---		
TOTAL	126900	189736	204640	132699	119810	273600	458130	388990	173038	74841	56561	138164		
MEAN	4094	6325	6601	4281	4279	8826	15270	12550	5768	2414	1825	4605		
MAX	7610	13300	13400	7050	9460	24400	40100	26100	10300	4990	5160	16500		
MIN	1350	706	1780	839	750	1950	3470	2950	898	410	685	954		
MEAN†	3833	6463	6248	3583	3128	7445	16390	14940	5786	2562	1800	4868		
CFSM†	.94	1.58	1.53	.88	.76	1.82	4.01	3.65	1.41	.63	.44	1.19		
IN.†	1.08	1.76	1.76	1.01	.80	2.10	4.47	4.21	1.58	.72	.51	1.33		
CAL YR 1974	TOTAL	3265228	MEAN	8946	MAX	39600	MIN	706	MEAN†	8877	CFSM†	2.17	IN†	29.45
WTR YR 1975	TOTAL	2337109	MEAN	6403	MAX	40100	MIN	410	MEAN†	6426	CFSM†	1.57	IN†	21.32

† Adjusted for change in contents in First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs, and Union Village Reservoir.

NOTE.--No gage-height record Sept. 16-30.

CONNECTICUT RIVER BASIN

81

01145000 MASCOMA RIVER AT WEST CANAAN, N.H.

LOCATION.--Lat 43°39'00", long 72°04'50", Grafton County, 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 (kilometre 31.1).

DRAINAGE AREA.--80.5 mi² (208.5 km²).

PERIOD OF RECORD.--Discharge: July 1939 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 835 ft (254.5 m) from topographic map.

REVISIONS (WATER YEARS).--WSP 1901: 1960.

REMARKS.--Records good except those for winter period, which are fair.

AVERAGE DISCHARGE.--36 years, 116 ft³/s (3.285 m³/s), 19.57 in/yr (497 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 3,780 ft³/s (107 m³/s) Mar. 27, 1953 (gage height, 8.94 ft or 2.725 m), from rating curve extended above 1,900 ft³/s (53.8 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.
Flood in September 1938 reached a stage of 9.6 ft (2.93 m), from floodmarks (discharge, 4,310 ft³/s or 122 m³/s, from rating curve extended above 1,900 ft³/s or 53.8 m³/s as explained above).

Current year: Peak discharges above base of 950 ft³/s (26.9 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	0800	*1,200 34.0	5.24 1.597				

Minimum discharge, 7.7 ft³/s (0.22 m³/s) Aug. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	48	85	50	65	133	105	425	60	15	18	27
2	92	42	92	48	58	102	78	454	62	13	16	20
3	123	38	134	45	50	87	110	404	48	12	14	25
4	98	44	125	43	45	76	150	377	47	11	13	22
5	77	92	143	40	40	69	150	338	49	10	14	18
6	67	184	131	38	40	66	125	298	125	9.1	13	15
7	58	128	86	40	43	61	98	248	168	16	16	20
8	50	93	80	43	42	62	77	214	120	12	58	17
9	44	78	308	46	40	58	95	187	82	11	44	32
10	42	69	235	50	38	55	78	161	63	22	27	28
11	36	64	157	60	36	53	105	143	49	18	21	19
12	33	60	126	80	34	50	120	128	51	18	17	16
13	29	98	110	100	33	51	110	183	288	157	17	27
14	29	125	100	90	32	52	115	162	303	295	15	24
15	29	114	85	70	32	50	150	128	176	235	13	20
16	35	114	75	60	32	50	195	118	125	174	12	17
17	88	92	85	50	32	51	295	108	104	102	11	16
18	81	83	96	46	32	53	475	93	83	67	10	16
19	62	87	88	43	33	61	705	83	73	48	9.4	16
20	51	84	81	41	34	273	1140	74	60	38	8.3	47
21	47	329	77	40	34	664	780	66	47	54	7.7	76
22	44	461	75	39	34	458	530	64	39	72	8.0	61
23	42	210	69	38	40	329	472	62	34	49	9.1	51
24	41	159	65	38	63	225	619	56	30	35	8.8	73
25	38	159	60	38	239	255	784	42	26	86	15	87
26	37	150	55	80	359	360	776	37	22	64	14	78
27	37	130	50	110	290	270	608	36	19	40	13	280
28	35	115	54	90	195	230	458	37	17	33	11	206
29	33	100	52	82	---	200	347	30	16	28	9.4	100
30	33	90	55	75	---	160	362	26	17	24	57	75
31	38	---	52	70	---	130	---	36	---	20	47	---
TOTAL	1674	3645	3086	1783	2045	4794	10212	4818	2403	1788.1	566.7	1529
MEAN	54.0	122	99.5	57.5	73.0	155	340	155	80.1	57.7	18.3	51.0
MAX	125	461	308	110	359	664	1140	454	303	295	58	280
MIN	29	38	50	38	32	50	77	26	16	9.1	7.7	15
CFSM	.67	1.52	1.24	.71	.91	1.93	4.22	1.93	1.00	.72	.23	.63
IN.	.77	1.68	1.43	.82	.95	2.22	4.72	2.23	1.11	.83	.26	.71
CAL YR 1974	TOTAL	44783.1	MEAN 123	MAX 1010	MIN 5.9	CFSM 1.53	IN 20.69					
WTR YR 1975	TOTAL	38343.8	MEAN 105	MAX 1140	MIN 7.7	CFSM 1.30	IN 17.72					

CONNECTICUT RIVER BASIN

01150500 MASCOMA RIVER AT MASCOMA, N.H.

LOCATION.--Lat 43°39'01", long 72°11'05", Grafton County, 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 mi² (396 km²).

PERIOD OF RECORD.--Discharge: August 1923 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 740 ft (226 m) from topographic map.

REVISIONS (WATER YEARS).--WSP 726: Drainage area. WSP 801: 1925(M).

REMARKS.--Records excellent. Flow regulated by Mascoma and Crystal Lakes and Goose and Grafton Ponds (see p.110).

AVERAGE DISCHARGE.--52 years, 213 ft³/s (6.032 m³/s), 18.91 in/yr (480 mm/yr), adjusted for storage since October 1928.

EXTREMES.--Period of record: Maximum discharge, 5,840 ft³/s (165 m³/s) Mar. 19, 1936 (gage height, 7.50 ft or 2.286 m), from rating curve extended above 2,500 ft³/s (70.8 m³/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 ft³/s (0.06 m³/s) Feb. 3, 1939, Sept. 1, 1940.

Current year: Maximum discharge, 1,370 ft³/s (38.8 m³/s) Apr. 21 (gage height, 3.62 ft or 1.103 m); minimum daily, 28 ft³/s (0.79 m³/s) Aug. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	342	183	201	137	137	117	415	752	85	58	56	31
2	358	181	191	137	135	118	354	674	87	58	56	31
3	320	176	188	137	133	118	302	596	69	58	56	31
4	259	174	188	137	131	118	313	590	45	58	54	32
5	216	174	183	137	130	118	320	510	50	58	54	32
6	211	176	176	137	130	120	320	412	62	58	54	32
7	201	178	172	137	128	120	316	416	185	58	54	31
8	191	181	172	137	128	120	313	408	285	58	55	31
9	181	181	201	137	94	118	306	281	185	58	59	30
10	160	178	203	137	84	118	299	153	100	60	62	31
11	130	176	224	137	99	118	295	153	102	62	63	31
12	130	174	227	137	110	117	295	155	161	62	62	31
13	130	172	227	143	115	117	295	139	372	72	60	31
14	128	172	222	152	112	117	295	127	449	198	58	32
15	126	174	216	158	113	117	227	145	436	334	56	32
16	128	174	208	160	112	115	131	155	320	358	55	32
17	186	176	208	158	112	117	147	161	153	495	55	48
18	256	174	203	152	110	124	415	163	155	393	54	64
19	244	174	198	147	110	580	808	159	157	163	54	64
20	230	174	196	143	108	646	1050	153	124	161	48	64
21	222	188	191	141	108	658	1330	147	65	159	38	64
22	219	274	186	137	106	640	1170	139	67	135	38	71
23	216	350	183	137	106	625	1050	133	58	85	36	118
24	213	342	181	135	106	610	980	129	48	62	33	155
25	208	316	178	135	106	598	992	120	49	58	32	165
26	206	295	176	135	110	592	1050	112	50	53	30	278
27	203	280	158	135	112	598	1100	98	53	55	30	376
28	198	259	137	137	115	562	1040	87	54	55	30	400
29	196	238	137	137	---	526	938	85	56	55	29	379
30	191	219	137	137	---	490	824	82	58	56	28	334
31	186	---	137	137	---	455	---	82	---	56	29	---
TOTAL	6385	6283	5805	4360	3200	9707	17690	7516	4140	3709	1478	3081
MEAN	206	209	187	141	114	313	590	242	138	120	47.7	103
MAX	358	350	227	160	137	658	1330	752	449	495	63	400
MIN	126	172	137	135	84	115	131	82	45	53	28	30
MEAN†	96.4	230	181	125	111	353	669	289	137	93.0	35.3	101
CFSM†	.63	1.50	1.18	.82	.73	2.31	4.37	1.89	.90	.61	.23	.66
IN.†	.73	1.68	1.37	.95	.75	2.66	4.88	2.18	1.00	.70	.27	.73
CAL YR 1974 TOTAL	89200											
WTR YR 1975 TOTAL	73354											
MEAN 244												
MEAN 201												
MAX 1390												
MAX 1330												
MIN 39												
MIN 28												
MEAN† 238												
MEAN† 202												
CFSM† 1.56												
CFSM† 1.32												
IN† 21.10												
IN† 17.89												

† Adjusted for change in contents in Mascoma and Crystal Lakes and Goose and Grafton Ponds.

CONNECTICUT RIVER BASIN

83

01151500 OTTAUQUECHEE RIVER AT NORTH HARTLAND, VT.

LOCATION.--Lat 43°36'09", long 72°21'17", Windsor County, 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.

Chemical analyses: Water years 1954-55 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 336.77 ft (102.647 m) above mean sea level (levels by Corps of Engineers).

REMARKS.--Records excellent except those for period of doubtful gage-height record, which are poor. Flow regulated by powerplants above station and by North Hartland Reservoir (see p. 110) since March 1961; greater regulation by powerplants prior to 1958. Small seasonal storage in reservoir at Plymouth.

AVERAGE DISCHARGE.--45 years, 388 ft³/s (10.99 m³/s), 23.84 in/yr (606 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 24,400 ft³/s (691 m³/s) Sept. 21, 1938 (gage height, 17.68 ft or 5.389 m), from rating curve extended above 6,200 ft³/s (176 m³/s) on basis of computations of flow over dams at gage heights 15.58, 17.68, and 21.5 ft (4.749, 5.389, and 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, 5,930 ft³/s (168 m³/s) Apr. 26, 1969 (gage height, 8.52 ft or 2.597 m). Maximum stage since at least 1760, 21.5 ft (6.55 m) in November 1927, from floodmarks (discharge, 30,400 ft³/s or 861 m³/s, by computation of peak flow over dam). Current year: Maximum discharge, 3,860 ft³/s (109 m³/s) Apr. 20 (gage height, 7.17 ft or 2.185 m); minimum, 9.1 ft³/s (0.26 m³/s) Aug. 22; minimum daily, 41 ft³/s (1.16 m³/s) Aug. 2-6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	391	306	257	230	496	311	505	1740	214	146	55	141
2	208	356	329	230	407	302	467	1770	268	125	41	103
3	253	345	377	160	380	262	585	1520	267	111	41	103
4	271	335	300	201	293	250	595	1480	225	98	41	138
5	259	442	199	210	253	256	560	1380	206	73	41	122
6	208	600	250	150	259	250	464	1190	430	65	41	89
7	184	592	244	219	262	242	455	1080	542	65	77	79
8	184	333	375	256	256	280	447	985	391	64	691	79
9	184	269	1010	217	240	260	415	762	301	74	569	79
10	184	245	601	214	225	253	427	733	224	120	126	107
11	184	231	458	236	215	256	451	658	209	119	115	114
12	159	221	412	391	210	250	455	580	209	85	128	90
13	148	425	387	335	205	268	455	682	451	129	145	131
14	148	443	370	289	200	302	491	446	497	172	144	140
15	173	407	341	256	200	289	570	198	383	172	105	140
16	221	359	283	244	200	265	644	210	286	152	75	139
17	331	319	316	225	198	277	865	303	286	109	56	138
18	367	309	356	185	198	280	1300	384	286	109	52	104
19	217	296	322	190	196	294	1940	384	251	77	65	95
20	210	307	310	240	196	756	3340	364	213	64	67	197
21	226	1100	289	219	199	1660	2570	354	180	64	67	365
22	191	1020	286	190	196	1210	1640	290	169	162	68	396
23	180	579	266	185	222	1060	1680	265	169	116	53	292
24	216	509	270	180	341	1020	2630	264	118	42	43	240
25	227	565	264	331	923	957	3280	237	96	83	65	444
26	226	516	170	349	992	978	2860	225	96	83	75	503
27	204	384	160	342	679	862	1960	224	94	83	75	909
28	196	386	277	286	468	712	1620	222	94	83	75	1000
29	185	383	228	289	---	700	1340	221	94	82	60	491
30	181	333	259	345	---	700	1480	186	114	82	199	176
31	181	---	206	532	---	588	---	170	---	82	270	---
TOTAL	6697	12915	10172	7926	9109	16350	36491	19507	7363	3131	3725	7144
MEAN	216	431	328	256	325	527	1216	629	245	101	120	238
MAX	391	1100	1010	532	992	1660	3340	1770	542	172	691	1000
MIN	148	221	160	150	196	242	415	170	94	64	41	79
MEAN†	215	393	329	255	325	528	1222	661	247	96.5	122	231
CFSM†	.97	1.78	1.49	1.15	1.47	2.39	5.53	2.99	1.12	.44	.55	1.05
IN.†	1.12	1.98	1.72	1.33	1.53	2.76	6.17	3.45	1.25	.50	.64	1.17
CAL YR 1974 TOTAL	158758			MEAN 435	MAX 3280	MIN 49		MEAN† 435	CFSM† 1.97	IN† 26.73		
WTR YR 1975 TOTAL	140530			MEAN 385	MAX 3340	MIN 41		MEAN† 384	CFSM† 1.74	IN† 23.62		

† Adjusted for change in contents in North Hartland Reservoir.

NOTE.--Doubtful gage-height record Jan. 25 to Apr. 14.

CONNECTICUT RIVER BASIN

01152500 SUGAR RIVER AT WEST CLAREMONT, N.H.

LOCATION.--Lat 43°23'15", long 72°21'45", Sullivan County, 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.
Chemical analyses: Water year 1954 (partial-record station).
Water temperatures: Water year 1954 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 358.78 ft (109.356 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1928, nonrecording gage at site 0.8 mi (1.3 km) upstream at different datum.

REVISIONS (WATER YEARS).--WSP 711: 1930(M). WSP 756: Drainage area. WSP 1901: 1960 (adjusted figures only).

REMARKS.--Records excellent except those for period of doubtful gage-height record, which are fair. Regulation by Sunapee Lake 25 mi (40 km) upstream (see p.110) and occasional diurnal fluctuation at low flow by mills above station; greater regulation by mills prior to 1971.

AVERAGE DISCHARGE.--47 years, 396 ft³/s (11.21 m³/s), 19.99 in/yr (508 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 14,000 ft³/s (396 m³/s) Mar. 19, 1936 (gage height, 10.92 ft or 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 and 10.92 ft (3.197 and 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.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	0230	*3,660 104	*5.70 1.737				

Minimum daily discharge, 63 ft³/s (1.78 m³/s) July 5.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248	109	197	206	334	610	762	1050	240	81	118	223
2	203	110	248	203	287	565	687	1060	211	76	107	169
3	204	106	414	170	256	530	669	1010	168	72	102	150
4	178	112	395	185	216	492	1190	947	157	68	97	134
5	154	145	231	189	213	457	1140	883	154	63	96	116
6	137	277	219	167	217	431	981	886	463	69	94	105
7	129	326	199	170	235	410	840	799	632	76	102	103
8	117	262	251	181	237	395	740	715	457	65	302	97
9	109	223	763	186	234	362	671	639	343	68	341	109
10	103	196	712	197	227	358	617	557	259	71	219	97
11	102	178	543	209	225	352	601	507	203	67	167	88
12	101	165	457	312	225	344	610	471	198	77	138	97
13	98	177	425	433	231	336	617	533	640	306	120	105
14	95	286	400	397	232	337	615	535	745	718	106	113
15	93	286	372	344	228	335	710	471	559	1310	97	108
16	106	287	324	309	241	328	870	447	490	1120	88	101
17	244	253	254	289	237	329	1100	440	422	2020	83	92
18	240	243	336	219	232	339	1600	401	357	1210	80	84
19	199	240	325	225	228	361	2150	344	306	858	75	85
20	176	240	304	251	229	969	3210	291	266	697	72	117
21	163	822	280	213	241	2030	2430	245	188	649	69	190
22	152	1190	269	211	253	1590	1830	213	173	594	71	274
23	145	728	250	215	258	1300	1580	195	155	529	73	281
24	140	569	250	207	299	1210	1840	180	124	472	71	391
25	118	517	245	213	557	1180	2380	164	104	544	76	460
26	112	510	187	352	774	1380	2170	151	94	364	78	543
27	107	424	170	479	741	1250	1740	139	87	265	78	1100
28	102	340	208	439	673	1050	1380	134	83	206	74	1130
29	100	321	223	406	---	957	1130	125	100	169	70	749
30	101	272	221	388	---	880	1040	117	89	148	335	557
31	106	---	209	372	---	824	---	140	---	131	355	---
TOTAL	4382	9914	9881	8337	8560	22291	37900	14789	8467	13163	3954	7968
MEAN	141	330	319	269	306	719	1263	477	282	425	128	266
MAX	248	1190	763	479	774	2030	3210	1060	745	2020	355	1130
MIN	93	106	170	167	213	328	601	117	83	63	69	84
MEAN†	98.0	349	345	286	280	702	1372	482	288	415	99.5	263
CFSM†	.36	1.30	1.28	1.06	1.04	2.61	5.10	1.79	1.07	1.54	.37	.98
IN.†	.42	1.45	1.48	1.23	1.08	3.01	5.69	2.06	1.19	1.78	.43	1.09

CAL YR 1974	TOTAL	153206	MEAN 420	MAX 2930	MIN 55	MEAN† 413	CFSM† 1.54	IN† 20.84
WTR YR 1975	TOTAL	149606	MEAN 410	MAX 3210	MIN 63	MEAN† 414	CFSM† 1.54	IN† 20.91

† Adjusted for change in contents in Sunapee Lake.

NOTE.--Doubtful gage-height record Mar. 21 to Apr. 18.

CONNECTICUT RIVER BASIN

85

01153000 BLACK RIVER AT NORTH SPRINGFIELD, VT.

LOCATION.--Lat 43°20'00", long 72°30'55", Windsor County, 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.--October 1929 to current year. October 1929 monthly discharge only, published in WSP 1301.

Chemical analyses: Water years 1954-55 (partial-record station).
Water temperatures: Water years 1954-55 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 445.79 ft (135.877 m) above mean sea level (levels by Corps of Engineers).

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 781: 1931(M), 1934(M).

REMARKS.--Records excellent. Flow regulated by mills above station and by North Springfield Reservoir (see p. 110) since November 1960. High flow slightly affected by retarding reservoirs since 1968.

AVERAGE DISCHARGE.--46 years, 281 ft³/s (7.958 m³/s), 24.15 in/yr (613 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 15,500 ft³/s (439 m³/s) Sept. 22, 1938 (gage height, 17.68 ft or 5.389 m), from rating curve extended above 3,200 ft³/s (90.6 m³/s) on basis of computations of flow over dams at gage heights 16.41 and 17.68 ft (5.002 and 5.389 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Nov. 13, 1973. Maximum discharge since construction of North Springfield Dam in 1960, 3,550 ft³/s (101 m³/s) Apr. 11, 1962 (gage height, 6.43 ft or 1.960 m); maximum gage height, 7.23 ft (2.204 m) June 30, 1973.
Current year: Maximum discharge, 2,460 ft³/s (69.7 m³/s) Apr. 25 (gage height, 5.71 ft or 1.740 m); minimum daily, 38 ft³/s (1.08 m³/s) July 7.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	354	92	197	160	269	319	364	1130	242	82	42	191
2	261	95	205	177	226	325	339	1180	216	62	48	140
3	214	96	222	143	194	237	340	1060	161	55	42	126
4	168	95	201	119	180	224	505	1060	165	49	64	119
5	148	136	155	131	162	208	408	1050	198	51	75	105
6	141	264	156	124	182	203	353	874	438	48	66	90
7	130	252	161	117	207	213	327	755	525	38	72	79
8	120	210	156	122	180	207	307	643	369	46	1190	80
9	125	187	538	149	160	184	285	502	316	62	595	154
10	126	148	716	146	150	175	273	457	235	100	305	140
11	111	144	637	172	140	175	306	369	148	77	202	118
12	107	147	333	238	140	177	328	364	183	57	139	115
13	105	288	261	289	140	177	328	387	342	274	120	210
14	98	353	262	289	140	209	324	391	396	255	94	154
15	100	320	242	230	140	212	382	338	340	189	86	207
16	152	285	216	196	134	190	466	309	264	158	71	143
17	278	245	189	199	132	183	727	310	238	145	66	103
18	233	231	222	155	132	199	1080	238	201	126	64	98
19	149	206	234	138	150	222	1290	239	158	82	57	118
20	136	222	196	160	148	1040	1580	214	148	85	52	237
21	129	1140	189	160	140	1590	1980	182	136	133	47	364
22	119	886	193	144	140	1300	1940	141	117	103	54	325
23	118	513	193	135	139	1330	1500	144	102	82	61	268
24	108	395	191	137	251	998	1670	126	89	71	53	321
25	108	377	181	146	453	790	2170	112	88	122	54	501
26	106	366	161	238	789	952	2340	107	74	124	56	683
27	103	263	127	253	631	632	1670	102	67	106	55	1450
28	94	267	134	328	361	518	1050	92	66	67	50	774
29	95	255	152	310	---	486	905	87	69	59	47	464
30	106	229	182	292	---	439	928	79	90	62	295	364
31	77	---	170	293	---	403	---	100	---	49	272	---
TOTAL	4419	8707	7372	5890	6210	14517	26505	13142	6181	3019	4494	8241
MEAN	143	290	238	190	222	468	884	424	206	97.4	145	275
MAX	354	1140	716	328	789	1590	2340	1180	525	274	1190	1450
MIN	77	92	127	117	132	175	273	79	66	38	42	79
MEAN†	139	291	239	190	219	469	885	422	205	96.9	147	274
CFSM†	.88	1.84	1.51	1.20	1.39	2.97	5.60	2.67	1.30	.61	.93	1.73
IN.†	1.01	2.06	1.75	1.39	1.44	3.42	6.25	3.08	1.45	.71	1.07	1.93
CAL YR 1974	TOTAL	112022	MEAN 307	MAX 1980	MIN 25	MEAN† 307	CFSM† 1.94	IN† 26.39				
WTR YR 1975	TOTAL	108697	MEAN 298	MAX 2340	MIN 38	MEAN† 298	CFSM† 1.89	IN† 25.57				

CONNECTICUT RIVER BASIN

01153500 WILLIAMS RIVER AT BROCKWAYS MILLS, VT.

LOCATION.--Lat 43°12'31", long 72°31'05", Windham County, 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.

Chemical analyses: Water years 1957, 1971-74 (partial-record station).

Water temperatures: Water years 1957, 1967-69, 1971-74 (partial-record station).

Sediment records: Water years 1967-74 (partial-record station).

GAGE.--Water-stage recorder. Altitude of gage is 430 ft (131 m) from topographic map.

REVISIONS (WATER YEARS).--WSP 1031: 1943-44(P). WSP 1301: 1941-42(M).

REMARKS.--Records good except those for winter period, which are fair.

AVERAGE DISCHARGE.--35 years, 168 ft³/s (4.758 m³/s), 22.15 in/yr (563 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 8,910 ft³/s (252 m³/s) June 1, 1952 (gage height, 13.39 ft or 4.081 m), from rating curve extended above 3,300 ft³/s (93.5 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.

Flood in September 1938 had greatest discharge since at least 1753 (gage height, 22.7 ft or 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.

Current year: Peak discharges above base of 2,600 ft³/s (73.6 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 20	1730	2,980 84.4	7.46 2.274	May 31	2400	*4,190 119	*8.87 2.704

Minimum discharge, 25 ft³/s (0.71 m³/s) Aug. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEH	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	39	89	106	270	221	246	481	1140	83	46	128
2	96	36	135	97	220	186	241	447	305	60	44	101
3	78	35	115	92	195	165	288	394	205	52	40	110
4	67	41	88	88	175	140	391	377	253	45	40	76
5	58	79	78	84	160	128	288	422	209	41	43	57
6	52	154	125	82	175	135	251	316	1000	37	37	54
7	46	97	108	82	150	141	224	269	610	34	179	54
8	42	75	358	82	135	139	205	231	351	33	1310	45
9	39	65	523	81	120	91	196	205	248	67	351	56
10	38	58	237	85	110	122	200	187	198	115	176	44
11	36	55	175	109	100	132	231	172	164	71	132	40
12	35	54	153	260	96	111	251	160	246	57	115	63
13	34	216	143	220	93	150	253	264	474	745	93	86
14	33	163	141	175	90	154	253	241	302	386	71	56
15	37	150	122	140	90	127	322	183	221	419	54	44
16	59	123	113	110	89	118	416	214	194	243	47	39
17	139	107	118	105	87	127	673	181	176	179	44	39
18	90	102	142	100	86	139	801	154	151	128	45	40
19	64	95	123	110	86	156	1490	141	133	98	37	67
20	56	124	116	100	90	1840	1590	128	126	95	29	187
21	50	808	111	96	84	1170	997	112	107	266	27	307
22	46	381	110	92	85	586	704	99	93	168	41	160
23	45	224	104	88	94	539	768	95	82	110	34	174
24	43	191	103	85	210	528	1200	83	71	86	31	243
25	41	191	105	90	820	626	1140	74	64	368	35	434
26	41	158	74	500	622	647	880	68	59	156	47	602
27	39	119	99	340	366	400	647	67	58	109	42	1140
28	37	134	145	270	260	348	513	88	57	86	32	438
29	36	117	125	250	---	322	441	62	99	68	29	293
30	36	106	120	450	---	293	460	54	215	57	543	231
31	38	---	115	340	---	266	---	264	---	50	233	---
TOTAL	1680	4297	4413	4909	5158	10247	16560	6233	7611	4512	4027	5408
MEAN	54.2	143	142	158	184	331	552	201	254	146	130	180
MAX	139	808	523	500	820	1840	1590	481	1140	745	1310	1140
MIN	33	35	74	81	84	91	196	54	57	33	27	39
CFSM	.53	1.39	1.38	1.53	1.79	3.21	5.36	1.95	2.47	1.42	1.26	1.75
IN.	.61	1.55	1.59	1.77	1.86	3.70	5.98	2.25	2.75	1.63	1.45	1.95

CAL YR 1974	TOTAL	67500	MEAN 185	MAX 2140	MIN 10	CFSM 1.80	IN 24.38
WTR YR 1975	TOTAL	75055	MEAN 206	MAX 1840	MIN 27	CFSM 2.00	IN 27.11

01154000 SAXTONS RIVER AT SAXTONS RIVER, VT.

LOCATION.--Lat 43°08'14", long 72°29'17", Windham County, 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.

Chemical analyses: Water year 1957 (partial-record station).

Water temperatures: Water year 1957 (partial-record station).

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

REVISIONS (WATER YEARS).--WSP 1301: 1948-49(M).

REMARKS.--Records good except those for January and February, which are fair. Occasional diurnal fluctuation at low flow prior to 1962; fluctuation more frequent prior to 1946.

AVERAGE DISCHARGE.--35 years, 117 ft³/s (3.313 m³/s), 22.01 in/yr (559 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 7,510 ft³/s (213 m³/s) June 30, 1973 (gage height, 13.26 ft or 4.042 m), from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurements at gage heights 10.51, 11.37, and 13.26 ft (3.203, 3.466, and 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.

Maximum stage since at least 1869, 17.9 ft (5.46 m) in September 1938, from floodmarks (discharge not determined).

Current year: Peak discharges above base of 1,750 ft³/s (49.6 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 24	2130	-	†*7.71 2.350	Mar. 20	1530	*2,050	58.1 7.43 2.265

† Ice jam.

Minimum discharge, 16 ft³/s (0.45 m³/s) Aug. 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	34	68	67	189	153	168	285	207	54	30	92
2	52	30	80	64	154	139	168	272	94	40	26	69
3	44	27	74	60	135	127	294	249	71	35	20	71
4	39	31	61	57	120	110	395	244	104	31	20	56
5	35	50	68	55	110	102	235	275	94	27	27	44
6	32	87	91	54	120	103	198	213	404	23	24	42
7	30	66	79	55	105	100	177	182	292	21	52	40
8	26	56	230	56	92	98	155	160	174	19	534	34
9	24	50	261	56	82	74	143	144	126	34	235	36
10	24	46	143	62	75	81	147	132	103	57	121	30
11	22	44	111	73	70	89	170	121	85	33	94	27
12	21	42	99	150	66	81	182	115	167	27	83	44
13	21	121	93	137	63	107	177	209	366	452	71	67
14	21	103	91	116	62	108	179	176	244	442	62	45
15	22	93	81	94	61	93	225	139	167	452	54	36
16	36	80	75	75	60	87	288	155	139	237	35	31
17	75	70	89	69	60	93	466	137	127	146	29	30
18	53	67	89	64	60	102	541	115	109	100	29	30
19	42	63	80	72	59	114	937	104	94	76	24	39
20	39	68	76	68	61	1400	928	93	85	88	20	116
21	35	364	74	64	56	840	623	81	72	148	18	228
22	34	221	72	60	54	432	434	72	63	112	22	134
23	33	137	70	58	60	388	444	65	56	88	21	165
24	30	116	69	56	115	377	700	59	48	75	18	224
25	29	113	70	60	470	447	670	51	41	149	22	438
26	29	91	59	370	335	462	513	50	37	86	54	586
27	27	77	65	228	217	288	383	49	32	65	44	1040
28	26	81	89	170	182	243	315	51	31	62	27	414
29	24	75	76	174	---	220	277	40	89	52	21	272
30	24	75	76	318	---	207	280	37	126	37	391	202
31	32	---	69	221	---	186	---	52	---	34	162	---
TOTAL	1037	2578	2828	3283	3293	7451	10812	4127	3847	3302	2390	4682
MEAN	33.5	85.9	91.2	106	118	240	360	133	128	107	77.1	156
MAX	75	364	261	370	470	1400	937	285	404	452	534	1040
MIN	21	27	59	54	54	74	143	37	31	19	18	27
CFSM	.46	1.19	1.26	1.47	1.63	3.32	4.99	1.84	1.77	1.48	1.07	2.16
IN.	.53	1.33	1.46	1.69	1.70	3.84	5.57	2.13	1.98	1.70	1.23	2.41

CAL YR 1974	TOTAL	43103.0	MEAN 118	MAX 1270	MIN	4.1	CFSM 1.63	IN 22.21
WTR YR 1975	TOTAL	49630.0	MEAN 136	MAX 1400	MIN	18	CFSM 1.88	IN 25.57

CONNECTICUT RIVER BASIN

01154500 CONNECTICUT RIVER AT NORTH WALPOLE, N.H.

LOCATION.--Lat 43°07'34", long 72°26'14", Cheshire County, 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, N.H., 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.

Chemical analyses: Water years 1954-55, 1971 (partial-record station).

Water temperatures: Water year 1954 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 218.63 ft (66.638 m) above mean sea level.

REMARKS.--Records excellent except those for winter period and period of no gage-height record, which are good.

Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs (see p. 110), and other reservoirs (combined usable capacity, about 24,800,000,000 ft³ or 702,000,000 m³).

AVERAGE DISCHARGE.--33 years, 9,195 ft³/s (260.4 m³/s), 22.73 in/yr (577 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 97,000 ft³/s (2,750 m³/s) Mar. 27, 1953 (gage height, 30.37 ft or 9.257 m); minimum daily, 115 ft³/s (3.26 m³/s) Aug. 31, 1952, Sept. 2, 1957.

Maximum stage since at least 1750, 43.8 ft (13.35 m) Mar. 19, 1936, from floodmarks.

Current year: Peak discharges above base of 44,000 ft³/s (1,250 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	-	*53,200 1,510	†*20.90 6.370				

† From peak-stage indicator.

Minimum daily discharge, 1,420 ft³/s (40.2 m³/s) July 6, Aug. 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	11800	5450	4740	3510	5370	9060	12400	22200	8740	1890	3300	1620		
2	9210	2900	7000	5200	4140	6190	12000	26400	8050	2280	1440	1510		
3	7880	1490	8290	5350	5860	8720	13800	30600	10100	3100	1420	2080		
4	8990	5870	10100	5040	6650	9460	16100	31300	7050	1430	4120	3420		
5	6500	6450	9510	4100	7140	8740	14700	31300	6820	1430	3580	3230		
6	2980	6440	7830	5310	8020	7350	11200	29300	9470	1420	2210	2710		
7	5010	9270	6760	5060	6750	8370	9150	26800	13900	2960	2600	1490		
8	4800	7460	6590	6210	4110	6310	10800	24600	13200	1690	7090	3750		
9	5340	6000	13500	6660	1590	4490	9920	21700	11900	1430	8600	2650		
10	4520	4810	18800	6930	6200	5960	9550	18000	9370	1460	2480	1920		
11	4480	6550	14600	7330	5800	8350	9910	12600	8480	1440	2630	1950		
12	3130	6590	12800	7700	5000	7070	9950	11200	7750	1460	1650	3880		
13	2220	7400	12300	9060	5400	7140	9820	14100	10600	6910	1940	2190		
14	2410	7010	12600	9150	4600	8230	8160	16800	11600	7300	2530	1550		
15	4420	6900	10100	8240	4500	6810	12000	14900	11300	8870	1470	3870		
16	7100	9570	8450	7810	2800	3380	13500	14800	8730	7320	1440	4570		
17	8550	6600	9750	7710	1900	6310	17500	13200	11100	7800	1450	3600		
18	8050	7080	10700	3000	5600	6720	24000	9630	8450	7220	1460	4950		
19	4950	7770	8220	2100	5200	7950	35000	9220	6900	3650	1440	4920		
20	4210	9130	7780	5200	6400	17700	51000	10800	6450	2250	1450	5690		
21	7240	12300	7090	5600	5880	34100	50000	11600	4840	6000	1450	6230		
22	5600	20400	5290	4100	4150	29900	41800	9530	2080	4920	1450	6800		
23	4150	14300	6890	4200	3560	23000	35700	11100	4180	5720	1440	9010		
24	4750	8830	7080	4700	6530	23400	34600	8630	5760	3820	1430	7200		
25	5260	11000	5690	5550	11900	23600	41100	6910	3450	5690	1450	9830		
26	3230	12000	7260	5860	13800	27800	42000	4240	2890	3300	1480	9130		
27	2770	13600	8110	7420	13400	21900	35500	4230	2250	2510	4430	19700		
28	4080	12700	5870	6540	10900	18900	26000	6670	1730	2910	1980	22400		
29	4560	10600	2860	6800	---	18200	22100	7430	1680	1850	1970	18600		
30	4490	7840	6800	6180	---	13600	21900	5240	1990	2010	5530	15400		
31	4390	---	7340	6430	---	12600	---	5510	---	3050	5810	---		
TOTAL	167070	254310	270700	184050	173150	401310	661160	470540	220810	115090	82720	185850		
MEAN	5389	8477	8732	5937	6184	12950	22040	15180	7360	3713	2668	6195		
MAX	11800	20400	18800	9150	13800	34100	51000	31300	13900	8870	8600	22400		
MIN	2220	1490	2860	2100	1590	3380	8160	4230	1680	1420	1420	1490		
MEAN†	4971	8619	8402	5241	5000	11590	23360	17650	7383	3819	2608	6445		
CFSM†	.90	1.57	1.53	.95	.91	2.11	4.25	3.21	1.34	.70	.47	1.17		
IN.†	1.04	1.75	1.76	1.10	.95	2.43	4.75	3.70	1.50	.80	.55	1.31		
CAL YR 1974	TOTAL	4263270	MEAN	11680	MAX	55000	MIN	1440	MEAN†	11600	CFSM†	2.11	IN†	28.67
WTR YR 1975	TOTAL	3186760	MEAN	8731	MAX	51000	MIN	1420	MEAN†	8758	CFSM†	1.59	IN†	21.65

† Adjusted for change in contents in all reservoirs from First Connecticut and Second Connecticut Lakes to North Springfield Reservoir on Black River listed on page 110.

NOTE.--No gage-height record Apr. 15-21.

CONNECTICUT RIVER BASIN

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01155000 COLD RIVER AT DREWSVILLE, N.H.

LOCATION.--Lat 43°07'54", long 72°23'23", Cheshire County, 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 current year.
Chemical analyses: Water year 1957 (partial-record station).
Water temperatures: Water year 1957 (partial-record station).

GAGE.--Water-stage recorder. Altitude of gage is 375 ft (114 m) from topographic map.

REVISIONS (WATER YEARS).--WSP 1431: 1952(P). WRD Mass., N.H., R.I., Vt., 1973: 1951(M), 1969(M).

REMARKS.--Records excellent except those for winter period, which are fair. Occasional diurnal fluctuation at low flow caused by sawmill above station; fluctuation more frequent prior to 1945.

AVERAGE DISCHARGE.--35 years, 116 ft³/s (3.285 m³/s), 19.05 in/yr (484 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 6,710 ft³/s (190 m³/s) Dec. 21, 1973 (gage height, 12.30 ft or 3.749 m), from rating curve extended above 3,400 ft³/s (96.3 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.

Current year: Peak discharges above base of 1,100 ft³/s (31.2 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 20	1900	1,130 32.0	5.95 1.814	July 14	1745	*2,850 80.7	*7.76 2.365
Apr. 19	2130	1,390 39.4	6.28 1.914				

Minimum discharge, 12 ft³/s (0.34 m³/s) July 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	35	61	63	132	188	193	219	104	20	25	55
2	56	33	111	60	115	164	182	212	71	18	22	43
3	52	31	196	51	98	147	331	202	51	16	22	45
4	44	33	144	60	85	130	695	189	57	15	25	37
5	38	48	87	53	76	117	422	192	56	14	23	30
6	34	98	73	47	78	112	324	171	178	14	21	29
7	31	72	72	48	74	108	265	154	205	13	39	29
8	29	59	146	49	70	108	233	140	182	13	167	25
9	26	53	288	51	66	87	210	125	130	17	111	28
10	25	48	221	58	62	92	203	114	92	26	64	24
11	24	45	175	100	58	91	216	104	68	17	48	21
12	23	44	153	220	55	81	225	97	79	24	48	25
13	22	56	158	180	53	97	221	144	324	258	54	41
14	21	62	143	150	52	102	212	126	263	810	38	33
15	21	67	126	110	51	92	252	104	185	651	29	33
16	31	64	109	114	50	90	297	102	137	347	25	29
17	91	58	123	88	52	93	399	94	110	311	23	27
18	66	56	119	66	56	104	560	80	82	186	22	26
19	52	53	103	108	58	125	1020	71	66	117	20	27
20	47	56	94	90	58	651	996	64	57	96	18	44
21	42	352	88	70	59	762	646	56	48	87	17	86
22	38	352	87	67	58	447	429	50	42	67	25	64
23	36	218	78	62	60	374	383	46	37	54	24	109
24	33	175	78	66	128	357	518	42	33	46	20	143
25	32	163	72	75	357	432	630	37	29	103	24	224
26	31	151	59	301	336	447	475	34	25	96	29	267
27	30	112	51	237	252	316	366	35	23	65	26	706
28	28	100	63	171	212	263	299	42	21	50	21	339
29	27	98	60	153	---	238	256	38	24	37	18	218
30	26	75	69	202	---	235	231	38	22	31	175	156
31	33	---	60	158	---	218	---	35	---	28	97	---
TOTAL	1140	2867	3467	3328	2861	6868	11689	3157	2801	3647	1320	2963
MEAN	36.8	95.6	112	107	102	222	390	102	93.4	118	42.6	98.8
MAX	91	352	288	301	357	762	1020	219	324	810	175	706
MIN	21	31	51	47	50	81	182	34	21	13	17	21
CFSM	.44	1.16	1.35	1.29	1.23	2.68	4.72	1.23	1.13	1.43	.52	1.19
IN.	.51	1.29	1.56	1.50	1.29	3.09	5.26	1.42	1.26	1.64	.59	1.33

CAL YR 1974	TOTAL	43800.3	MEAN 120	MAX 1200	MIN 6.0	CFSM 1.45	IN 19.70
WTR YR 1975	TOTAL	46108.0	MEAN 126	MAX 1020	MIN 13	CFSM 1.52	IN 20.74

CONNECTICUT RIVER BASIN

01155050 CONNECTICUT RIVER AT WALPOLE, N.H.
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 43°05'04", long 72°26'04", Cheshire County, on pier of bridge over Connecticut River on Route 123 at Walpole, N.H.

INSTRUMENTATION.--Two-parameter water-quality monitor.

PERIOD OF RECORD.--CHEMICAL ANALYSES: March to September 1975.

REMARKS.--Discharge based on records for gaging stations at North Walpole (Sta. 01154500) and Cold River at Drewsville, N.H. (Sta. 01155000).

CHEMICAL ANALYSES, MARCH TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (FT /S)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	TOTAL PHYTO-PLANKTON (CELLS PER ML)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
MAR. 18...	1300	10400	138	6.9	6.0	.5	12.4	260	280	B100
APR. 17...	1130	--	124	7.2	18.5	5.5	12.0	180	860	B13
MAY 12...	1215	11800	82	6.6	25.5	12.0	10.7	370	500	52
JUNE 25...	1545	9810	125	7.4	32.0	23.0	9.9	2500	1200	250
JULY 29...	1100	1770	132	7.3	21.0	23.0	7.6	2600	20000	860
AUG. 26...	1330	1520	150	6.8	23.5	21.5	7.5	570	88000	--
SEP. 09...	1030	1640	148	8.1	15.0	18.5	9.3	5600	5400	140

DATE	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
MAR. 18...	120	--	--	.39	1.2	.81	.02	--	--
APR. 17...	815	--	--	.41	.66	.25	.02	--	--
MAY 12...	30	--	--	.42	.53	.11	.02	67	2140
JUNE 25...	37	--	--	.00	.32	.32	.04	10	265
JULY 29...	872	--	--	.15	.76	.61	.03	3	14
AUG. 26...	50	--	--	.17	.46	.29	.01	--	--
SEP. 09...	8120	.65	.01	.66	1.6	.90	.04	--	--

DATE	DIS-SOLVED SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
JUNE 25...	4.5	310	100	50	50	0	15	1.5	4.8	1.1
SEP. 09...	3.7	170	30	30	20	10	17	2.5	6.8	1.5

B NON-IDEAL COLONY COUNT.

CONNECTICUT RIVER BASIN

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01155050 CONNECTICUT RIVER AT WALPOLE, N.H.--Continued

CHEMICAL ANALYSES, MARCH TO SEPTEMBER 1975.--Continued

DATE	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED FLUORIDE (F) (MG/L)	DIS- SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CARBONATE HARD- NESS (MG/L)
JUNE 25...	46	0	38	10	8.5	.1	67	68	44	6
SEP. 09...	52	0	43	9.1	9.9	.1	86	76	53	10

DATE	CARBON DIOXIDE (CO ₂) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE D ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUS- PENDE D CADMIUM (CD) (UG/L)	DIS- SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUS- PENDE D CHROMIUM (CR) (UG/L)
JUNE 25...	2.9	4.3	0	0	0	4	4	0	20	0
SEP. 09...	.7	--	0	0	0	0	0	0	<10	<10

DATE	DIS- SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS- PENDE D COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE D COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDE D LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)
JUNE 25...	20	0	0	0	0	0	0	3	0	7
SEP. 09...	0	0	0	0	0	0	0	4	3	1

DATE	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE D MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUS- PENDE D SELENIUM (SE) (UG/L)	DIS- SOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE D ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JUNE 25...	<.5	.0	<.5	0	0	1	20	0	20
SEP. 09...	<.5	.0	<.5	1	1	0	10	0	10

01155050 CONNECTICUT RIVER AT WALPOLE, N.H.--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, MARCH TO SEPTEMBER 1975

PHYTOPLANKTON									
DATE	TIME	ORGANISM	COUNT (CELLS/ML)	PERCENT OF TOTAL	DATE	TIME	ORGANISM	COUNT (CELLS/ML)	PERCENT OF TOTAL
† MAR. 18	1300	CHRYSOPHYTA			† JUNE 25	1545	CHLOROPHYTA		
		..BACILLARIOPHYCEAE					..CHLOROPHYCEAE		
		..PENNALES					..CHLOROCOCCALES		
		..ACHNANTHACEAE					..COELASTRACEAE		
		....ACHNANTHES	62	24			....COELASTRUM	480	19
		....CYMBELLACEAE					....OCCYSTACEAE		
		....CYMBELLA	31	12			....ANKISTRODESMUS	150	6
		....DIATOMACEAE					....DICTYOSPHAERIUM	200	8
		....DIATOMA	10	4			....SCENEDESMACEAE		
		....FRAGILARIACEAE					....ACTINASTRUM	350	14
		....FRAGILARIA	52	20			....SCENEDESMUS	330	13
		....HANNAEA	10	4			..VOLVOCALES		
		....GOMPHONEMACEAE					....CHLAMYDOMONADACEAE		
		....GOMPHONEMA	52	20			....CHLAMYDOMONAS	50	2
		....NAVICULACEAE					CHRYSOPHYTA		
		....NAVICULA	21	8			..BACILLARIOPHYCEAE		
		....NITZSCHACEAE					..CENTRALES		
		....NITZSCHIA	21	8			..COSCINODISCACEAE		
		TOTAL	260				..CYCLOTELLA	75	3
† APR. 17	1115	CHRYSOPHYTA					..PENNALES		
		..BACILLARIOPHYCEAE					....CYMBELLACEAE		
		..PENNALES					....CYMBELLA	50	2
		..ACHNANTHACEAE					....EPITHEMIA	50	2
		....ACHNANTHES	9	5			....FRAGILARIACEAE		
		....CYMBELLACEAE					....ASTERIONELLA	150	6
		....CYMBELLA	63	35			....SYNEDRA	50	2
		....FRAGILARIACEAE					....NAVICULACEAE		
		....HANNAEA					....NAVICULA	50	2
		....HANNAEA ARCUS	9	5			....NITZSCHACEAE		
		....MERIDIONACEAE					....NITZSCHIA	330	13
		....MERIDION	9	5			CHRYSOPHYCEAE		
		....NAVICULACEAE					..CHRYSONOMADALES		
		....NAVICULA	72	40			..MALLOMONADACEAE		
		....NITZSCHACEAE					....MALLOMONAS	50	2
		....NITZSCHIA	18	10			CYANOPHYTA		
		TOTAL	180				..MYXOPHYCEAE		
† MAY 12	1215	CHLOROPHYTA					..CHROOCOCCALES		
		..CHLOROPHYCEAE					..CHROOCOCCACEAE		
		..CHLOROCOCCALES					....ANACYSTIS	230	9
		..OCCYSTACEAE					TOTAL	2,500	
		....ANKISTRODESMUS	26	7	† JULY 29	1100	CHLOROPHYTA		
		....SCENEDESMACEAE					..CHLOROPHYCEAE		
		....CRUCIGENIA	37	10			..CHLOROCOCCALES		
		CHRYSOPHYTA					..OCCYSTACEAE		
		..BACILLARIOPHYCEAE					....ANKISTRODESMUS		*
		..PENNALES					....CHODATELLA	40	2
		..ACHNANTHACEAE					....DICTYOSPHAERIUM	160	6
		....ACHNANTHES	96	26			....KIRCHNERIELLA	40	2
		....CYMBELLACEAE					....OOCYSTIS		*
		....CYMBELLA	26	7			....TETRAEDRON	40	2
		....FRAGILARIACEAE					....WESTELLA	490	18
		....FRAGILARIA	7	2			....SCENEDESMACEAE		
		....GOMPHONEMACEAE					....CRUCIGENIA	160	6
		....GOMPHONEMA	52	14			CHRYSOPHYTA		
		....MERIDIONACEAE					..BACILLARIOPHYCEAE		
		....MERIDION	7	2			..CENTRALES		
		....NAVICULACEAE					..COSCINODISCACEAE		
		....NAVICULA	37	10			....CYCLOTELLA	940	35
		....NITZSCHACEAE					..PENNALES		
		....NITZSCHIA	78	21			..ACHNANTHACEAE		
		TOTAL	370				....COCCONEIS		*
							....FRAGILARIACEAE		
							....SYNEDRA	40	2
							....NAVICULACEAE		
							....NAVICULA	40	2
							....NITZSCHACEAE		
							....NITZSCHIA	690	26
							CHRYSOPHYCEAE		
							..CHRYSONOMADALES		
							..OCHROMONADACEAE		
							....DINOBRYON		*
							PYRRHOPHYTA		
							..DINOPHYCEAE		
							..PERIDINIALES		
							....PERIDINIACEAE		
							....PERIDINIUM		*
							TOTAL	2,600	

* LESS THAN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED.

† USED DEPTH INTEGRATED SAMPLING METHOD.

01155050 CONNECTICUT RIVER AT WALPOLE, N.H.--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, MARCH TO SEPTEMBER 1975.--Continued

PHYTOPLANKTON

DATE	TIME	ORGANISM	COUNT (CELLS/ML)	PERCENT OF TOTAL	SAMPLING METHOD
AUG. 26	1330	CHLOROPHYTA			DEPTH INTEGRATED
		..CHLOROPHYCEAE			
		..CHLOROCOCCALES			
		...OCCYSTACEAE			
		....ANKISTRODESMUS		*	
		....TETRAEDRON	39	7	
		...SCENEDESMACEAE			
		....SCENEDESMUS	150	28	
		..TETRASPORALES			
		...PALMELLACEAE			
		....SPHAEROCYSTIS		*	
		CHRYSOPHYTA			
		..BACILLARIOPHYCEAE			
		..CENTRALES			
		...COSCINODISCACEAE			
		....CYCLOTELLA	110	21	
		....MELOSIRA	39	7	
		..PENNALES			
		...ACHNANTHACEAE			
		....ACHNANTHES	130	24	
		...CYMBELLACEAE			
		....CYMBELLA	19	3	
		..FRAGILARIACEAE			
		...FRAGILARIA	19	3	
		...GOMPHONEMACEAE			
		....GOMPHONEMA		*	
		...NAVICULACEAE			
		....NAVICULA	19	3	
		...NITZSCHIACEAE			
		....NITZSCHIA	19	3	
		PYRRHOPHYTA			
		..DINOPHYCEAE			
		...PERIDINIALES			
		...PERIDINIAEAE			
		....PERIDINIUM		*	
		TOTAL	570		
SEP. 09	1030	CHLOROPHYTA			DEPTH INTEGRATED
		..CHLOROPHYCEAE			
		..CHLOROCOCCALES			
		...MICRACTINIACEAE			
		....MICRACTINIUM		*	
		...OCCYSTACEAE			
		....ANKISTRODESMUS	110	2	
		....DICTYOSPHAERIUM	450	8	
		....KIRCHNERIELLA	220	4	
		...SCENEDESMACEAE			
		....SCENEDESMUS		*	
		..VOLVOCALES			
		...CHLAMYDOMONADACEAE			
		....CHLAMYDOMONAS		*	
		CHRYSOPHYTA			
		..BACILLARIOPHYCEAE			
		..CENTRALES			
		...COSCINODISCACEAE			
		....CYCLOTELLA	3,400	61	
		....MELOSIRA	1,200	22	
		..PENNALES			
		...ACHNANTHACEAE			
		....ACHNANTHES		*	
		...CYMBELLACEAE			
		....CYMBELLA		*	
		...NITZSCHIACEAE			
		....NITZSCHIA		*	
		...TABELLARIACEAE			
		....TABELLARIA	110	2	
		TOTAL	5,600		

* LESS THAN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED.

PERIPHYTON

DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS(G/SQ M)		CHLOROPHYLL A (MG/SQ M)	CHLOROPHYLL B (MG/SQ M)	BIOMASS PIGMENT RATIO	SAMPLING METHOD
AUG. 26	37	6.3	4.8	3.8	0.5	380	POLYETHYLENE STRIP

CONNECTICUT RIVER BASIN

01155500 WEST RIVER AT JAMAICA, VT.

LOCATION.--Lat 43°06'32", long 72°46'33", Windham County, 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.

Chemical analyses: Water year 1954 (partial-record station).

GAGE.--Water-stage recorder. Altitude of gage is 640 ft (195 m) from topographic map.

REMARKS.--Records excellent except those for winter period, which are poor. Flow regulated by Ball Mountain Reservoir since 1961 (see p. 110).

AVERAGE DISCHARGE.--29 years, 355 ft³/s (10.05 m³/s), 26.93 in/yr (684 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 29,500 ft³/s (835 m³/s) Dec. 31, 1948 (gage height, 14.87 ft or 4.532 m), from rating curve extended above 9,800 ft³/s (278 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, 5,020 ft³/s (142 m³/s) Apr. 24, 1962 (gage height, 8.75 ft or 2.667 m); maximum gage height, 9.46 ft (2.883 m) Feb. 4, 1970 (ice jam). Current year: Maximum discharge, 3,240 ft³/s (91.8 m³/s) Apr. 24 (gage height, 8.37 ft or 2.551 m); minimum, 19 ft³/s (0.54 m³/s) Aug. 1; minimum daily, 22 ft³/s (0.62 m³/s) Aug. 2, 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	873	118	212	190	780	550	373	1580	159	109	36	521
2	711	120	211	180	540	430	374	1840	148	174	22	228
3	572	116	230	165	400	350	376	1580	232	123	23	189
4	458	113	210	160	350	310	388	1510	819	67	22	189
5	186	197	160	155	310	270	415	1510	1540	67	24	148
6	116	443	165	150	340	250	381	1490	1760	67	23	120
7	116	347	180	155	340	240	320	1240	1720	66	138	118
8	116	243	488	160	280	230	302	977	1020	62	1260	85
9	116	214	1010	190	240	250	260	748	511	48	1900	59
10	113	188	1160	220	215	200	246	495	435	49	1180	140
11	113	168	676	282	200	185	288	500	388	36	668	168
12	510	162	478	456	190	195	335	500	393	26	215	143
13	522	450	368	559	185	190	348	699	577	118	92	235
14	127	630	322	475	180	270	344	788	774	294	69	294
15	289	450	314	290	180	300	348	537	713	302	69	291
16	406	335	270	260	175	290	384	298	459	287	69	195
17	496	262	266	230	175	270	631	270	302	187	69	113
18	613	251	250	190	175	260	1510	274	180	98	69	57
19	246	246	306	185	170	249	1980	274	133	72	67	133
20	211	262	298	180	170	822	2580	270	133	72	67	449
21	182	1250	228	190	165	1930	2740	266	133	90	67	1050
22	149	1330	204	180	160	2010	1780	266	133	79	51	1120
23	94	548	208	170	350	1270	1370	262	85	76	35	662
24	82	461	208	180	550	952	2480	258	53	74	36	668
25	136	514	211	200	620	963	2930	221	53	393	36	1080
26	188	450	175	600	660	1180	2390	132	53	370	116	1630
27	173	315	185	700	720	1060	988	88	52	138	156	1940
28	159	275	230	660	750	620	1970	87	52	60	123	1310
29	122	290	220	640	---	596	1300	88	53	59	72	655
30	111	246	210	740	---	597	1050	103	57	57	915	469
31	116	---	200	780	---	494	---	125	---	57	1220	---
TOTAL	8422	10994	9853	9872	9570	17783	31181	19276	13120	3777	8909	14459
MEAN	272	366	318	318	342	574	1039	622	437	122	287	482
MAX	873	1330	1160	780	780	2010	2930	1840	1760	393	1900	1940
MIN	82	113	160	150	160	185	246	87	52	26	22	57
MEAN†	208	366	320	327	348	572	1068	629	430	111	299	471
CFSM†	1.16	2.04	1.79	1.83	1.94	3.20	5.97	3.51	2.40	.62	1.67	2.63
IN.†	1.34	2.28	2.06	2.11	2.03	3.68	6.66	4.05	2.68	.71	1.93	2.94

CAL YR 1974 TOTAL 145071 MEAN 397 MAX 3270 MIN 34 MEAN† 398 CFSM† 2.22 IN† 30.17
WTR YR 1975 TOTAL 157216 MEAN 431 MAX 2930 MIN 22 MEAN† 428 CFSM† 2.39 IN† 32.47

† Adjusted for change in contents in Ball Mountain Reservoir.

CONNECTICUT RIVER BASIN

95

01156000 WEST RIVER AT NEWFANE, VT.

LOCATION.--Lat 42°59'43", long 72°38'13", Windham County, 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.

Chemical analyses: Water year 1954 (partial-record station).

Water temperatures: October 1954 to September 1965.

GAGE.--Water-stage recorder. Datum of gage is 384.21 ft (117.107 m) above mean sea level. 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.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1231: 1922-23, 1929-31(M).

REMARKS.--Records excellent above 200 ft³/s (5.66 m³/s) and good below except those for winter period, which are poor. Flow regulated since 1961 by Ball Mountain Reservoir and Townshend Reservoir 6.8 mi (10.9 km) upstream (see p.110).

AVERAGE DISCHARGE.--51 years, 616 ft³/s (17.45 m³/s), 27.16 in/yr (690 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 52,300 ft³/s (1,480 m³/s) Sept. 21, 1938 (gage height, 22.81 ft or 6.952 m, from floodmarks), from rating curve extended above 20,000 ft³/s (566 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 and 22.81 ft (5.931 and 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, 9,410 ft³/s (266 m³/s) Apr. 10, 1969 (gage height, 9.77 ft or 2.978 m). Maximum discharge since at least 1869, that of Sept. 21, 1938. Flood of Nov. 3, 1927, reached a discharge of 45,000 ft³/s or 1,270 m³/s (gage height, 23.0 ft or 7.01 m, from floodmarks, at nonrecording-gage site), from rating curve extended above 20,000 ft³/s (566 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. Current year: Maximum discharge, 5,960 ft³/s (169 m³/s) Aug. 8 (gage height, 8.51 ft or 2.594 m); minimum, 52 ft³/s (1.47 m³/s) Oct. 14; minimum daily, 73 ft³/s (2.07 m³/s) Aug. 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	190	360	330	1230	900	767	2480	281	113	107	930
2	1050	190	350	310	979	720	700	2930	312	179	83	433
3	652	190	360	280	738	620	846	2610	257	190	76	367
4	573	190	340	270	560	550	1100	2450	831	133	73	322
5	545	234	310	270	500	500	830	2540	1660	101	76	281
6	445	552	290	260	540	480	792	2360	2760	95	78	216
7	220	588	310	270	540	444	692	2110	2800	92	98	208
8	195	415	900	290	470	436	617	1490	1830	95	3600	190
9	190	344	1700	320	410	425	583	1330	831	104	3120	142
10	186	322	1900	380	370	397	510	784	596	98	1870	146
11	186	286	1050	490	340	371	542	774	510	92	1080	234
12	531	271	780	800	320	359	618	774	566	81	445	248
13	596	545	640	900	310	354	670	1120	1180	492	238	421
14	238	990	560	800	300	416	650	1320	1240	863	190	421
15	234	708	540	500	300	491	715	1040	1110	893	160	384
16	478	559	460	440	290	481	815	698	831	639	146	338
17	670	452	450	380	290	474	1350	524	538	452	139	220
18	841	415	430	330	290	471	2640	504	384	248	136	171
19	433	390	490	320	280	459	4040	484	253	179	129	164
20	327	402	470	310	280	2690	4960	458	257	175	119	596
21	286	2040	400	320	275	4270	5320	427	234	229	116	1620
22	257	2440	350	300	270	3510	3420	517	220	229	110	1800
23	208	890	350	290	300	2230	2510	452	199	179	105	1060
24	164	708	350	280	600	1820	4270	402	133	156	100	1130
25	164	774	350	310	1250	1970	5620	356	116	350	105	2090
26	243	793	320	1000	1200	2330	4760	296	107	566	120	3460
27	248	552	340	1210	1150	1870	2010	199	101	333	215	4230
28	234	491	400	1040	1200	1200	3180	190	95	153	199	2650
29	212	458	380	944	---	1110	2260	179	98	129	149	1290
30	190	415	360	1540	---	1080	1850	164	119	119	1590	991
31	186	---	340	1340	---	948	---	186	---	113	2010	---
TOTAL	12212	17794	16630	16824	15582	34376	59637	32148	20449	7870	16782	26753
MEAN	394	593	536	543	557	1109	1986	1037	682	254	541	892
MAX	1230	2440	1900	1540	1250	4270	5620	2930	2800	893	3600	4230
MIN	164	190	290	260	270	354	510	164	95	81	73	142
MEAN†	328	593	539	553	562	1108	2018	1042	674	243	555	881
CFSM†	1.06	1.93	1.75	1.80	1.82	3.60	6.55	3.38	2.19	.79	1.80	2.86
IN.†	1.23	2.15	2.02	2.07	1.90	4.15	7.31	3.90	2.44	.91	2.08	3.19
CAL YR 1974 TOTAL	247901		MEAN 679	MAX 6240	MIN 38		MEAN† 679	CFSM† 2.20	IN† 29.93			
WTR YR 1975 TOTAL	277057		MEAN 759	MAX 5620	MIN 73		MEAN† 756	CFSM† 2.45	IN† 33.34			

† Adjusted for change in contents in Ball Mountain and Townshend Reservoirs.

NOTE.--No gage-height record Dec. 1 to Jan. 21.

CONNECTICUT RIVER BASIN

01157000 ASHUELOT RIVER NEAR GILSUM, N.H.

LOCATION.--Lat 43°02'21", long 72°16'14", Cheshire County, 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 mi² (184.1 km²).

PERIOD OF RECORD.--Discharge: August 1922 to current year.

Chemical analyses: Water year 1955 (partial-record station).

Water temperatures: Water year 1955 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 772.86 ft (235.568 m) above mean sea level (levels by Corps of Engineers); prior to Oct. 1, 1964, datum was 1.00 ft (0.305 m) higher.

REVISIONS (WATER YEARS).--WSP 661: Drainage area. WSP 781: 1934(M). WSP 1231: 1923-27(M), 1928, 1929-30(M), 1931, 1932(M).

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Some regulation by reservoir above station. Prior to 1938, diurnal fluctuation caused by powerplant above station.

AVERAGE DISCHARGE.--53 years, 124 ft³/s (3.512 m³/s), 23.68 in/yr (601 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 5,220 ft³/s (148 m³/s) Sept. 21, 1938 (gage height, 12.24 ft or 3.731 m in gage well, present datum), from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of float measurements at gage heights 11.66 and 11.72 ft (3.554 and 3.572 m) and slope-area measurement at gage height 12.24 ft or 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 ft³/s (0.028 m³/s) Oct. 6, 1922, July 10, 1923, Nov. 14, 1952. Current year: Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	-	†*1,300 36.8	- -				

† About.

Minimum discharge, 6.6 ft³/s (0.19 m³/s) July 8, 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	55	94	65	147	171	182	230	29	14	24	78
2	73	51	124	62	120	141	159	220	32	12	21	59
3	62	46	189	63	110	122	281	210	32	11	19	52
4	55	46	154	65	105	111	671	190	57	9.4	17	44
5	50	62	115	58	100	107	450	200	58	8.4	15	37
6	46	109	98	53	94	93	350	180	128	7.7	14	34
7	43	116	93	58	86	86	280	160	248	7.2	18	36
8	40	102	129	59	84	86	250	140	233	6.9	73	29
9	37	90	346	59	74	80	220	120	185	7.8	90	27
10	35	80	377	64	69	89	210	110	135	9.3	57	25
11	33	72	312	83	69	81	220	100	96	9.7	41	22
12	31	69	260	213	63	66	220	94	90	9.5	35	23
13	29	78	240	217	63	73	220	100	361	118	39	29
14	27	105	210	189	59	83	210	110	395	344	35	28
15	27	124	190	150	56	78	240	100	289	459	27	25
16	50	128	160	125	55	80	270	98	209	395	25	23
17	125	115	140	105	53	78	350	94	162	310	22	22
18	129	102	127	90	53	84	500	82	120	200	19	21
19	106	90	112	100	54	99	660	72	104	135	15	20
20	91	89	102	110	56	452	1050	64	79	106	14	24
21	78	349	96	95	57	742	940	54	57	103	12	33
22	67	540	93	81	54	549	690	46	46	84	12	36
23	61	383	86	73	56	449	580	44	38	57	13	54
24	57	274	84	82	107	406	660	39	32	43	12	103
25	53	221	80	110	425	404	810	36	28	125	13	206
26	51	195	73	180	437	432	730	34	24	129	14	326
27	46	136	78	190	302	366	500	31	21	90	14	749
28	41	144	81	155	223	302	360	34	19	55	13	569
29	40	132	76	131	---	249	270	30	17	40	11	397
30	43	109	72	184	---	221	240	27	16	31	79	276
31	50	---	64	182	---	213	---	27	---	28	102	---
TOTAL	1756	4212	4455	3451	3231	6593	12773	3076	3340	2964.9	915	3407
MEAN	56.6	140	144	111	115	213	426	99.2	111	95.6	29.5	114
MAX	129	540	377	217	437	742	1050	230	395	459	102	749
MIN	27	46	64	53	53	66	159	27	16	6.9	11	20
CFSM	.80	1.97	2.03	1.56	1.62	3.00	5.99	1.40	1.56	1.34	.41	1.60
IN.	.92	2.20	2.33	1.81	1.69	3.45	6.68	1.61	1.75	1.55	.48	1.78

CAL YR 1974 TOTAL 46157.2 MEAN 126 MAX 1050 MIN 2.8 CFSM 1.77 IN 24.15
WTR YR 1975 TOTAL 50173.9 MEAN 137 MAX 1050 MIN 6.9 CFSM 1.93 IN 26.25

NOTE.--No gage-height record Oct. 1-17, Apr. 6 to May 27.

CONNECTICUT RIVER BASIN

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01158000 ASHUELOT RIVER BELOW SURRY MOUNTAIN DAM, NEAR KEENE, N.H.

LOCATION.--Lat 42°59'40", long 72°18'40", Cheshire County, 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) above mean sea level (Corps of Engineers bench mark).

REMARKS.--Records excellent above 50 ft³/s (1.42 m³/s) and good below. Flow regulated by Surry Mountain Lake (see p. 110).

AVERAGE DISCHARGE.--30 years, 171 ft³/s (4.843 m³/s), 22.99 in/yr (584 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 1,320 ft³/s (37.4 m³/s) Oct. 28, 1959 (gage height, 9.60 ft or 2.926 m); minimum daily, 0.4 ft³/s (0.011 m³/s) Sept. 17, 1964.

Current year: Maximum discharge, 939 ft³/s (26.6 m³/s) Sept. 29 (gage height, 8.44 ft or 2.573 m); minimum daily, 13 ft³/s (0.37 m³/s) July 8, 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	70	139	100	231	320	296	393	47	27	50	123
2	126	73	139	99	228	236	261	362	49	25	43	103
3	130	69	180	83	208	198	264	365	49	27	38	88
4	124	66	201	74	131	184	537	362	65	20	40	77
5	110	73	200	74	112	155	840	353	79	17	36	66
6	97	115	153	74	112	148	664	328	107	15	31	60
7	86	146	124	74	135	147	462	292	217	14	35	61
8	73	148	129	74	153	146	365	255	266	13	85	56
9	64	134	232	91	135	121	304	225	250	13	138	50
10	55	119	369	100	100	98	264	202	204	16	123	45
11	50	107	391	100	87	95	255	175	159	16	94	39
12	45	100	384	154	87	95	261	159	132	17	75	38
13	42	100	371	252	87	95	272	170	319	54	73	44
14	38	115	254	275	87	114	264	192	513	279	70	46
15	37	142	199	252	87	123	284	182	431	555	60	44
16	45	159	199	201	87	123	325	166	326	520	50	41
17	107	159	198	181	87	123	415	148	253	437	43	38
18	155	144	198	134	87	123	593	130	199	322	38	36
19	152	134	164	123	87	124	725	117	154	228	33	36
20	134	123	152	124	86	300	819	105	132	172	28	41
21	115	246	136	124	85	682	899	97	108	157	24	47
22	100	600	126	123	85	845	919	105	90	138	22	55
23	91	555	126	105	85	822	885	93	76	110	21	67
24	83	427	126	96	127	827	846	79	65	86	21	103
25	77	316	126	97	253	745	819	67	55	133	23	241
26	73	298	96	135	390	661	741	54	46	172	24	380
27	67	256	62	205	423	565	763	52	41	144	26	551
28	62	196	62	233	373	433	852	55	35	110	24	459
29	59	196	79	231	---	377	773	53	33	86	22	775
30	54	160	96	230	---	343	517	50	30	70	69	798
31	62	---	100	232	---	328	---	49	---	58	126	---
TOTAL	2621	5546	5519	4450	4235	9696	16484	5439	4530	4046	1585	4608
MEAN	84.5	185	178	144	151	313	549	175	151	131	51.1	154
MAX	155	600	391	275	423	845	919	393	513	555	138	798
MIN	37	66	62	74	85	95	255	49	30	13	21	36
MEAN†	84.1	190	181	150	146	311	550	165	151	131	54.2	176
CFSM†	.83	1.88	1.79	1.49	1.45	3.08	5.45	1.63	1.50	1.30	.54	1.74
IN.†	.96	2.10	2.07	1.71	1.51	3.55	6.08	1.89	1.66	1.50	.62	1.94
CAL YR 1974 TOTAL	66941.8		MEAN 183	MAX 1070	MIN	5.2	MEAN† 170	CFSM† 1.68	IN† 22.79			
WTR YR 1975 TOTAL	66759.0		MEAN 184	MAX 919	MIN	13	MEAN† 190	CFSM† 1.88	IN† 25.57			

† Adjusted for change in contents in Surry Mountain Lake.

CONNECTICUT RIVER BASIN

01158600 OTTER BROOK BELOW OTTER BROOK DAM, NEAR KEENE, N.H.

LOCATION.--Lat 42°56'45", long 72°14'14", Cheshire County, 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.--Discharge: May 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 658.65 ft (200.757 m) above mean sea level (Corps of Engineers bench mark).

REMARKS.--Records good except those for periods of doubtful and no gage-height record, which are fair. Flow regulated by Otter Brook Lake (see p. 110).

AVERAGE DISCHARGE.--17 years, 75.3 ft³/s (2.132 m³/s), 21.66 in/yr (550 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 685 ft³/s (19.4 m³/s) Apr. 20, 1959 (gage height, 8.59 ft or 2.618 m); maximum gage height, 8.61 ft (2.624 m) Apr. 26, 1972; 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.
Current year: Maximum discharge, 588 ft³/s (16.7 m³/s) Apr. 21 (gage height, 8.42 ft or 2.566 m); minimum, 3.0 ft³/s (0.085 m³/s) July 9; minimum daily, 4.2 ft³/s (0.12 m³/s) July 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	43	12	46	49	80	97	158	126	26	18	16	51		
2	33	16	46	49	69	84	115	122	28	12	15	36		
3	27	17	72	40	62	84	144	116	26	9.5	13	29		
4	24	17	83	35	58	65	340	106	86	7.7	17	23		
5	21	27	83	35	58	55	553	106	75	6.8	18	18		
6	19	59	58	35	58	55	513	96	139	6.2	11	16		
7	17	53	47	35	58	65	305	87	194	5.3	13	17		
8	16	42	61	35	58	68	192	77	151	4.2	76	15		
9	14	35	233	72	58	60	166	77	106	5.4	105	14		
10	13	30	295	66	49	47	90	69	85	7.4	77	12		
11	12	28	195	45	43	43	37	62	67	7.4	57	10		
12	12	26	139	97	32	43	218	57	68	8.7	43	10		
13	11	30	108	154	27	68	175	81	341	60	33	16		
14	11	39	99	121	42	64	121	105	353	230	30	16		
15	10	45	99	80	58	57	132	85	191	265	22	13		
16	24	45	99	78	58	57	157	76	139	142	18	12		
17	65	41	97	89	58	57	193	70	111	90	15	11		
18	58	36	99	75	38	57	309	60	83	65	12	10		
19	46	35	97	68	27	57	372	54	74	50	9.9	10		
20	36	35	76	69	28	186	412	50	65	42	8.3	15		
21	28	188	68	62	43	409	517	46	55	37	8.0	17		
22	26	335	68	58	51	408	549	49	48	34	7.8	15		
23	24	176	53	58	50	394	483	44	35	30	7.2	18		
24	22	119	47	58	64	374	417	39	30	28	7.1	34		
25	21	104	48	57	118	338	421	31	21	74	8.9	111		
26	20	99	48	104	207	344	350	27	18	72	11	162		
27	18	83	49	133	160	244	270	27	18	50	12	238		
28	15	73	49	99	128	198	217	30	17	40	9.5	315		
29	12	57	49	101	---	195	179	27	17	28	7.8	403		
30	10	46	49	121	---	172	151	22	19	21	84	289		
31	12	---	49	104	---	161	---	25	---	19	85	---		
TOTAL	720	1948	2709	2282	1840	4606	8256	2049	2686	1475.6	857.5	1956		
MEAN	23.2	64.9	87.4	73.6	65.7	149	275	66.1	89.5	47.6	27.7	65.2		
MAX	65	335	295	154	207	409	553	126	353	265	105	403		
MIN	10	12	46	35	27	43	37	22	17	4.2	7.1	10		
MEAN†	23.0	66.1	88.0	73.5	65.1	148	275	63.4	89.4	47.7	28.4	68.2		
CFSM†	.49	1.40	1.86	1.56	1.38	3.14	5.83	1.34	1.89	1.01	.60	1.44		
IN.†	.56	1.56	2.15	1.80	1.44	3.62	6.50	1.60	2.11	1.17	.69	1.61		
CAL YR 1974	TOTAL	28333.5	MEAN	77.6	MAX	556	MIN	1.6	MEAN†	73.6	CFSM†	1.56	IN†	21.18
WTR YR 1975	TOTAL	31385.1	MEAN	86.0	MAX	553	MIN	4.2	MEAN†	86.3	CFSM†	1.83	IN†	24.82

† Adjusted for change in contents in Otter Brook Lake.

NOTE.--Doubtful or no gage-height record Oct. 1-15, 17-21, June 19 to July 7, July 9, 12-15, July 18 to Aug. 20.

01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, N.H.

LOCATION.--Lat 42°52'20", long 72°12'51", Cheshire County, 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 mi² (93.2 km²).

DISCHARGE RECORDS

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only October 1920, published in WSP 1301.

GAGE.--Water-stage recorder. Concrete control since July 18, 1938. Datum of gage is 667.11 ft (203.335 m) above mean sea level (levels by Corps of Engineers).

REVISIONS (WATER YEARS).--WSP 641: 1925(M). WSP 871: Drainage area. WSP 1231: 1921-24(M), 1926(M), 1929, 1933-34(M), 1939. WRD Mass., N.H., R.I., Vt., 1971: 1966(M), 1967-69.

REMARKS.--Records good except those for winter period, which are fair. Regulation at times prior to 1962 by power-plant and several small reservoirs above station; regulation greater prior to 1956.

AVERAGE DISCHARGE.--55 years, 59.0 ft³/s (1.671 m³/s), 22.26 in/yr (565 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 5,960 ft³/s (169 m³/s) Sept. 21, 1938 (gage height, 7.89 ft or 2.405 m), from rating curve extended above 3,300 ft³/s (93.5 m³/s) on basis of contracted-opening and slope-area measurements of peak flow; maximum gage height, 9.70 ft (2.951 m) Mar. 12, 1936 (ice jam); practically no flow for part of Mar. 22, 1931; minimum daily discharge, 0.4 ft³/s (0.011 m³/s) Sept. 15-17, 1926. Maximum discharge known since at least 1869, that of Sept. 21, 1938.

Current year: Peak discharges above base of 550 ft³/s (15.6 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 20	1830	764 21.6	5.49 1.673	Aug. 8	1815	570 16.1	5.16 1.573
Apr. 3	2245	805 22.8	5.55 1.692	Sept. 27	0715	*1,870 53.0	*6.83 2.082
July 14	2130	663 18.8	5.33 1.625				

Minimum discharge, 6.5 ft³/s (0.18 m³/s) July 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	23	38	35	72	76	110	72	16	14	15	45
2	25	21	59	35	64	68	100	70	19	11	13	29
3	20	19	85	34	58	62	308	73	20	9.9	12	22
4	18	23	63	32	53	54	535	69	95	8.9	12	18
5	15	54	51	31	49	49	288	80	82	7.6	12	13
6	14	77	45	29	47	45	188	71	141	11	11	14
7	13	55	38	29	46	43	142	61	137	7.4	39	21
8	12	41	85	29	45	45	122	55	97	6.8	331	19
9	11	34	287	31	44	42	109	50	73	8.1	341	17
10	10	30	167	35	40	39	104	47	49	21	116	14
11	9.5	28	108	50	37	36	110	51	39	14	69	12
12	9.5	26	88	169	36	35	115	48	43	13	49	13
13	9.2	41	82	145	35	40	112	77	251	53	45	22
14	9.5	48	77	106	34	42	105	83	192	376	32	19
15	8.5	44	70	87	32	40	120	62	104	416	23	15
16	26	39	63	76	31	39	132	56	76	188	19	13
17	77	34	76	66	30	38	161	52	58	96	17	12
18	48	31	76	55	33	49	189	46	47	67	16	12
19	32	29	65	62	35	62	291	43	40	48	14	12
20	25	31	57	66	37	517	317	40	40	39	13	19
21	21	123	52	54	37	513	209	37	40	79	11	21
22	19	150	50	49	36	275	145	32	23	71	10	16
23	18	81	47	46	37	196	122	26	17	45	9.0	17
24	17	66	45	43	100	193	130	23	14	31	9.7	46
25	17	61	46	50	250	231	153	19	12	108	17	260
26	16	57	43	97	180	266	127	18	12	79	17	293
27	16	48	40	100	110	160	111	17	11	48	16	1190
28	15	46	40	79	86	120	102	17	11	34	13	440
29	14	45	40	73	---	112	88	15	9.7	27	9.9	229
30	14	40	38	92	---	130	78	14	17	21	114	138
31	21	---	36	83	---	137	---	15	---	17	91	---
TOTAL	613.2	1445	2157	1968	1694	3754	4923	1439	1785.7	1975.7	1516.6	3011
MEAN	19.8	48.2	69.6	63.5	60.5	121	164	46.4	59.5	63.7	48.9	100
MAX	77	150	287	169	250	517	535	83	251	416	341	1190
MIN	8.5	19	36	29	30	35	78	14	9.7	6.8	9.0	12
CFSM	.55	1.34	1.93	1.76	1.68	3.36	4.56	1.29	1.65	1.77	1.36	2.78
IN.	.63	1.49	2.23	2.03	1.75	3.88	5.09	1.49	1.85	2.04	1.57	3.11

CAL YR 1974	TOTAL	20985.9	MEAN 57.5	MAX 472	MIN 2.3	CFSM 1.60	IN 21.68
WTR YR 1975	TOTAL	26282.2	MEAN 72.0	MAX 1190	MIN 6.8	CFSM 2.00	IN 27.16

CONNECTICUT RIVER BASIN

01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, N.H.--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--CHEMICAL ANALYSES: August 1972 to current year.

WATER TEMPERATURES: October 1954 to current year.

INSTRUMENTATION.--Two-parameter water-quality monitor.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument.

EXTREMES.--Period of record:

SPECIFIC CONDUCTANCE: Maximum, 170 micromhos Sept. 9, 1972; minimum, 36 micromhos Dec. 8, 12, 1972.

WATER TEMPERATURES: Maximum, 33.5°C July 14, 1965; minimum, freezing point on many days during winter periods.

EXTREMES.--Current year:

SPECIFIC CONDUCTANCE: Maximum, 111 micromhos July 9, 10; minimum, 39 micromhos Sept. 27.

WATER TEMPERATURES: Maximum, 29.0°C Aug. 2; minimum, freezing point on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	65	62	63	71	70	70	55	54	55	62	61	62
2	66	63	65	72	71	71	96	55	62	63	61	62
3	67	63	65	72	71	71	86	60	70	63	61	62
4	68	66	67	72	69	70	60	56	58	63	62	62
5	71	67	69	69	65	67	57	56	57	62	62	62
6	75	70	72	68	64	66	59	57	58	---	---	---
7	75	73	74	65	61	63	85	58	61	---	---	---
8	75	72	74	66	63	65	68	54	59	65	64	64
9	78	74	76	66	64	65	56	46	49	73	64	66
10	80	76	78	67	66	66	47	46	46	75	65	69
11	82	80	81	67	65	66	48	46	47	78	65	70
12	83	81	82	68	67	67	53	48	49	76	59	65
13	84	79	82	69	64	67	51	49	50	61	56	59
14	85	79	82	67	62	64	53	50	51	62	59	60
15	88	85	87	66	60	62	---	---	---	60	59	59
16	86	76	83	63	61	62	---	---	---	60	59	60
17	77	66	72	65	62	63	---	---	---	62	60	61
18	67	64	65	67	64	66	---	---	---	62	62	62
19	68	64	66	68	66	67	59	58	58	63	61	62
20	70	66	68	69	67	68	59	58	59	64	62	63
21	69	67	68	67	54	61	63	60	61	63	62	62
22	69	67	68	54	51	53	62	60	60	63	60	62
23	74	69	72	52	51	52	62	60	61	61	60	61
24	79	75	77	53	52	53	61	60	60	63	61	62
25	80	78	79	58	53	54	62	60	60	84	62	74
26	81	79	80	63	53	55	61	60	61	85	78	81
27	82	78	81	59	54	56	62	61	61	---	---	---
28	79	72	75	55	54	55	74	61	65	---	---	---
29	75	72	73	61	53	55	62	61	62	---	---	---
30	78	75	77	55	53	54	62	61	62	---	---	---
31	85	72	76	---	---	---	62	61	62	---	---	---
MONTH	88	62	74	72	51	62	96	46	58	---	---	---

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

	DAY	MARCH			APRIL			MAY				
		MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN		
	1	---	---	---	52	51	51	55	53	54		
	2	---	---	---	55	51	52	55	54	54		
	3	---	---	---	62	43	51	56	54	55		
	4	---	---	---	43	43	43	56	55	56		
	5	---	---	---	45	43	44	56	55	56		
	6	---	---	---	47	45	46	58	55	56		
	7	---	---	---	48	46	47	59	57	58		
	8	---	---	---	50	47	49	60	58	59		
	9	---	---	---	52	50	51	62	58	60		
	10	---	---	---	54	51	52	63	60	62		
	11	67	67	67	57	55	56	63	61	62		
	12	79	67	74	56	53	54	61	60	61		
	13	77	70	73	53	50	52	61	55	58		
	14	82	72	76	53	51	52	60	58	58		
	15	77	60	72	52	50	51	62	59	60		
	16	85	61	71	50	47	49	62	60	61		
	17	92	71	81	48	46	46	63	60	61		
	18	85	74	80	45	44	45	63	61	62		
	19	80	74	78	45	42	43	65	62	64		
	20	77	52	63	42	42	42	65	61	63		
	21	51	50	50	45	42	42	68	61	63		
	22	53	51	52	45	42	43	70	63	64		
	23	57	54	56	45	44	44	72	65	68		
	24	58	49	53	46	44	45	76	68	72		
	25	51	49	50	46	45	45	76	71	73		
	26	49	46	47	47	45	46	78	72	74		
	27	48	45	46	48	46	47	80	75	77		
	28	49	47	48	49	48	48	79	73	76		
	29	50	48	49	53	48	50	81	75	77		
	30	62	49	53	54	50	52	83	78	79		
	31	52	50	51	---	---	---	82	78	80		
	MONTH	---	---	---	62	42	48	83	53	64		
	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	83	79	80	85	78	81	87	74	80	58	53	55
2	81	77	78	85	77	80	92	87	90	61	58	59
3	85	69	75	84	80	82	92	88	90	64	61	63
4	71	58	65	88	82	84	90	86	88	68	57	64
5	58	53	56	93	85	88	92	90	91	73	68	70
6	56	49	52	95	88	92	94	91	92	75	72	73
7	51	49	49	94	82	90	94	79	86	74	69	72
8	52	50	50	104	94	99	78	55	69	74	71	73
9	53	50	51	111	104	107	---	---	---	76	71	74
10	55	51	52	111	87	95	---	---	---	78	73	75
11	56	55	55	87	81	83	---	---	---	77	73	75
12	58	55	57	82	80	81	---	---	---	78	73	76
13	63	54	58	80	65	73	---	---	---	76	72	74
14	56	44	49	63	47	53	---	---	---	76	71	73
15	47	44	45	48	45	47	---	---	---	73	69	72
16	49	45	47	56	48	50	---	---	---	75	73	74
17	56	49	51	60	54	56	---	---	---	78	75	77
18	58	55	56	61	58	59	---	---	---	79	77	78
19	60	57	58	64	61	62	---	---	---	83	80	81
20	61	59	60	66	64	64	---	---	---	83	79	81
21	59	55	58	64	61	63	85	81	83	82	77	81
22	58	55	56	61	59	61	92	86	90	79	77	78
23	65	58	62	64	61	63	91	89	90	79	76	77
24	67	64	66	69	64	66	90	81	87	76	67	72
25	74	67	70	69	61	65	85	82	84	69	44	56
26	81	72	76	61	58	60	85	81	83	43	41	42
27	85	78	81	65	61	62	79	76	77	41	39	39
28	87	79	84	66	59	62	80	73	78	40	40	40
29	99	87	92	68	62	65	82	79	80	40	40	40
30	98	85	92	71	66	68	80	53	66	42	40	41
31	---	---	---	75	71	73	55	51	53	---	---	---
MONTH	99	44	63	111	45	72	---	---	---	83	39	67
YEAR	111	39	65									

CONNECTICUT RIVER BASIN

01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, N.H.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.0	9.5	10.0	10.0	7.5	9.0	0.0	0.0	0.0	0.0	0.0	0.0
2	10.5	9.0	9.5	9.5	7.0	8.5	0.5	0.0	0.0	0.0	0.0	0.0
3	9.0	7.5	8.5	8.0	5.5	7.0	0.5	0.0	0.5	0.0	0.0	0.0
4	8.5	6.0	7.0	8.5	7.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0
5	9.0	5.0	7.0	8.0	7.5	8.0	0.0	0.0	0.0	0.0	0.0	0.0
6	11.0	6.5	8.5	8.0	7.0	7.5	0.0	0.0	0.0	---	---	---
7	10.5	8.0	9.0	7.5	6.5	7.5	0.0	0.0	0.0	---	---	---
8	9.0	6.0	7.5	7.0	5.5	6.0	2.0	0.0	1.0	0.0	0.0	0.0
9	8.5	5.5	7.0	6.0	4.0	5.0	1.5	0.5	1.0	0.0	0.0	0.0
10	8.5	5.5	7.0	5.0	3.0	4.0	0.5	0.0	0.0	0.5	0.0	0.5
11	8.0	5.0	6.5	4.5	2.5	3.5	1.0	0.0	0.5	0.5	0.5	0.5
12	8.5	5.0	7.0	6.0	4.0	5.0	1.0	0.5	0.5	1.0	0.0	0.5
13	8.5	6.0	7.5	6.0	5.0	6.0	1.5	1.0	1.0	0.5	0.0	0.5
14	8.0	5.5	6.5	5.5	4.5	5.0	2.0	1.5	1.5	0.5	0.0	0.0
15	10.0	8.5	9.0	5.0	3.5	4.5	---	---	---	0.0	0.0	0.0
16	8.5	7.5	8.0	3.5	2.5	3.0	---	---	---	0.0	0.0	0.0
17	8.0	7.0	7.5	3.0	1.5	2.0	---	---	---	0.0	0.0	0.0
18	7.5	5.0	6.5	3.5	1.0	3.0	---	---	---	0.0	0.0	0.0
19	5.5	3.0	4.0	4.0	2.5	3.0	0.5	0.5	0.5	0.0	0.0	0.0
20	3.5	2.0	3.0	4.0	3.0	3.5	1.0	0.0	0.5	0.0	0.0	0.0
21	3.5	1.0	2.0	4.5	3.0	4.0	1.0	0.5	0.5	0.0	0.0	0.0
22	5.0	1.0	3.0	3.0	0.5	2.0	1.5	0.0	0.5	0.0	0.0	0.0
23	6.0	3.0	4.0	0.5	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
24	5.0	2.5	3.5	1.5	0.0	1.0	1.0	0.0	0.5	0.0	0.0	0.0
25	4.5	2.5	3.5	2.5	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
26	5.5	3.5	4.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	5.0	2.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	4.5	1.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	6.0	2.5	4.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	7.5	4.5	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	8.5	7.0	7.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	11.0	1.0	6.0	10.0	0.0	4.0	2.0	0.0	0.5	1.0	0.0	0.0
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	1.0	0.0	0.5	2.5	0.5	1.5	11.0	8.0	10.0
2	0.0	0.0	0.0	0.5	0.0	0.0	3.0	0.5	1.5	10.5	9.0	9.5
3	0.0	0.0	0.0	0.5	0.0	0.0	2.0	0.5	1.5	12.0	8.5	10.5
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	9.5	10.0
5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.5	10.5	8.5	9.5
6	0.0	0.0	0.0	1.0	0.0	0.5	1.5	0.5	1.0	12.0	8.5	10.5
7	0.0	0.0	0.0	1.5	0.0	1.0	1.5	0.5	1.0	13.0	10.5	12.0
8	0.0	0.0	0.0	1.0	0.0	0.5	2.0	0.0	1.0	13.0	11.0	12.0
9	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.5	1.5	15.0	9.5	12.0
10	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	2.0	14.0	11.0	13.0
11	0.0	0.0	0.0	0.5	0.0	0.0	4.5	1.0	3.0	16.0	11.0	13.5
12	0.0	0.0	0.0	1.0	0.5	0.5	4.0	1.0	3.0	16.5	12.5	14.5
13	0.0	0.0	0.0	1.5	0.5	1.0	3.5	1.5	2.5	15.5	14.0	14.5
14	0.0	0.0	0.0	0.5	0.0	0.5	4.5	1.0	3.0	17.0	13.0	15.0
15	0.0	0.0	0.0	1.0	0.0	0.0	4.5	2.0	3.5	17.5	13.5	15.5
16	0.0	0.0	0.0	1.5	0.0	0.5	5.0	3.0	4.0	18.0	15.0	16.0
17	0.0	0.0	0.0	3.0	0.0	1.0	6.0	3.0	4.5	18.5	14.0	16.0
18	0.5	0.0	0.0	3.0	0.5	1.5	5.0	3.0	4.5	19.0	14.5	16.5
19	0.5	0.0	0.0	2.5	1.0	1.5	5.5	4.5	5.0	20.5	16.0	18.0
20	0.5	0.0	0.0	2.0	0.5	1.0	5.0	3.5	4.5	22.0	17.0	19.0
21	0.5	0.0	0.0	1.0	0.0	0.5	5.5	3.0	3.5	23.0	18.5	20.5
22	0.5	0.0	0.0	0.5	0.0	0.5	6.5	3.0	5.0	22.5	18.5	20.5
23	0.5	0.0	0.5	2.5	0.5	1.5	7.5	4.0	6.0	24.0	18.5	21.0
24	0.5	0.0	0.0	1.5	0.5	1.0	7.5	6.5	7.0	25.0	19.5	21.5
25	0.0	0.0	0.0	2.5	1.0	2.0	8.5	6.5	7.5	19.0	16.0	18.0
26	0.5	0.0	0.0	1.5	0.0	1.0	8.5	7.0	8.0	20.0	14.5	17.0
27	1.0	0.0	0.5	0.5	0.0	0.0	7.0	6.0	6.5	20.0	16.0	17.5
28	1.0	0.0	0.5	1.5	0.0	0.5	7.0	5.5	6.0	21.5	15.0	18.0
29	---	---	---	1.5	0.0	0.5	8.5	4.5	7.0	21.5	14.0	17.5
30	---	---	---	1.5	0.5	1.0	10.5	6.5	8.5	18.5	15.0	16.5
31	---	---	---	2.0	0.5	1.0	---	---	---	19.5	16.0	17.5
MONTH	1.0	0.0	0.0	3.0	0.0	0.5	10.5	0.0	4.0	25.0	8.0	15.5

CONNECTICUT RIVER BASIN

01161000 ASHUELOT RIVER AT HINSDALE, N.H.

LOCATION.--Lat 42°47'07", long 72°29'12", Cheshire County, 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 mi² (1,088 km²).

PERIOD OF RECORD.--Discharge: March 1907 to December 1911, July 1914 to current year.

Chemical analyses: Water years 1953, 1958, 1968 (partial-record station).

Water temperatures: Water year 1958 (partial-record station).

REVISIONS (WATER YEARS).--WSP 661: Drainage area. WSP 781: 1907-10, 1914-34. WSP 1301: 1915(M), 1917-19(M), 1921-33(M). WSP 1701: 1920.

REMARKS.--Records good. 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 (see p. 110). Occasional diurnal fluctuation at low flow by mills above station; greater regulation prior to 1952.

AVERAGE DISCHARGE.--65 years, 660 ft³/s (18.69 m³/s), 21.34 in/yr (542 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 16,600 ft³/s (470 m³/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 ft³/s (0.28 m³/s) Sept. 9, 1953; minimum daily, 12 ft³/s (0.34 m³/s) Sept. 15, 1929.

Maximum discharge since at least 1859, that of Mar. 19, 1936.

Current year: Maximum discharge, 4,300 ft³/s (122 m³/s) Sept. 27 (gage height, 7.15 ft or 2.179 m); minimum, 96 ft³/s (2.72 m³/s) July 9; minimum daily, 100 ft³/s (2.83 m³/s) July 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	351	264	499	432	950	1380	1520	1310	222	156	212	697
2	307	272	533	409	829	1170	1370	1140	236	145	194	443
3	294	257	738	382	754	995	1820	1100	243	135	174	351
4	272	261	820	371	658	871	3950	1080	499	128	188	289
5	253	361	705	331	583	754	3580	1100	697	124	182	246
6	232	583	635	312	568	705	3170	1060	771	112	169	222
7	212	673	526	331	547	658	2590	968	1230	106	206	236
8	200	583	547	336	547	713	1900	862	1190	100	627	226
9	197	499	1010	346	547	642	1580	780	995	106	1420	209
10	185	438	1500	480	474	575	1410	713	788	156	1260	188
11	188	398	1390	506	444	561	1270	650	597	161	746	174
12	188	366	1180	818	420	506	1270	605	513	140	513	166
13	169	387	1110	1200	398	547	1430	738	1480	326	449	188
14	153	438	1040	1220	398	658	1280	950	2150	1290	382	200
15	145	449	897	932	409	627	1300	871	1870	2100	303	185
16	194	461	820	862	409	561	1400	738	1410	1940	243	171
17	526	449	888	771	392	597	1550	665	1100	1400	212	163
18	642	420	959	612	392	642	1770	575	914	1030	197	156
19	499	392	871	650	382	738	2140	506	738	771	177	158
20	409	398	771	713	403	2470	2510	455	568	583	158	200
21	356	888	689	620	398	4030	2580	415	461	597	140	216
22	317	1460	642	575	392	3620	2510	382	398	605	133	209
23	303	1460	605	561	420	3040	2410	382	336	474	126	216
24	281	1370	561	499	620	2750	2290	341	289	371	121	321
25	264	1130	554	493	1550	2720	2280	298	253	554	138	1100
26	253	950	499	820	2060	2740	2200	264	219	804	150	1910
27	239	871	443	1100	1940	2430	1980	246	197	605	158	3680
28	226	738	438	1070	1600	1940	1820	239	180	438	153	3890
29	222	673	420	968	---	1650	1760	236	169	351	138	2780
30	216	605	426	1090	---	1590	1600	219	166	281	575	2210
31	236	---	426	1070	---	1680	---	219	---	239	1010	---
TOTAL	8529	18494	23142	20880	19484	44560	60240	20107	20879	16328	10854	21400
MEAN	275	616	747	674	696	1437	2008	649	696	527	350	713
MAX	642	1460	1500	1220	2060	4030	3950	1310	2150	2100	1420	3890
MIN	145	257	420	312	382	506	1270	219	166	100	121	156
MEAN†	274	622	750	680	690	1436	2008	638	695	527	354	738
CFSM†	.65	1.48	1.79	1.62	1.64	3.42	4.78	1.52	1.65	1.25	.84	1.76
IN†	.75	1.65	2.06	1.87	1.71	3.94	5.34	1.75	1.85	1.45	.97	1.96
CAL YR 1974 TOTAL	270945		MEAN 742	MAX 3070	MIN 53		MEAN† 724	CFSM† 1.72	IN† 23.42			
WTR YR 1975 TOTAL	284897		MEAN 781	MAX 4030	MIN 100		MEAN† 783	CFSM† 1.86	IN† 25.30			

† Adjusted for change in contents in Surry Mountain and Otter Brook Lakes.

01167800 BEAVER BROOK AT WILMINGTON, VT.

LOCATION.--Lat 42°51'38", long 72°51'04", Windham County, on right bank 20 ft (6 m) downstream from bridge on State Highway 9, 1.0 mi (1.6 km) southeast of Wilmington, and 1.7 mi (2.7 km) upstream from mouth.

DRAINAGE AREA.--6.38 mi² (16.52 km²).

DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (475 m) from topographic map.

REVISIONS (WATER YEARS).--WRD Mass., N.H., R.I., Vt., 1972: 1963(M), 1964(P), 1967-68(P), 1969-70, 1971(P).

REMARKS.--Records poor October to December, fair January to March, and good thereafter. Recording rain gage at station April 1964 to November 1974 (no winter records).

AVERAGE DISCHARGE.--12 years, 15.4 ft³/s (0.436 m³/s), 32.78 in/yr (833 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 1,140 ft³/s (32.3 m³/s) June 30, 1973 (gage height, 8.61 ft or 2.624 m), from rating curve extended above 160 ft³/s (4.53 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 8.73 ft (2.661 m) Jan. 19, 1965 (ice jam); minimum discharge, 0.06 ft³/s (0.002 m³/s) Aug. 1, 1965.

Current year: Peak discharges above base of 230 ft³/s (6.51 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)				
Feb. 25	0215	-	-	†*5.55	1.692	Aug. 30	0600	*331	9.37	4.81	1.466
Apr. 19	1700	290	8.21	4.59	1.399	Sept. 27	0030	282	7.99	4.54	1.384
July 14	1615	323	9.15	4.77	1.454						

† Ice jam.

Minimum discharge, 1.4 ft³/s (0.040 m³/s) July 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	9.4	9.4	5.5	12	15	15	36	5.6	3.2	2.3	11
2	18	8.5	11	5.3	11	14	14	35	4.8	2.7	1.9	8.6
3	13	8.2	10	5.0	10	13	38	31	5.1	2.3	1.7	8.1
4	10	14	8.7	4.7	9.0	12	46	37	19	2.1	2.1	6.2
5	9.4	21	8.0	4.5	9.0	11	25	48	10	1.9	3.4	5.3
6	8.1	23	8.0	4.5	9.0	10	15	30	58	1.7	2.3	5.6
7	7.3	15	8.0	4.7	8.6	9.0	13	23	26	1.6	28	5.6
8	6.9	12	35	5.1	8.2	9.0	11	20	14	1.6	101	4.5
9	6.5	10	32	5.4	7.8	9.0	9.4	16	9.4	2.3	33	4.2
10	6.5	9.4	18	5.4	7.4	8.5	9.8	14	7.3	3.0	11	3.6
11	6.5	9.0	14	10	7.0	8.1	10	12	6.2	2.1	7.3	3.6
12	6.5	11	11	21	6.5	6.9	12	20	20	1.9	5.9	6.5
13	6.2	28	10	14	6.2	10	11	87	71	57	4.8	6.5
14	6.5	17	10	11	6.0	8.5	14	55	46	84	3.6	4.8
15	8.1	15	10	9.5	5.8	8.0	19	29	20	48	3.0	4.2
16	47	13	11	8.0	5.6	7.2	30	27	14	16	2.8	3.9
17	48	12	15	7.0	5.5	6.9	59	19	12	8.6	2.8	3.9
18	23	11	11	6.6	5.5	7.3	81	16	9.8	5.6	2.8	3.6
19	18	11	8.5	6.6	5.4	8.6	191	14	7.3	4.5	2.3	11
20	15	17	7.4	6.2	5.3	173	126	12	6.2	5.9	2.1	17
21	12	45	7.0	5.8	5.3	91	72	9.0	5.6	13	1.7	7.7
22	11	23	6.8	5.6	5.6	50	54	6.5	6.2	6.2	2.1	5.6
23	9.4	17	6.8	5.4	6.9	33	64	7.7	5.1	4.8	1.9	11
24	8.6	16	6.8	5.0	50	32	134	7.3	4.2	3.4	2.3	23
25	8.2	18	6.6	9.0	70	49	123	5.3	3.4	28	3.0	81
26	10	15	6.4	30	35	43	98	5.1	2.8	8.1	4.2	107
27	8.6	13	6.2	16	22	37	60	4.8	2.7	5.3	3.2	134
28	8.0	11	6.0	12	18	29	38	4.8	2.3	3.9	2.3	41
29	7.4	10	5.8	15	---	23	33	4.2	3.6	3.2	2.3	22
30	7.0	9.6	5.7	20	---	20	35	4.2	6.9	2.8	105	14
31	9.0	---	5.6	15	---	17	---	5.6	---	2.5	23	---
TOTAL	385.7	452.1	325.7	288.8	363.6	779.0	1460.2	645.5	414.5	337.2	375.1	574.0
MEAN	12.4	15.1	10.5	9.32	13.0	25.1	48.7	20.8	13.8	10.9	12.1	19.1
MAX	48	45	35	30	70	173	191	87	71	84	105	134
MIN	6.2	8.2	5.6	4.5	5.3	6.9	9.4	4.2	2.3	1.6	1.7	3.6
CFSM	1.94	2.37	1.65	1.46	2.04	3.93	7.63	3.26	2.16	1.71	1.90	2.99
IN.	2.25	2.64	1.90	1.68	2.12	4.54	8.51	3.76	2.42	1.97	2.19	3.35

CAL YR 1974 TOTAL 5033.61 MEAN 13.8 MAX 210 MIN 1.62 CFSM 2.16 IN 29.35
WTR YR 1975 TOTAL 6401.40 MEAN 17.5 MAX 191 MIN 1.6 CFSM 2.74 IN 37.32

NOTE.--Backwater from beaver dam Oct. 21 to Jan. 24.

CONNECTICUT RIVER BASIN

01167800 BEAVER BROOK AT WILMINGTON, VT.--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--CHEMICAL ANALYSES: August 1972 to current year.

INSTRUMENTATION.--Two-parameter water-quality monitor.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument.

EXTREMES.--Period of record:

SPECIFIC CONDUCTANCE: Maximum, 191 micromhos Feb. 22, 1974; minimum recorded, 22 micromhos Nov. 30, 1974, but may have been lower during period of no record in November 1974.

WATER TEMPERATURES: Maximum, 25.5°C Aug. 10, 1973, June 10, 1974, July 8, Aug. 2, 1975; minimum, freezing point on many days during winter periods.

EXTREMES.--Current year:

SPECIFIC CONDUCTANCE: Maximum, 114 micromhos July 9; minimum recorded, 22 micromhos Nov. 30, but may have been lower during period of no record in November.

WATER TEMPERATURES: Maximum, 25.5°C July 8, Aug. 2; minimum, freezing point on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	57	45	50	68	50	56	58	23	31	57	53	54
2	56	45	49	62	43	51	58	29	35	54	53	54
3	54	45	47	66	42	48	50	31	38	56	54	54
4	63	44	50	51	44	47	45	28	34	54	54	54
5	70	46	54	46	41	43	67	29	41	57	54	55
6	72	49	57	47	40	42	53	36	42	58	55	56
7	57	49	53	56	37	42	53	38	40	56	54	55
8	71	48	55	56	36	41	---	---	---	56	54	55
9	76	49	58	59	35	42	---	---	---	60	56	57
10	62	52	57	61	30	44	54	32	37	61	58	59
11	82	54	62	72	41	53	67	36	45	64	59	60
12	67	53	60	54	45	49	62	38	47	63	55	59
13	78	55	62	50	39	45	81	45	56	56	52	53
14	62	53	58	56	39	48	87	42	60	55	51	52
15	63	58	61	68	43	46	50	42	45	57	55	55
16	58	46	53	66	51	56	48	45	46	64	51	57
17	53	44	47	74	23	42	50	46	48	70	60	64
18	59	44	48	51	37	40	52	48	49	70	61	66
19	62	47	52	71	50	55	51	49	50	70	56	62
20	58	50	53	57	52	54	55	50	52	---	---	---
21	71	45	57	57	45	50	53	50	52	---	---	---
22	81	52	60	---	---	---	54	52	53	---	---	---
23	80	50	59	---	---	---	57	52	53	---	---	---
24	82	49	59	---	---	---	60	55	57	---	---	---
25	58	51	56	---	---	---	55	51	53	---	---	---
26	72	54	59	---	---	---	54	51	52	---	---	---
27	82	56	62	---	---	---	55	52	54	---	---	---
28	77	48	62	---	---	---	56	54	55	---	---	---
29	83	55	63	---	---	---	56	54	55	---	---	---
30	75	55	63	67	22	32	59	55	57	---	---	---
31	68	54	60	---	---	---	57	54	55	---	---	---
MONTH	83	44	56	---	---	---	87	23	48	---	---	---

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	58	57	58	58	56	57	43	42	43
2	---	---	---	60	58	59	60	56	58	43	42	43
3	---	---	---	60	59	60	64	56	59	44	42	43
4	---	---	---	64	60	61	61	57	58	43	41	42
5	---	---	---	62	60	61	60	58	59	42	42	42
6	---	---	---	71	60	61	62	59	60	45	43	44
7	---	---	---	75	60	65	63	60	62	47	44	46
8	---	---	---	78	62	70	64	60	62	50	48	49
9	---	---	---	74	65	70	66	62	64	52	48	50
10	---	---	---	67	64	66	69	64	67	53	50	51
11	---	---	---	66	64	64	70	66	69	54	52	52
12	56	49	55	109	63	69	72	68	70	54	48	53
13	56	55	56	77	68	72	73	69	72	47	43	46
14	57	54	56	79	68	74	74	69	72	46	44	45
15	58	55	57	77	65	67	71	67	69	49	45	47
16	62	56	58	71	65	68	69	60	66	49	44	46
17	68	57	61	73	65	69	64	53	59	51	46	48
18	64	57	60	74	69	71	54	50	52	51	49	50
19	77	58	65	76	71	73	50	44	47	55	50	52
20	76	63	70	72	51	58	47	44	46	59	55	58
21	79	67	71	52	50	51	48	46	47	61	58	60
22	73	65	69	62	52	54	49	47	48	63	59	60
23	77	70	73	62	57	59	49	45	47	64	58	61
24	74	66	71	61	59	60	44	42	44	64	58	60
25	65	59	62	---	---	---	43	41	42	67	64	65
26	59	54	56	---	---	---	43	41	42	69	64	66
27	54	52	53	52	49	51	43	42	43	70	67	68
28	57	53	55	53	51	52	45	43	44	75	68	72
29	---	---	---	54	52	53	46	44	45	77	74	75
30	---	---	---	57	53	55	45	43	44	79	75	77
31	---	---	---	59	54	56	---	---	---	77	70	74
MONTH	---	---	---	109	49	62	74	41	56	79	41	54
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	73	64	67	78	66	72	85	81	83	56	50	52
2	71	65	67	87	74	82	93	85	90	56	54	55
3	73	69	72	91	86	88	97	90	93	59	55	56
4	66	50	55	95	90	92	91	80	86	64	59	60
5	63	51	59	100	93	96	79	69	72	69	61	66
6	51	40	46	103	99	101	78	73	76	72	62	67
7	52	46	49	106	101	103	76	43	52	66	63	64
8	58	51	54	109	104	106	47	39	43	69	65	67
9	62	58	60	114	84	104	46	43	45	76	69	71
10	65	62	63	94	82	88	50	46	47	92	75	78
11	68	62	64	99	91	95	55	50	52	79	72	76
12	69	41	57	98	96	97	58	54	56	76	60	68
13	43	39	41	95	38	58	65	59	61	66	61	63
14	44	39	41	52	35	44	70	64	67	73	67	69
15	45	42	43	45	39	42	73	65	68	81	72	74
16	45	44	45	50	45	47	78	73	76	79	75	77
17	50	44	46	56	51	53	80	76	78	81	76	78
18	53	49	51	63	56	59	79	73	76	80	77	79
19	57	53	55	66	62	64	83	77	79	80	54	71
20	59	55	57	68	54	62	86	83	84	64	55	60
21	64	59	61	55	48	51	88	85	86	70	64	67
22	69	64	66	61	54	57	85	79	85	77	71	74
23	74	68	70	67	62	63	84	81	82	76	62	68
24	74	70	74	70	64	67	85	68	79	68	57	66
25	80	75	77	61	45	53	72	66	68	---	---	---
26	84	80	82	63	58	60	68	58	62	---	---	---
27	91	85	88	67	63	65	72	65	69	---	---	---
28	97	89	93	72	67	69	76	73	75	---	---	---
29	97	62	90	77	70	73	80	70	78	---	---	---
30	64	54	59	78	75	76	71	37	45	---	---	---
31	---	---	---	82	78	79	51	45	47	---	---	---
MONTH	97	39	62	114	35	73	97	37	70	92	50	68
YEAR	114	22	60									

CONNECTICUT RIVER BASIN

01167800 BEAVER BROOK AT WILMINGTON, VT.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.0	7.5	8.5	11.5	9.0	10.5	0.0	0.0	0.0	0.5	0.5	0.5
2	9.5	8.0	8.5	11.5	7.5	10.0	0.0	0.0	0.0	0.5	0.0	0.5
3	8.0	6.5	7.0	7.5	5.0	6.5	0.5	0.0	0.5	0.5	0.0	0.5
4	7.5	5.5	6.5	9.0	7.0	8.0	0.0	0.0	0.0	0.5	0.0	0.5
5	9.0	5.5	7.5	8.0	7.0	7.5	0.0	0.0	0.0	0.5	0.0	0.0
6	11.5	7.5	9.5	7.5	7.0	7.5	0.0	0.0	0.0	0.5	0.0	0.0
7	10.0	8.0	9.0	7.5	6.0	7.0	0.0	0.0	0.0	0.5	0.0	0.5
8	8.0	5.5	7.0	6.5	4.5	5.5	1.0	0.0	0.5	0.5	0.0	0.5
9	7.5	5.0	6.5	6.0	4.0	5.0	1.0	0.0	1.0	0.5	0.0	0.0
10	7.0	6.0	6.5	4.5	2.5	3.5	0.5	0.0	0.0	0.5	0.0	0.0
11	8.0	5.0	6.5	4.5	2.0	3.5	1.0	0.5	0.5	0.5	0.0	0.5
12	9.0	5.5	7.0	5.5	4.0	4.5	1.0	0.5	0.5	0.5	0.0	0.0
13	9.5	7.0	8.0	6.0	4.0	5.5	1.5	0.5	1.0	0.5	0.0	0.0
14	8.0	6.5	7.0	5.5	3.5	4.5	1.5	0.5	1.0	0.0	0.0	0.0
15	10.0	8.5	9.0	5.0	2.0	3.5	0.5	0.0	0.0	0.0	0.0	0.0
16	8.5	7.5	8.0	2.5	1.5	2.0	0.5	0.0	0.0	0.0	0.0	0.0
17	8.5	7.0	7.5	2.5	1.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0
18	7.5	4.0	6.0	4.0	1.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
19	4.5	2.5	3.5	4.5	3.5	4.0	0.5	0.0	0.5	0.0	0.0	0.0
20	3.5	2.5	3.0	4.5	3.0	4.0	1.0	0.5	0.5	0.5	0.0	0.0
21	3.0	1.0	2.0	4.5	2.5	4.0	1.0	0.0	0.5	0.0	0.0	0.0
22	4.5	2.0	3.5	2.5	0.0	1.0	1.0	0.0	0.5	0.5	0.0	0.0
23	6.5	4.0	5.0	1.0	0.0	0.5	1.0	0.5	1.0	0.5	0.0	0.0
24	5.0	3.0	4.0	2.5	0.5	2.0	1.5	0.5	1.0	0.5	0.0	0.5
25	4.5	2.5	3.5	3.5	2.0	3.0	1.0	0.0	0.5	0.0	0.0	0.0
26	5.0	3.5	4.5	1.5	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
27	5.5	3.5	4.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
28	3.5	1.0	2.5	1.0	0.0	0.5	0.5	0.0	0.0	0.5	0.0	0.0
29	5.5	2.0	4.0	1.0	0.0	0.5	0.5	0.0	0.5	0.0	0.0	0.0
30	8.0	5.0	6.5	0.5	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
31	10.5	8.0	9.0	---	---	---	0.5	0.0	0.5	0.0	0.0	0.0
MONTH	11.5	1.0	6.0	11.5	0.0	4.0	1.5	0.0	0.5	0.5	0.0	0.0
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	2.0	0.5	1.0	2.5	0.5	1.5	6.0	2.5	4.5
2	0.5	0.0	0.0	1.0	0.5	0.5	3.5	0.5	2.0	4.5	3.5	4.0
3	0.5	0.0	0.0	0.5	0.5	0.5	1.5	0.5	0.5	8.5	2.0	5.0
4	0.5	0.0	0.0	0.5	0.5	0.5	1.5	0.5	1.0	4.5	3.5	4.0
5	---	---	---	0.5	0.5	0.5	2.0	0.5	1.0	7.5	3.0	3.5
6	---	---	---	0.5	0.5	0.5	3.0	0.5	1.5	9.0	3.5	6.0
7	---	---	---	1.0	0.5	0.5	3.0	0.5	1.5	11.0	5.5	7.5
8	---	---	---	1.0	0.5	0.5	3.5	0.5	1.5	10.0	5.5	7.5
9	---	---	---	0.5	0.5	0.5	4.5	0.5	2.0	11.5	4.5	8.0
10	---	---	---	0.5	0.5	0.5	5.0	0.5	2.5	11.5	7.0	9.0
11	---	---	---	0.5	0.5	0.5	6.0	0.5	2.5	13.0	6.0	9.5
12	0.5	0.5	0.5	0.5	0.5	0.5	5.5	0.5	2.5	13.0	8.5	10.5
13	0.5	0.5	0.5	1.0	0.5	0.5	3.5	0.5	1.5	11.5	9.5	10.5
14	0.5	0.5	0.5	1.0	0.5	0.5	6.5	0.5	3.0	13.5	8.0	10.5
15	0.5	0.5	0.5	1.0	0.5	0.5	5.0	0.5	2.5	15.0	9.5	12.0
16	0.5	0.5	0.5	1.5	0.5	1.0	5.5	1.5	3.0	14.0	11.0	12.0
17	0.5	0.5	0.5	2.5	0.5	1.0	6.0	1.5	3.0	16.0	9.0	12.5
18	0.5	0.5	0.5	2.5	0.5	1.0	3.5	1.0	2.0	16.5	10.5	13.5
19	0.5	0.5	0.5	2.0	0.5	1.5	2.0	1.0	1.5	18.5	12.0	15.0
20	1.0	0.5	0.5	1.0	0.5	1.0	3.0	1.0	2.0	20.5	13.0	16.5
21	1.0	0.5	1.0	1.5	0.5	1.0	4.5	0.5	2.0	20.0	14.5	17.0
22	1.5	0.5	1.0	1.5	0.5	1.0	5.5	0.0	2.0	20.0	15.0	17.5
23	1.5	0.5	1.0	3.0	1.0	1.5	6.0	0.5	3.0	21.0	15.5	18.5
24	0.5	0.5	0.5	1.5	0.5	1.0	3.0	2.0	2.5	22.5	16.5	19.5
25	1.0	0.5	0.5	---	---	---	5.0	2.0	3.0	17.0	13.0	15.0
26	1.0	0.5	0.5	---	---	---	5.0	2.5	3.5	18.5	11.5	15.0
27	1.0	0.5	0.5	1.0	0.5	0.5	4.5	1.5	3.0	17.5	15.0	16.0
28	1.5	0.5	1.0	1.5	0.5	1.0	5.0	0.5	2.5	19.5	13.5	16.0
29	---	---	---	1.5	0.5	1.0	7.0	0.5	3.5	20.0	12.5	16.0
30	---	---	---	2.5	0.5	1.5	8.5	1.5	5.0	15.0	13.0	14.5
31	---	---	---	2.5	0.5	1.0	---	---	---	19.0	14.0	16.0
MONTH	---	---	---	3.0	0.5	1.0	8.5	0.0	2.5	22.5	2.0	11.5

CONNECTICUT RIVER BASIN

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, N.H., 506,000,000 ft³ (14,300,000 m³); First Lake, 5.6 mi (9.0 km) northeast of Pittsburg, N.H., 3,330,000,000 ft³ (94,300,000 m³). Records furnished by New England Power Co.
01129000. LAKE FRANCIS on Connecticut River at Pittsburg, N.H., 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, N.H., filled in April 1956, 4,970,000,000 ft³ (141,000,000 m³); Comerford Reservoir, 5 mi (8 km) northeast of Monroe, N.H., 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, N.H., 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, N.H., 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, N.H., 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, N.H., 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 1974 TO SEPTEMBER 1975

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, 1974.....	2,785.1	3,643.8	5,636.5	2.8	959.4	124.0
Oct. 31.....	2,448.6	3,390.7	5,528.9	1.5	665.9	122.0
Nov. 30.....	2,606.2	3,431.2	5,679.1	12.8	719.6	24.8
Dec. 31.....	2,225.1	3,011.1	5,529.8	16.2	703.9	28.0
Jan. 31, 1975.....	1,554.8	2,311.6	5,032.4	15.2	663.3	26.4
Feb. 28.....	902.5	1,141.7	4,070.9	14.5	654.8	25.3
Mar. 31.....	259.8	808.0	1,350.6	13.0	760.7	27.5
Apr. 30.....	936.8	1,384.0	3,009.1	8.5	966.6	42.8
May 31.....	2,957.7	2,903.3	5,869.6	3.1	1,091.8	127.0
June 30.....	3,314.6	3,171.5	5,292.6	1.5	1,087.9	131.0
July 31.....	3,425.8	3,159.6	5,589.2	1.6	1,016.6	119.0
Aug. 31.....	3,249.5	3,545.1	5,315.4	1.4	983.4	125.0
Sept. 30.....	3,186.0	4,065.2	5,539.1	2.5	977.9	107.3
	Sunapee Lake	North Springfield Reservoir	Ball Mountain Reservoir	Townshend Reservoir	Surry Mountain Lake	Otter Brook Lake
Sept. 30, 1974.....	364	34.9	176.8	42.9	65.7	34.0
Oct. 31.....	248	24.7	6.1	35.8	64.5	33.4
Nov. 30.....	296	27.6	4.9	36.9	76.9	36.5
Dec. 31.....	367	32.0	10.4	36.9	84.7	38.2
Jan. 31, 1975.....	413	32.7	32.7	41.1	101.1	37.9
Feb. 28.....	350	25.4	48.1	38.3	88.8	36.5
Mar. 31.....	304	26.2	43.3	39.4	84.7	35.8
Apr. 30.....	586	30.5	117.3	43.6	86.0	35.4
May 31.....	598	26.2	137.4	37.2	58.6	33.4
June 30.....	612	24.7	119.4	34.4	57.4	33.0
July 31.....	585	23.3	89.6	34.1	58.6	33.4
Aug. 31.....	510	29.1	122.0	39.4	66.9	35.4
Sept. 30.....	502	26.9	93.8	40.0	124.0	43.2

01329000 BATTEN KILL AT ARLINGTON, VT.

LOCATION.--Lat 43°04'38", long 73°09'26", Bennington County, 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.--Discharge: October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 597.68 ft (182.173 m) above mean sea level, unadjusted. Prior to Nov. 18, 1941, nonrecording gage at downstream side of bridge at same datum.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 851: 1936 (maximum gage height). WSP 1302: 1929-34(M).

REMARKS.--Records excellent. Prior to 1949, diurnal fluctuation at low flow caused by mill above station.

AVERAGE DISCHARGE.--47 years, 333 ft³/s (9.431 m³/s), 29.75 in/yr (756 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 11,100 ft³/s (314 m³/s) Mar. 18, 1936 (gage height, 11.3 ft or 3.44 m, from floodmarks, present site), from rating curve extended above 5,200 ft³/s (147 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.

Current year: Peak discharges above base of 2,200 ft³/s (62.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 25	2130	2,280 64.6	6.98 2.128	Aug. 8	0930	*2,870 81.3	*7.45 2.271

Minimum discharge, 116 ft³/s (3.29 m³/s) Aug. 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	591	192	302	225	435	338	431	1290	906	157	145	305
2	464	184	337	219	352	311	398	1340	518	147	139	232
3	418	178	361	199	320	291	956	1280	335	143	131	251
4	366	195	308	216	265	272	1010	1500	704	144	126	223
5	332	264	267	202	293	259	639	1690	556	135	146	185
6	306	377	267	178	303	258	526	1510	883	129	135	176
7	282	280	253	209	288	255	469	1290	856	127	275	171
8	263	236	593	201	267	315	430	1200	748	151	2050	154
9	250	217	1270	239	256	251	402	975	543	148	1600	180
10	242	206	713	253	246	246	393	883	412	195	493	162
11	232	200	483	327	247	242	412	766	341	146	305	146
12	225	195	446	692	237	233	421	720	446	134	295	566
13	219	413	443	494	235	302	410	959	844	345	233	614
14	216	419	390	377	225	303	404	743	572	339	197	337
15	227	352	351	311	235	262	452	563	431	427	175	248
16	266	295	327	294	220	246	479	608	367	386	159	211
17	404	261	332	259	216	253	577	591	339	264	152	203
18	340	249	329	245	215	274	714	453	300	196	152	200
19	280	256	301	320	229	319	1420	389	274	168	138	217
20	250	305	288	258	224	1130	2030	349	255	237	129	373
21	230	1320	278	225	210	1520	1560	308	235	360	123	1520
22	215	1000	268	257	207	1020	1050	284	218	275	123	826
23	205	559	258	225	222	894	899	261	202	193	129	639
24	195	479	256	237	472	791	1450	242	190	184	125	664
25	202	641	258	274	921	988	2080	222	180	1260	131	822
26	204	586	230	732	621	1070	2020	212	171	449	214	895
27	197	445	231	443	437	739	1520	211	165	257	173	1050
28	189	397	243	345	369	611	1070	224	163	205	138	705
29	186	373	231	441	---	556	818	196	167	179	123	510
30	184	334	228	916	---	534	941	185	175	163	1190	421
31	193	---	224	550	---	488	---	239	---	153	660	---
TOTAL	8373	11408	11066	10363	8767	15571	26381	21683	12496	7796	10304	13206
MEAN	270	380	357	334	313	502	879	699	417	251	332	440
MAX	591	1320	1270	916	921	1520	2080	1690	906	1260	2050	1520
MIN	184	178	224	178	207	233	393	185	163	127	123	146
CFSM	1.78	2.50	2.35	2.20	2.06	3.30	5.78	4.60	2.74	1.65	2.18	2.89
IN.	2.05	2.79	2.71	2.54	2.15	3.81	6.46	5.31	3.06	1.91	2.52	3.23
CAL YR 1974	TOTAL	144099	MEAN 395	MAX 2220	MIN 97	CFSM 2.60	IN 35.27					
WTR YR 1975	TOTAL	157414	MEAN 431	MAX 2080	MIN 123	CFSM 2.84	IN 38.52					

HOOSIC RIVER BASIN

01333350 HOOSIC RIVER NEAR NORTH POWNAL, VT.

LOCATION.--Lat 42°48'33", long 73°17'12", Rensselaer County, N.Y., at bridge on New York-Vermont State Highway 346, at State line, 1.3 mi (2.1 km) northwest of North Pownal, Vt.

PERIOD OF RECORD.--CHEMICAL ANALYSES: August 1969 to May 1975 (discontinued).

CHEMICAL ANALYSES, OCTOBER 1974 TO MAY 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
OCT.										
01...	0945	768	167	.49	.01	.50	.16	.23	.89	.39
29...	0920	475	255	.79	.02	.81	.62	.19	1.6	.81
FEB.										
19...	1125	363	359	.97	.02	.99	.50	.08	1.6	.58
MAR.										
11...	1045	522	241	.54	.01	.55	.23	.31	1.1	.54
APR.										
08...	1135	--	197	.51	.01	.52	.14	.11	.77	.25
22...	1100	1800	106	.41	.01	.42	.06	.14	.62	.20
MAY										
21...	0930	576	209	.33	.04	.37	.12	.04	.53	.16

DATE	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	FIXED NON-FILTERABLE RESIDUE (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	RESIDUE ON IGNITION (MG/L)	TOTAL RESIDUE (MG/L)	TURBIDITY (JTU)	COLOR (PLATINUM-COBALT UNITS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.										
01...	.06	.42	30	36	110	143	20	3	14	5.0
29...	.50	.61	9	12	133	162	6	6	12	5.8
FEB.										
19...	.31	.36	5	11	178	198	6	9	13	4.2
MAR.										
11...	.12	.11	10	14	116	138	5	8	8	2.2
APR.										
08...	.02	.04	8	10	83	116	5	4	8	3.2
22...	.03	.07	11	12	51	78	8	5	7	2.0
MAY										
21...	.03	.06	4	6	103	120	2	1	9	1.7

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.										
01...	800	90	19	5.2	5.7	1.3	69	57	12	6.9
29...	350	110	26	11	9.7	1.0	107	88	16	13
FEB.										
19...	390	140	28	7.0	28	1.3	101	83	17	43
MAR.										
11...	260	50	23	6.5	10	1.0	91	75	15	16
APR.										
08...	810	100	21	6.2	7.3	.8	71	58	13	12
22...	610	60	11	3.3	3.3	.6	38	31	10	5.6
MAY										
21...	290	60	10	6.9	7.0	.9	82	67	13	9.3

HUDSON RIVER BASIN

113

01334000 WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT.

LOCATION.--Lat 42°54'47", long 73°15'25", Bennington County, 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 m² (287 km²).

PERIOD OF RECORD.--Discharge: June 1931 to current year.

Chemical analyses: Water years 1953-54 (partial-record station).

Water temperatures: Water year 1954 (partial-record station).

GAGE.--Water-stage recorder. Altitude of gage is 525 ft (160 m) from topographic map.

REVISIONS (WATER YEARS).--WSP 781: 1933(M).

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Occasional diurnal fluctuation at low flow caused by mills above station; diurnal fluctuation greater prior to 1960. Diversion above station for municipal supply of Bennington and North Bennington since 1961. See table below for figures of diversion.

AVERAGE DISCHARGE.--44 years, 218 ft³/s (6.174 m³/s), 26.67 in/yr (677 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 8,450 ft³/s (239 m³/s) Sept. 21, 1938 (gage height, 12.04 ft or 3.670 m), from rating curve extended above 2,800 ft³/s (79.3 m³/s) on basis of contracted-opening measurements at gage heights 10.13, 10.49, 11.50, and 12.04 ft (3.088, 3.197, 3.505 and 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 (0.11 m³/s) Sept. 27, 1932; minimum daily, 21 ft³/s (0.59 m³/s) Sept. 22, 23, 1964, July 12, 1965.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Aug. 8	1000	*3,330 94.3	*7.29 2.222	Aug. 30	0730	2,990 84.7	6.89 2.100

Minimum discharge, 64 ft³/s (1.81 m³/s) July 8, 9; minimum daily, 68 ft³/s (1.93 m³/s) July 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	393	126	238	159	310	288	350	831	180	91	105	230
2	350	118	333	155	250	258	320	826	149	84	98	170
3	295	113	334	137	200	233	640	855	196	91	91	185
4	259	136	263	154	175	212	600	926	692	105	93	160
5	232	230	214	139	199	202	470	993	389	84	146	135
6	212	349	213	125	212	200	420	792	697	76	110	130
7	194	229	204	147	199	200	380	697	537	72	542	125
8	178	185	652	140	186	240	350	622	477	68	2400	115
9	167	165	891	170	176	200	330	528	336	117	1200	130
10	159	153	474	180	160	190	320	486	262	170	400	120
11	151	146	367	300	170	185	344	423	223	98	230	110
12	144	141	342	500	160	180	352	415	477	86	220	450
13	140	335	329	350	160	230	340	730	843	477	170	400
14	136	326	301	270	155	230	336	459	523	406	145	250
15	149	301	273	230	155	200	364	364	352	617	130	190
16	182	248	255	200	155	190	381	472	292	348	120	160
17	353	217	271	180	152	200	445	389	285	206	110	150
18	230	204	258	170	152	210	504	320	237	152	110	150
19	181	212	233	220	173	250	1120	285	212	127	105	160
20	164	262	220	180	164	900	1090	250	192	219	96	220
21	153	1120	211	160	149	780	675	225	167	377	90	500
22	144	627	203	180	149	472	566	200	149	233	90	277
23	140	418	192	155	183	459	602	190	138	161	94	377
24	135	381	192	165	697	475	1070	173	127	141	92	377
25	134	510	197	220	950	750	1310	155	117	622	96	586
26	143	444	167	500	523	700	1020	146	107	288	160	576
27	133	351	170	330	372	580	780	144	102	192	130	830
28	125	313	178	250	312	500	576	144	102	155	100	518
29	120	295	165	350	---	450	566	125	102	144	90	394
30	118	263	164	650	---	430	714	125	105	127	1700	320
31	125	---	156	420	---	390	---	144	---	114	500	---
TOTAL	5739	8918	8660	7486	6998	10984	17335	13434	8767	6248	9763	8495
MEAN	185	297	279	241	250	354	578	433	292	202	315	283
MAX	393	1120	891	650	950	900	1310	993	843	622	2400	830
MIN	118	113	156	125	149	180	320	125	102	68	90	110
CFSM	1.67	2.68	2.51	2.17	2.25	3.19	5.21	3.90	2.63	1.82	2.84	2.55
IN.	1.92	2.99	2.90	2.51	2.35	3.68	5.81	4.50	2.94	2.09	3.27	2.85
(†)	6.29	5.57	5.60	5.79	5.73	5.97	7.89	5.15	5.13	4.32	5.80	5.68

CAL YR 1974 TOTAL 98188 MEAN 269 MAX 1540 MIN 49 CFSM 2.42 IN 32.91 (†) 5.13
WTR YR 1975 TOTAL 112827 MEAN 309 MAX 2400 MIN 68 CFSM 2.78 IN 37.81 (†) 5.74

† Diversion, in cubic feet per second, for municipal supply of Bennington and North Bennington; records furnished by town of Bennington.

NOTE.--No gage-height record Aug. 9 to Sept. 19.

S T. LAWRENCE RIVER BASIN

ST. LAWRENCE RIVER BASIN

04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT.

LOCATION.--Lat 43°37'40", long 73°18'50", Rutland County, 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.

Chemical analyses: Water year 1954 (partial-record station).

GAGE.--Water-stage recorder. Altitude of gage is 105 ft (32 m) from topographic map.

REVISIONS (WATER YEARS).--WSP 1114: 1929(M), 1932-35.

REMARKS.--Records good except those for periods of backwater from grass, which are poor. Flow regulated by power-plant above station and by Lake Bomoseen.

AVERAGE DISCHARGE.--47 years, 238 ft³/s (6.740 m³/s), 17.28 in/yr (439 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 14,800 ft³/s (419 m³/s) July 20, 1945 (gage height, 24.36 ft or 7.425 m, from high-water mark in gage well), from rating curve extended above 2,400 ft³/s (68.0 m³/s) on basis of computations of flow over dam at gage heights 16.10, 21.40, and 24.36 ft (4.907, 6.523, and 7.425 m); minimum daily, 2.1 ft³/s (0.059 m³/s) Aug. 8, 1965.

Current year: Peak discharges above base of 2,600 ft³/s (73.6 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 21	1215	*2,030 57.5	*9.99 3.045				

Minimum daily discharge, 4.2 ft³/s (0.12 m³/s) July 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	421	167	433	130	326	484	404	266	146	37	7.4	35
2	412	157	437	138	297	408	364	224	224	27	11	30
3	426	186	426	108	255	370	386	250	139	24	13	32
4	369	145	347	128	253	306	783	229	167	17	37	30
5	304	224	276	129	230	281	693	305	211	19	10	25
6	213	387	285	121	204	285	612	277	223	21	15	23
7	162	322	247	136	191	269	613	249	277	34	41	23
8	163	275	313	132	242	305	578	221	362	8.6	220	21
9	150	326	598	144	188	255	507	210	314	9.1	287	23
10	150	332	545	196	180	245	394	182	210	37	186	23
11	116	318	402	273	170	240	451	176	158	10	48	20
12	114	304	400	746	165	241	513	147	147	6.6	57	23
13	120	342	437	723	160	235	557	147	366	24	103	44
14	110	483	415	603	155	235	571	138	598	19	51	40
15	114	529	371	490	155	210	635	121	437	31	37	32
16	174	597	337	417	180	178	703	135	339	36	33	28
17	298	537	338	366	170	231	812	167	312	25	30	28
18	189	502	342	343	170	261	916	140	254	10	26	32
19	180	479	315	327	183	332	953	121	114	51	27	43
20	143	459	299	323	120	896	1040	104	90	21	27	130
21	121	885	273	329	118	1730	777	94	139	12	9.1	342
22	123	1420	238	330	118	1070	625	85	97	41	31	250
23	114	891	199	335	111	1050	532	62	80	71	25	215
24	115	748	149	320	272	983	527	76	56	4.2	10	197
25	104	804	153	272	1070	919	716	73	53	97	13	171
26	110	821	133	705	1170	999	571	70	45	35	26	269
27	109	661	133	569	731	763	478	54	41	45	13	878
28	103	595	151	442	551	667	424	71	31	35	23	723
29	103	570	131	333	---	641	358	66	35	11	18	555
30	98	511	150	479	---	602	304	46	38	33	47	467
31	119	---	126	361	---	540	---	73	---	10	55	---
TOTAL	5547	14977	9399	10448	8135	16231	17797	4609	5703	861.5	1536.5	4752
MEAN	179	499	303	337	291	524	593	149	190	27.8	49.6	158
MAX	426	1420	598	746	1170	1730	1040	305	598	97	287	878
MIN	98	145	126	108	111	178	304	46	31	4.2	7.4	20
CFSM	.96	2.67	1.62	1.80	1.56	2.80	3.17	.80	1.02	.15	.27	.84
IN.	1.10	2.98	1.87	2.08	1.62	3.23	3.54	.92	1.13	.17	.31	.95

CAL YR 1974 TOTAL 131747.0 MEAN 361 MAX 1760 MIN 18 CFSM 1.93 IN 26.21
WTR YR 1975 TOTAL 99996.0 MEAN 274 MAX 1730 MIN 4.2 CFSM 1.47 IN 19.89

NOTE.--Backwater from grass May 20-31, June 19 to Sept. 20.

04281500 EAST CREEK AT RUTLAND, VT.

LOCATION.--Lat 43°37'43", long 72°59'22", Rutland County, on left bank on grounds of Rutland Country Club, at Rutland, 280 ft (85 m) downstream from Grove Street Bridge and 2 mi (3 km) upstream from mouth.

DRAINAGE AREA.--51.1 mi² (132.3 km²).

PERIOD OF RECORD.--Discharge: August 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 570 ft (174 m) from topographic map.

REVISIONS (WATER YEARS).--WSP 1307: 1941-42 (M).

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversion above station from Mendon Brook for municipal supply of Rutland. Flow regulated by powerplants and by Chittenden Reservoir 11 mi (17.7 km) upstream (usable capacity, 819,800,000 ft³ or 23,220,000 m³); prior to June 3, 1947, also regulated by East Pittsford Reservoir (usable capacity, 150,000,000 ft³ or 4,250,000 m³). See table below for figures of diversion and monthend contents in Chittenden Reservoir.

AVERAGE DISCHARGE.--35 years, 98.7 ft³/s (2.795 m³/s), 26.23 in/yr (666 mm/yr), adjusted for diversion and storage.

EXTREMES.--Period of record: Maximum discharge, 36,500 ft³/s (1,030 m³/s) June 3, 1947 (gage height, 20.3 ft or 6.19 m, from high-water mark in gage house), mean of two slope-area measurements, caused by failure of East Pittsford Dam, 5.8 mi (9.3 km) upstream; minimum daily, 3.1 ft³/s (0.088 m³/s) Nov. 8, 1947.
Current year: Maximum discharge, 762 ft³/s (21.6 m³/s) Apr. 19 (gage height, 3.13 ft or 0.954 m); minimum daily, 4.8 ft³/s (0.14 m³/s) Sept. 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	122	60	44	55	105	140	161	104	52	23	18
2	114	127	191	96	34	55	141	161	52	59	5.6	57
3	137	49	216	71	106	115	205	154	35	16	5.3	95
4	142	133	202	75	104	53	209	157	76	11	40	41
5	66	179	185	37	108	111	97	167	55	8.0	37	72
6	75	205	189	83	115	122	76	133	90	9.2	46	4.8
7	91	150	189	77	120	125	169	125	118	47	74	7.6
8	132	142	204	119	82	101	200	117	115	48	246	49
9	132	63	324	118	32	37	195	107	64	53	44	41
10	91	46	242	119	113	105	193	95	47	54	21	60
11	107	43	227	137	161	119	149	93	37	9.5	64	39
12	112	115	223	166	115	117	134	90	53	7.0	111	68
13	47	186	223	155	164	126	80	117	130	49	57	25
14	125	159	216	144	105	119	153	85	176	62	35	29
15	117	173	70	127	165	83	188	75	81	74	71	44
16	156	81	152	121	160	39	214	123	60	56	8.4	66
17	176	66	155	108	161	79	264	82	63	58	8.1	66
18	148	138	152	35	164	114	231	68	49	16	66	80
19	133	154	146	53	162	96	460	61	45	7.8	66	76
20	66	160	133	101	163	414	373	51	43	9.1	92	30
21	109	301	64	88	107	257	243	43	36	134	90	35
22	116	205	55	87	73	125	164	42	29	42	58	75
23	123	109	121	78	37	133	183	37	48	18	20	90
24	126	93	62	83	207	169	351	33	56	54	8.7	84
25	123	214	51	56	355	268	375	28	59	51	89	82
26	123	189	107	154	208	326	242	28	58	20	91	100
27	48	164	123	129	156	177	175	35	56	13	105	200
28	101	96	59	130	141	122	152	39	17	27	93	140
29	121	79	43	148	---	104	131	27	81	40	53	100
30	119	68	71	171	---	84	147	29	112	44	126	80
31	126	---	39	127	---	133	---	38	---	29	32	---
TOTAL	3537	4009	4499	3237	3673	4133	6034	2601	2050	1177.6	1890.1	1954.4
MEAN	114	134	145	104	131	133	201	83.4	68.3	38.0	61.0	65.1
MAX	176	301	324	171	355	414	460	167	176	134	246	200
MIN	47	43	39	35	32	37	76	27	17	7.0	5.3	4.8
(†)	5.91	6.00	5.75	5.82	5.71	5.46	5.32	6.21	6.45	6.48	5.90	5.24
(‡)	578.6	578.6	483.7	440.2	318.3	297.6	420.9	551.1	639.4	614.3	574.0	581.7
MEAN††	84.4	140	115	94.0	86.5	131	254	139	109	35.1	51.8	73.4
CFSM††	1.65	2.74	2.25	1.84	1.69	2.56	4.97	2.72	2.13	.69	1.01	1.44
IN.††	1.90	3.05	2.61	2.12	1.76	2.96	5.55	3.13	2.38	.79	1.17	1.60
CAL YR 1974 TOTAL	43598.0	MEAN 119	MAX 625	MIN 16	MEAN†† 130	CFSM†† 2.54	IN†† 34.45					
WTR YR 1975 TOTAL	38795.1	MEAN 106	MAX 460	MIN 4.8	MEAN†† 109	CFSM†† 2.13	IN†† 29.02					

† Diversion, in cubic feet per second, from Mendon Brook for municipal supply of Rutland; records furnished by city of Rutland.

‡ Monthend contents, in millions of cubic feet, in Chittenden Reservoir; records furnished by Central Vermont Public Service Corp.

†† Adjusted for diversion from Meadow Brook and for change in contents in Chittenden Reservoir.

NOTE.--No gage-height record Sept. 15-30.

04282000 OTTER CREEK AT CENTER RUTLAND, VT.

LOCATION.--Lat 43°36'13", long 73°00'49", Rutland County, 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.
Chemical analyses: Water years 1955, 1971 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 474.80 ft (144.719 m) above mean sea level; prior to Oct. 1, 1964, datum was 1.00 ft (0.305 m) higher. Prior to July 22, 1929, nonrecording gage at same site.

REVISIONS (WATER YEARS).--WSP 1084: 1929.

REMARKS.--Records good except those for periods of no gage-height record, 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 or 23,220,000 m³); prior to June 3, 1947, also regulated by East Pittsford Reservoir (usable capacity, 150,000,000 ft³ or 4,250,000 m³). See table with station 04281500 for monthend contents in Chittenden Reservoir.

AVERAGE DISCHARGE.--47 years, 538 ft³/s (15.24 m³/s), 23.80 in/yr (605 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 13,700 ft³/s (388 m³/s) Sept. 22, 1938 (gage height, 13.45 ft or 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.

Current year: Peak discharges above base of 3,400 ft³/s (96.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	2330	*3,820 108	*8.10 2.469	Apr. 26	0745	3,550 101	7.76 2.365

Minimum daily discharge, 88 ft³/s (2.49 m³/s) Aug. 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	860	387	547	439	793	776	889	1300	393	249	118	368
2	750	397	705	464	536	654	836	1400	323	211	94	305
3	680	318	851	365	549	666	1080	1500	248	159	88	374
4	600	401	717	479	481	583	1420	1400	303	151	127	309
5	530	599	543	381	495	579	1060	1500	308	137	189	281
6	460	831	628	292	550	613	900	1350	351	128	153	195
7	420	640	601	437	578	612	906	1200	434	157	224	180
8	400	540	860	490	499	642	896	1050	336	153	1470	209
9	380	440	1850	504	431	466	859	980	234	158	1410	727
10	400	380	1430	555	428	544	842	900	170	175	672	726
11	380	358	1010	714	458	584	837	850	200	128	429	400
12	399	405	903	1220	465	541	887	800	350	115	477	410
13	340	596	908	998	453	583	852	1000	500	207	370	727
14	377	749	860	833	442	690	889	800	750	308	282	562
15	408	683	668	692	498	566	1080	660	700	304	265	433
16	520	557	654	617	497	465	1150	721	600	327	178	355
17	734	478	683	535	493	541	1460	655	519	403	158	332
18	633	530	715	477	495	618	1780	548	438	262	189	364
19	531	570	671	524	502	655	2330	496	378	179	212	371
20	430	575	638	535	513	1760	3590	447	367	147	207	508
21	420	1420	555	433	455	2610	3330	400	337	304	185	831
22	428	1650	524	494	433	2120	2300	358	280	272	175	682
23	425	1570	556	473	412	1610	1910	327	266	185	186	545
24	418	998	515	478	891	1500	2310	295	253	190	147	620
25	405	1030	492	503	1930	1570	3140	263	235	272	213	803
26	415	1130	461	1060	1650	1910	3320	244	220	279	213	928
27	340	1060	465	898	1100	1350	2600	244	206	182	268	1510
28	346	953	508	796	871	1120	2000	304	197	160	229	1090
29	375	650	447	715	---	1070	1600	258	328	159	175	790
30	375	595	487	1020	---	954	1450	219	468	153	588	652
31	389	---	418	834	---	960	---	258	---	131	645	---
TOTAL	14568	21490	21910	19255	17898	29912	48503	22727	10692	6345	10336	16587
MEAN	470	716	707	621	639	965	1617	733	356	205	333	553
MAX	860	1650	1850	1220	1930	2610	3590	1500	750	403	1470	1510
MIN	340	318	418	292	412	465	836	219	170	115	88	180
CFSM	1.53	2.33	2.30	2.02	2.08	3.14	5.27	2.39	1.16	.67	1.08	1.80
IN.	1.77	2.60	2.65	2.33	2.17	3.62	5.88	2.75	1.30	.77	1.25	2.01

CAL YR 1974 TOTAL 227852 MEAN 624 MAX 3760 MIN 127 CFSM 2.03 IN 27.61
WTR YR 1975 TOTAL 240223 MEAN 658 MAX 3590 MIN 88 CFSM 2.14 IN 29.11

NOTE.--No gage-height record Oct. 1-11, Apr. 28 to May 15, June 10-16.

ST. LAWRENCE RIVER BASIN

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04282500 OTTER CREEK AT MIDDLEBURY, VT.

LOCATION.--Lat 44°00'47", long 73°10'06", Addison County, 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.

Chemical analyses: Water years 1954, 1971-74 (partial-record station).

Water temperatures: Water years 1967-69, 1971-74 (partial-record station).

Sediment records: Water years 1967-74 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 335.75 ft (102.337 m) above mean sea level. 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.

REVISIONS (WATER YEARS).--WSP 434: 1903-4. WSP 684: 1913(M), drainage area. WSP 1114: 1913. WSP 1207: 1929, 1931.

REMARKS.--Records good. Some regulation by Chittenden Reservoir (usable capacity, 819,800,000 ft³ or 23,220,000 m³) on East Creek; see table with station 04281500 for monthend contents.

AVERAGE DISCHARGE.--59 years (1903-6, 1910-19, 1928-75), 964 ft³/s (27.30 m³/s), 20.85 in/yr (530 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 11,000 ft³/s (312 m³/s) Mar. 20, 21, 1936 (gage height, 10.3 ft or 3.14 m); minimum daily, 92 ft³/s (2.61 m³/s) Aug. 9, 1965.
Maximum discharge since at least 1830, 13,600 ft³/s (385 m³/s) Nov. 4, 1927 (gage height, 13.3 ft or 4.05 m, present datum, at site 1,800 ft or 550 m upstream), from rating curve extended above 9,000 ft³/s (255 m³/s).
Current year: Maximum discharge, 3,100 ft³/s (87.8 m³/s) May 1 (gage height, 4.92 ft or 1.50 m); minimum daily, 171 ft³/s (4.84 m³/s) Aug. 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1410	503	1150	590	1160	1810	2030	3080	861	673	267	777
2	1420	556	1000	591	1000	1900	1690	3040	1040	531	269	632
3	1330	536	1050	590	782	1890	1800	2940	937	449	223	721
4	1230	497	1100	590	690	1620	1790	2840	788	455	171	644
5	1120	622	1050	570	630	1250	1750	2770	853	328	255	543
6	942	1040	1000	490	612	982	1730	2690	999	256	313	475
7	775	1170	980	477	605	851	1680	2600	1250	286	311	375
8	646	1100	1210	553	590	848	1590	2550	1440	351	636	292
9	612	957	1890	625	580	825	1510	2480	1480	337	1180	532
10	638	763	1820	694	520	668	1440	2400	1420	351	1310	794
11	592	617	1800	1030	478	694	1420	2310	1200	333	1280	888
12	561	567	1800	1510	530	725	1460	2200	929	324	1070	728
13	530	724	1770	1520	530	735	1490	2080	999	263	861	779
14	517	996	1710	1500	520	821	1500	1940	1350	342	666	897
15	567	1210	1610	1410	560	815	1510	1810	1450	543	537	825
16	730	1210	1460	1220	607	689	1560	1700	1450	604	490	680
17	847	1080	1290	990	629	620	1680	1540	1370	555	356	589
18	970	957	1190	800	628	752	1760	1370	1160	592	274	562
19	964	952	1090	670	647	894	2080	1160	945	478	396	614
20	828	991	982	620	640	1510	2250	968	802	356	337	827
21	704	1470	893	620	640	2060	2160	809	739	396	308	1120
22	680	1650	808	610	622	2020	2190	654	679	585	348	1210
23	665	1690	734	610	673	2080	2300	616	592	520	337	1150
24	643	1750	718	610	920	2140	2520	654	555	438	254	1080
25	603	1880	703	610	1600	2230	2730	604	531	496	272	1150
26	645	1850	655	1070	1710	2350	2810	520	502	502	355	1360
27	597	1790	610	1220	1700	2300	2840	484	478	427	411	1990
28	535	1710	680	1210	1750	2310	2920	490	461	360	432	1820
29	578	1590	690	1150	---	2290	3000	496	385	375	400	1780
30	581	1410	650	1170	---	2240	3060	502	484	356	477	1750
31	524	---	640	1210	---	2140	---	484	---	317	671	---
TOTAL	23984	33838	34733	27130	22553	45059	60450	50781	28129	13179	15467	27584
MEAN	774	1128	1120	875	805	1454	2015	1638	938	425	499	919
MAX	1420	1880	1890	1520	1750	2350	3060	3080	1480	673	1310	1990
MIN	517	497	610	477	478	620	1420	484	385	256	171	292
CFSM	1.23	1.80	1.78	1.39	1.28	2.32	3.21	2.61	1.49	.68	.79	1.46
IN.	1.42	2.00	2.06	1.61	1.34	2.67	3.58	3.01	1.67	.78	.92	1.63
CAL YR 1974	TOTAL	461643	MEAN	1265	MAX	4120	MIN	261	CFSM	2.01	IN	27.35
WTR YR 1975	TOTAL	382887	MEAN	1049	MAX	3080	MIN	171	CFSM	1.67	IN	22.68

04284000 JAIL BRANCH AT EAST BARRE, VT.

LOCATION.--Lat 44°09'30", long 72°26'44", Washington County, 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.--Discharge: 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.

GAGE.--Water-stage recorder. Datum of gage is 1,107.25 ft (337.490 m) above mean sea level. 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) above mean sea level Nov. 1, 1933, to Sept. 30, 1964, and 1,069.59 ft (326.011 m) above mean sea level Oct 1, 1964, to Aug. 7, 1972 (levels by Corps of Engineers).

REVISIONS (WATER YEARS).--WSP 564: 1922. WSP 1034: Drainage area. WSP 1307: 1921-23(M).

REMARKS.--Records good except those for winter period, which are poor. Discharge affected by East Barre Detention Reservoir since 1935 (see p. 120). Prior to 1964, occasional diurnal fluctuation at low flow caused by mill above station. Diversion from reservoir on Orange Brook, a tributary above station, for city of Barre.

AVERAGE DISCHARGE.--45 years, 53.5 ft³/s (1.515 m³/s), 17.98 in/yr (457 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 1,820 ft³/s (51.5 m³/s) Oct. 1, 1920 (gage height, 9.50 ft or 2.896 m, from graph based on gage readings, site and datum then in use), from rating curve extended above 900 ft³/s (25.5 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 or 1.009 m, site and datum then in use); maximum gage height, 9.48 ft or 2.890 m Jan. 7, 1973 (ice jam).

Current year: Maximum discharge, 551 ft³/s (15.6 m³/s) Mar. 20 (gage height, 4.76 ft or 1.451 m); maximum gage height, 5.05 ft (1.539 m) Apr. 2 (ice jam); minimum discharge, 1.5 ft³/s (0.042 m³/s) Aug. 22, 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	13	36	33	27	46	41	303	118	8.4	3.3	5.7
2	24	13	35	32	24	39	33	336	64	7.1	3.2	9.4
3	26	12	43	31	23	35	47	302	32	6.4	3.1	34
4	21	15	33	31	22	31	65	289	36	5.7	7.4	13
5	18	45	31	30	22	23	57	261	47	5.5	5.0	6.0
6	18	78	29	29	22	25	54	244	78	5.1	3.6	4.9
7	16	36	28	29	22	22	50	219	102	5.0	3.8	4.6
8	14	25	120	29	21	21	48	196	84	4.2	46	4.2
9	13	22	310	30	20	20	44	169	48	4.0	12	43
10	13	18	110	30	19	21	47	147	33	5.3	6.2	11
11	13	18	67	40	20	19	49	131	26	5.1	4.7	6.4
12	13	18	58	150	18	16	59	113	25	4.6	5.0	18
13	13	52	56	72	17	18	60	120	71	6.0	4.5	26
14	13	42	55	58	16	16	50	128	129	9.5	4.0	20
15	30	56	46	40	16	16	67	137	57	14	3.4	14
16	42	46	50	35	16	17	91	217	43	12	3.0	7.9
17	52	38	57	32	15	16	143	81	43	6.9	2.8	6.7
18	52	35	60	30	15	19	227	65	33	5.0	3.7	7.0
19	39	36	52	37	15	19	380	56	27	4.0	2.2	22
20	35	36	48	32	16	300	484	43	26	4.1	1.7	47
21	34	161	45	28	15	499	469	36	21	9.8	2.2	56
22	34	90	43	30	17	274	360	68	19	11	1.5	26
23	35	55	41	29	20	118	269	47	16	5.3	1.6	15
24	33	53	41	27	35	92	388	47	13	4.4	2.7	15
25	20	138	41	26	100	118	423	34	10	28	3.0	28
26	19	82	35	31	150	187	359	31	8.4	9.6	3.0	47
27	17	60	50	28	138	123	266	28	7.2	6.4	5.1	324
28	12	55	35	26	70	142	213	42	7.1	4.7	5.1	105
29	13	48	33	26	---	75	186	25	7.4	3.9	3.0	54
30	13	36	34	28	---	61	244	20	17	3.5	22	34
31	13	---	32	30	---	45	---	25	---	3.3	10	---
TOTAL	739	1432	1754	1139	931	2477	5273	3960	1248.1	217.8	187.8	1014.8
MEAN	23.8	47.7	56.6	36.7	33.3	79.9	176	128	41.6	7.03	6.06	33.8
MAX	52	161	310	150	150	499	484	336	129	28	46	324
MIN	12	12	28	26	15	16	33	20	7.1	3.3	1.5	4.2
MEAN†	23.4	48.0	56.7	36.8	33.9	80.2	180	123	40.7	7.14	6.10	34.3
CFSM†	.60	1.23	1.46	.95	.87	2.06	4.63	3.16	1.05	.18	.16	.88
IN.†	.69	1.38	1.68	1.09	.91	2.38	5.17	3.64	1.17	.21	.18	.98
CAL YR 1974	TOTAL	25687.6	MEAN 70.4	MAX	502	MIN 2.8	MEAN†	70.3	CFSM†	1.81	IN†	24.53
WTR YR 1975	TOTAL	20373.5	MEAN 55.8	MAX	499	MIN 1.5	MEAN†	55.8	CFSM†	1.43	IN†	19.47

† Adjusted for change in contents in East Barre Detention Reservoir.

NOTE.--No gage-height record Jan. 15 to Feb. 21.

04285500 NORTH BRANCH WINOOSKI RIVER AT WRIGHTSVILLE, VT.

LOCATION.--Lat 44°17'58", long 72°34'45", Washington County, 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.

Chemical analyses: Water year 1957 (partial-record station).

Water temperatures: Water year 1957 (partial-record station).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 550.53 ft (167.802 m) above mean sea level (levels by Corps of Engineers). Prior to Nov. 21, 1934, nonrecording gage at same site and datum.

REVISIONS (WATER YEARS).--WSP 1237: 1937: 1934-39.

REMARKS.--Records good except those for winter period, which are fair. Discharge affected since 1935 by Wrightsville Detention Reservoir (see following page). Occasional diurnal fluctuation at low flow caused by small mill above station; more frequent diurnal fluctuation prior to 1968.

AVERAGE DISCHARGE.--42 years, 131 ft³/s (3.710 m³/s), 25.71 in/yr (653 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 2,170 ft³/s (61.5 m³/s) Apr. 12, 1934 (gage height, 6.53 ft or 1.990 m), from rating curve extended above 920 ft³/s (26.1 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 or 1.317 m); maximum gage height, 5.43 ft (1.655 m) Mar. 12, 1936 (ice jam).

Maximum discharge since at least 1850, 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.

Current year: Maximum discharge, 695 ft³/s (19.7 m³/s) Apr. 26 (gage height, 3.47 ft or 1.058 m); minimum daily, 4.6 ft³/s (0.13 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	367	48	79	59	60	83	105	628	49	14	8.4	35
2	269	52	89	58	53	77	100	636	49	13	7.4	24
3	101	49	104	57	50	72	111	637	41	17	9.5	31
4	75	61	84	57	48	66	107	635	41	15	61	35
5	63	135	62	54	47	60	97	625	48	12	40	27
6	57	149	72	53	46	58	90	613	141	11	27	21
7	50	113	67	54	45	61	86	594	165	9.4	25	23
8	44	90	109	52	44	62	81	571	140	8.6	48	29
9	41	78	364	53	43	57	78	539	93	8.4	45	41
10	40	69	381	54	42	57	77	501	62	8.6	29	44
11	40	64	330	66	42	55	88	461	47	11	22	40
12	40	59	220	166	41	53	96	412	44	14	16	84
13	41	129	129	146	40	53	99	357	204	9.0	11	129
14	41	168	115	102	39	53	96	287	280	9.0	9.7	77
15	94	155	95	83	39	52	136	131	279	15	8.3	57
16	133	135	80	73	38	54	205	142	305	30	7.2	43
17	112	113	95	66	37	56	290	122	249	13	6.4	35
18	100	108	96	64	38	59	370	95	121	10	6.1	30
19	80	105	87	70	36	66	512	85	86	8.8	5.6	99
20	69	115	82	60	39	249	658	75	86	8.4	5.1	313
21	61	324	79	56	38	513	672	64	63	35	4.6	255
22	56	356	76	58	38	518	662	55	50	50	8.3	117
23	54	312	72	54	40	494	651	49	44	30	11	76
24	50	204	71	53	51	453	669	43	38	13	13	66
25	48	271	72	56	125	419	686	39	29	14	12	92
26	51	273	61	62	168	409	689	36	23	14	12	184
27	49	164	84	58	119	370	680	35	20	12	41	479
28	44	126	70	52	95	320	664	39	18	11	43	499
29	42	116	61	56	---	234	638	35	17	10	25	461
30	42	105	63	59	---	149	623	30	16	9.5	52	404
31	45	---	58	66	---	125	---	38	---	9.2	56	---
TOTAL	2399	4246	3507	2077	1543	5407	10116	8609	2848	452.9	675.6	3850
MEAN	77.4	142	113	67.0	55.1	174	337	278	94.9	14.6	21.8	128
MAX	367	356	381	166	168	518	689	637	305	50	61	499
MIN	40	48	58	52	37	52	77	30	16	8.4	4.6	21
MEAN†	64.0	142	113	66.9	55.5	175	404	212	94.6	14.3	22.6	138
CFSM†	.92	2.05	1.63	.97	.80	2.53	5.84	3.06	1.37	.21	.33	1.99
IN.†	1.07	2.29	1.88	1.12	.84	2.91	6.52	3.53	1.53	.24	.38	2.23
CAL YR 1974 TOTAL	58594.0	MEAN 161	MAX 734	MIN 12	MEAN† 159	CFSM† 2.30	IN† 31.11					
WTR YR 1975 TOTAL	45730.5	MEAN 125	MAX 689	MIN 4.6	MEAN† 125	CFSM† 1.81	IN† 24.52					

† 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, 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. Water-stage recorder. Datum of gage is at mean sea level (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) above mean sea level. Maximum elevation for current year, 1,142.87 ft (348.347 m) Apr. 20. Maximum elevation for period of record, 1,163.9 ft (354.76 m), present datum, Mar. 22, 1936.

Reservoir is formed by earthfill dam completed by Corps of Engineers in 1935 for flood control. Usable capacity of reservoir, 525,000,000 ft³ (14,900,000 m³) between elevation 1,124.9 ft or 342.87 m (bottom of outlet opening) and 1,165.0 ft or 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.

04285000 WRIGHTSVILLE DETENTION RESERVOIR.--Lat 44°18'38", long 72°34'31", Washington County, 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. Water-stage recorder. Datum of gage is at mean sea level (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 m) above mean sea level. Extremes for current year: Maximum elevation, 651.05 ft (198.440 m), Apr. 26; minimum, 619.98 ft (188.970 m) Aug. 21. 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, 613.0 ft (186.84 m) Aug. 17, 1949, and Aug. 17-19, 1950.

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 or 186.766 (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 or 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.

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

Date	Elevation (feet)	Contents (millions of cubic feet)	Change in contents	
			Millions of cubic feet	Equivalent, cubic feet per second
04283500 East Barre Detention Reservoir				
Sept. 30.....	1,130.22	5.8	-	-0.49
Oct. 31.....	1,129.16	4.5	-1.3	+31
Nov. 30.....	1,129.80	5.3	+8	+11
Dec. 31.....	1,130.03	5.6	+3	
CAL YR 1974.....	-	-	-3.4	-11
Jan. 31.....	1,130.13	5.7	+1	+04
Feb. 28.....	1,131.32	7.3	+1.6	+66
Mar. 31.....	1,131.91	8.1	+8	+30
Apr. 30.....	1,137.23	19.3	+11.2	+432
May 31.....	1,130.10	5.7	-13.6	-508
June 30.....	1,128.11	3.3	-2.4	-93
July 31.....	1,128.32	3.6	+3	+11
Aug. 31.....	1,128.45	3.7	+1	+04
Sept. 30.....	1,129.48	4.9	+1.2	+46
WTR YR 1975.....	-	-	-.9	-.03
04285000 Wrightsville Detention Reservoir				
Sept. 30.....	627.94	59.4	-	-
Oct. 31.....	620.41	23.6	-35.8	-13.4
Nov. 30.....	620.70	24.7	+1.1	+42
Dec. 31.....	620.50	23.9	-.8	-.30
CAL YR 1974.....	-	-	-62.5	-198
Jan. 31.....	620.43	23.7	-.2	-.07
Feb. 28.....	620.69	24.7	+1.0	+41
Mar. 31.....	620.84	25.3	+6	+22
Apr. 30.....	644.71	199.3	+174.0	+67.1
May 31.....	620.39	23.6	-175.7	-56.6
June 30.....	620.19	22.8	-.8	-.31
July 31.....	620.03	22.1	-.7	-.26
Aug. 31.....	620.55	24.2	+2.1	+78
Sept. 30.....	*626.1	49.3	+25.1	+9.7
WTR YR 1975.....	-	-	-10.1	-.32

* Estimated.

04286000 WINOOSKI RIVER AT MONTPELIER, VT.

LOCATION.--Lat 44°15'23", long 72°35'36", Washington County, 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.--Discharge: May 1909 to June 1914 (fragmentary), July 1914 to September 1923, August 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 499.99 ft (152.397 m) above mean sea level. 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.

REVISIONS (WATER YEARS).--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). WRD Mass., N.H., R.I., Vt., 1972: 1969(M), 1970(P), 1971(M).

REMARKS.--Records good except those for winter period and period of doubtful gage-height record, which are fair. Flow regulated by several small powerplants above station, by Peacham Pond and, since 1926, by Mollys Falls Reservoir (combined usable capacity, 492,000,000 ft³ or 13,900,000 m³), which regulate runoff from 24 mi² (62 km²), and by East Barre and Wrightsville Detention Reservoirs since 1935 (see preceding page). See table below for monthend contents in Peacham Pond and Mollys Falls Reservoir.

AVERAGE DISCHARGE.--56 years (1914-23, 1928-74), 581 ft³/s (16.45 m³/s), 19.87 in/yr (505 mm/yr), adjusted for storage since October 1935.

EXTREMES.--Period of record: Maximum discharge, 17,200 ft³/s (487 m³/s) Apr. 7, 1912, (gage height, 17.31 ft or 5.276 m, from floodmarks, present datum), from rating curve extended above 6,900 ft³/s (195 m³/s); maximum gage height, 17.55 ft or 5.349 m June 30, 1973; minimum daily discharge, 17 ft³/s (0.48 m³/s) Sept. 3, 1933. Maximum discharge since at least 1830, 57,000 ft³/s (1,610 m³/s) Nov. 3, 1927 (gage height, 27.1 ft or 8.26 m), from rating curve extended above 6,900 ft³/s (195 m³/s).

Current year: Peak discharges above base of 3,900 ft³/s (110 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 20	2200	4,770 135	9.43 2.874	Sept. 26	2245	3,980 113	8.55 2.606
Apr. 19	2000	*6,450 183	*11.17 3.405				

Minimum daily discharge, 99 ft³/s (2.80 m³/s) Aug. 18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	724	245	460	400	360	640	753	2170	679	147	106	184
2	576	244	500	390	300	520	747	2280	579	136	102	158
3	376	213	540	380	270	470	788	2180	401	138	123	228
4	299	219	500	390	270	450	766	2070	392	140	315	200
5	260	491	460	350	290	400	765	1940	452	129	281	160
6	242	720	440	350	310	460	660	1800	668	122	173	140
7	229	544	450	380	290	470	631	1650	960	119	169	133
8	212	415	739	428	270	460	653	1540	732	130	568	145
9	198	376	1780	389	250	420	621	1420	544	115	346	205
10	192	298	1160	389	245	440	609	1300	461	133	189	169
11	211	273	924	468	240	420	669	1190	367	138	163	137
12	194	263	861	1020	235	400	717	1090	335	134	202	195
13	193	406	746	851	230	390	691	1020	696	129	179	442
14	191	645	683	645	225	385	668	895	1110	138	206	313
15	323	596	569	500	220	380	920	727	776	165	190	257
16	537	630	537	440	215	380	1080	844	744	210	111	201
17	517	459	609	400	215	410	1550	743	704	188	100	173
18	483	425	643	380	220	420	1950	599	532	160	99	163
19	407	482	572	360	230	430	4230	541	413	144	143	327
20	308	475	554	350	235	2300	4660	487	393	109	146	838
21	284	1200	532	350	230	3250	3340	438	326	260	143	789
22	294	1060	467	350	225	2090	2690	428	265	344	145	497
23	291	840	447	350	230	1630	2500	403	242	206	169	324
24	291	725	479	360	350	1520	3170	382	246	185	109	286
25	269	1130	420	400	900	1730	3200	327	202	256	110	400
26	268	1010	370	410	1100	1930	2830	300	183	213	165	1440
27	231	817	470	400	900	1340	2470	295	169	141	265	2720
28	207	700	450	390	700	1260	2220	332	159	129	272	1240
29	229	550	450	400	---	1010	1970	293	153	127	204	923
30	236	500	400	420	---	901	2020	263	155	121	360	748
31	241	---	420	400	---	813	---	312	---	112	288	---
TOTAL	9513	16959	18632	13490	9755	28119	50538	30259	14038	4918	6141	14135
MEAN	307	565	601	435	348	907	1685	976	468	159	198	471
MAX	724	1200	1780	1020	1100	3250	4660	2280	1110	344	568	2720
MIN	191	213	370	350	215	380	609	263	153	109	99	133
(f)	374.9	331.8	284.8	216.2	202.2	92.3	252.8	434.8	433.3	416.8	342.6	404.9
MEAN†	282	549	583	410	344	867	1818	973	466	152	171	505
CFSM†	.71	1.38	1.47	1.03	.87	2.18	4.58	2.45	1.17	.38	.43	1.27
IN.†	.82	1.54	1.69	1.19	.90	2.52	5.11	2.83	1.31	.44	.50	1.42
CAL YR 1974 TOTAL	288362		MEAN 790	MAX 4640	MIN 103		MEAN† 787	CFSM† 1.98	IN† 26.92			
WTR YR 1975 TOTAL	216497		MEAN 593	MAX 4660	MIN 99		MEAN† 593	CFSM† 1.49	IN† 20.27			

† Monthend contents, in millions of cubic feet, in Peacham Pond and Mollys Falls Reservoir; records furnished by Green Mountain Power Corp.

‡ Adjusted for change in contents in Peacham Pond, Mollys Falls Reservoir, and East Barre and Wrightsville Detention Reservoirs.

NOTE.--Doubtful gage-height record May 1 to Sept. 23.

ST. LAWRENCE RIVER BASIN

04287000 DOG RIVER AT NORTHFIELD FALLS, VT.

LOCATION.--Lat 44°10'58", long 72°38'27", Washington County, 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.

Chemical analyses: Water year 1957 (partial-record station).

Water temperatures: Water year 1957 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 603.00 ft (183.794 m) above mean sea level (levels by Corps of Engineers).

REVISIONS (WATER YEARS)---WSP 1237: 1935-37.

REMARKS.- Records good except those for winter period, which are fair. Infrequent diurnal fluctuation at low flow by powerplant above station; regulation much greater prior to 1955.

AVERAGE DISCHARGE.--41 years, 120 ft³/s (3.398 m³/s), 21.41 in/yr (544 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 10,600 ft³/s (300 m³/s) June 30, 1973 (gage height, 11.57 ft or 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, 11.53, and 11.57 ft (2.731, 3.514, and 3.527 m); minimum, 4.3 ft³/s (0.12 m³/s) Aug. 31, Sept. 7, 1942.

Current year: Peak discharges above base of 1,600 ft³/s (45.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 19	1930	*2,920 82.7	*6.11 1.862	Sept. 27	0300	1,890 53.5	4.99 1.521

Minimum discharge, 11 ft³/s (0.31 m³/s) Aug. 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	34	87	76	66	106	143	610	124	29	16	22
2	62	33	96	71	60	98	138	598	83	27	15	22
3	56	32	96	71	54	94	143	533	63	26	15	35
4	50	36	92	75	52	88	150	457	60	24	21	25
5	46	59	90	66	54	86	131	412	57	23	22	21
6	43	102	82	66	55	87	122	366	101	22	17	20
7	40	77	77	71	54	83	115	322	114	22	20	19
8	37	65	234	67	52	83	110	277	111	21	77	18
9	36	57	574	66	50	77	106	234	89	21	36	40
10	35	52	258	67	54	87	106	202	74	24	25	27
11	35	51	185	89	50	76	112	177	64	22	21	21
12	33	49	156	165	49	74	119	156	62	21	23	44
13	33	110	140	125	48	76	118	148	128	21	20	52
14	32	111	129	103	47	72	120	132	205	23	18	40
15	44	103	113	87	45	70	155	119	111	31	16	30
16	52	90	103	82	44	72	206	125	96	29	15	26
17	63	81	114	76	43	74	346	112	98	23	14	24
18	57	77	108	85	44	77	456	101	82	21	14	24
19	48	74	100	90	44	86	1510	94	73	20	13	62
20	46	84	96	72	44	809	1240	87	76	18	13	123
21	42	366	93	74	44	621	690	81	64	33	12	143
22	41	224	91	70	47	343	544	93	57	29	12	81
23	40	145	87	65	56	271	644	79	54	23	13	61
24	38	143	86	64	80	230	983	70	47	22	14	57
25	38	299	86	64	200	311	885	62	42	28	15	78
26	38	206	69	72	170	370	713	59	39	22	14	188
27	36	145	87	62	132	235	563	61	36	19	30	827
28	33	125	88	60	110	230	476	60	34	19	21	237
29	33	110	77	60	---	200	422	51	33	17	17	150
30	33	104	79	74	---	180	530	50	32	17	43	115
31	34	---	75	76	---	157	---	56	---	16	30	---
TOTAL	1330	3244	3828	2411	1848	5523	12096	5984	2309	713	652	2632
MEAN	42.9	108	123	77.8	66.0	178	403	193	77.0	23.0	21.0	87.7
MAX	76	366	574	165	200	809	1510	610	205	33	77	827
MIN	32	32	69	60	43	70	106	50	32	16	12	18
CFSM	.56	1.42	1.62	1.02	.87	2.34	5.30	2.54	1.01	.30	.28	1.15
IN.	.65	1.59	1.87	1.18	.90	2.70	5.91	2.93	1.13	.35	.32	1.29

CAL YR 1974	TOTAL	51687	MEAN 142	MAX 1470	MIN 18	CFSM 1.87	IN 25.27
WTR YR 1975	TOTAL	42570	MEAN 117	MAX 1510	MIN 12	CFSM 1.54	IN 20.81

04288000 MAD RIVER NEAR MORETOWN, VT.

LOCATION.--Lat 44°16'42", long 72°44'37", Washington County, 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.

Chemical analyses: Water years 1954-55, 1957, 1971-74 (partial-record station).

Water temperatures: Water years 1957, 1967-69, 1971-74 (partial-record station).

Sediment records: Water years 1967-74 (partial-record station).

GAGE.--Water-stage recorder. Concrete control since Oct. 13, 1933. Datum of gage is 543.93 ft (165.790 m) above mean sea level (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.

REVISIONS (WATER YEARS).--WSP 744: Drainage area. WSP 854: 1934(M). WSP 1114: 1929, 1930(M), 1936-37.

REMARKS.--Records good except those for winter period, which are fair. Occasional diurnal fluctuation at low flow; much greater regulation prior to 1958.

AVERAGE DISCHARGE.--47 years (1928-75), 250 ft³/s (7.080 m³/s), 24.42 in/yr (620 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 18,400 ft³/s (521 m³/s) Sept. 22, 1938 (gage height, 16.34 ft or 4.980 m, from floodmarks), from rating curve extended above 2,700 ft³/s (76.5 m³/s) on basis of computations of flow over dam at gage heights 9.98, 11.51, 16.34, and 19.4 ft (3.042, 3.508, 4.980 and 5.91 m); minimum, 1.4 ft³/s (0.040 m³/s) Oct. 1, 1930.

Maximum discharge since at least 1830, 23,000 ft³/s (651 m³/s) Nov. 3, 1927 (gage height, 19.4 ft or 5.91 m, from floodmarks), by computation of peak flow over dam.

Current year: Peak discharges above base of 3,400 ft³/s (96.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 19	-	†4,200 119	- -	Apr. 19	1845	*6,300 178	9.23 2.813
Mar. 19	-	- -	‡9.97 3.039	Sept. 27	0345	4,260 121	7.73 2.356

† About.

‡ Ice jam.

Minimum discharge, 21 ft³/s (0.59 m³/s) Aug. 20-22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	80	210	135	140	190	256	1300	116	60	30	58
2	137	84	210	130	120	180	250	1100	107	49	28	47
3	118	78	215	130	105	170	258	1000	82	45	47	99
4	102	91	205	135	95	165	253	1000	85	42	42	82
5	89	190	200	120	98	160	234	920	82	39	43	57
6	84	288	195	120	100	160	214	840	232	37	32	48
7	77	186	190	130	98	150	200	783	369	36	35	49
8	73	144	686	125	95	160	198	745	351	34	229	41
9	70	126	1240	120	92	140	183	659	222	33	80	69
10	68	112	539	125	98	160	182	624	165	41	49	54
11	66	104	383	170	90	140	201	580	126	54	39	43
12	63	98	321	350	88	135	218	556	110	54	46	186
13	65	230	284	250	86	140	220	536	270	42	40	202
14	63	241	259	200	92	130	218	438	420	50	36	137
15	203	342	210	160	86	130	306	374	273	85	32	98
16	223	241	230	150	80	130	407	443	212	68	28	75
17	211	195	227	140	78	135	647	353	269	48	26	66
18	173	191	210	155	80	140	836	288	171	39	26	65
19	132	180	187	165	90	160	3400	260	133	34	25	276
20	115	235	177	130	96	1900	2300	226	143	32	22	437
21	103	1170	168	135	92	1180	1300	189	105	105	21	497
22	97	559	163	125	90	644	1000	223	87	68	22	251
23	94	384	166	120	110	534	1300	169	78	45	24	171
24	87	405	156	125	200	459	2200	136	69	47	22	158
25	82	849	153	130	500	760	1700	113	60	93	26	295
26	87	495	130	165	350	815	1400	102	55	57	28	547
27	80	370	160	170	260	465	1100	103	52	42	112	1830
28	74	300	160	155	210	430	1000	95	48	39	50	539
29	74	265	140	140	---	375	900	81	84	41	35	339
30	74	240	145	200	---	336	1100	77	98	36	176	243
31	80	---	140	170	---	290	---	89	---	32	92	---
TOTAL	3251	8473	8059	4775	3719	11063	23981	14402	4674	1527	1543	7059
MEAN	105	282	260	154	133	357	799	465	156	49.3	49.8	235
MAX	223	1170	1240	350	500	1900	3400	1300	420	105	229	1830
MIN	63	78	130	120	78	130	182	77	48	32	21	41
CFSM	.76	2.03	1.87	1.11	.96	2.57	5.75	3.35	1.12	.35	.36	1.69
IN.	.87	2.27	2.16	1.28	1.00	2.96	6.42	3.85	1.25	.41	.41	1.89

CAL YR 1974 TOTAL 105551 MEAN 289 MAX 3170 MIN 32 CFSM 2.08 IN 28.25
WTR YR 1975 TOTAL 92526 MEAN 253 MAX 3400 MIN 21 CFSM 1.82 IN 24.76

ST. LAWRENCE RIVER BASIN

04288500 WATERBURY RESERVOIR NEAR WATERBURY, VT.

LOCATION.--Lat 44°22'54", long 72°46'13", Washington County, 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 at mean sea level (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 or 152.40 m and 592.0 ft or 180.44 m (sill of taintor gate); for flood control, 1,229,600,000 ft³ (34,822,000 m³) between elevations 592.0 ft or 180.44 m and 617.5 ft or 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.--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.

Current year: Maximum elevation, 591.57 ft (180.311 m) Oct. 1; minimum, 536.25 ft (163.449 m) Apr. 11.

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	591.11	586.79	590.88	585.40	580.20	570.56	554.57	572.97	590.02	588.97	588.36	581.57
2	590.65	587.21	590.48	584.90	580.00	570.95	553.10	574.94	590.27	588.87	588.40	581.74
3	590.40	587.44	590.32	584.30	579.60	570.22	551.77	576.83	589.91	588.77	588.42	582.10
4	590.11	587.23	589.90	584.40	579.20	569.44	550.27	578.01	589.82	588.81	588.47	582.32
5	590.24	587.30	589.20	584.40	578.90	568.72	548.65	579.21	589.59	588.88	588.50	582.45
6	590.39	587.13	588.69	584.00	578.70	567.93	546.89	580.20	589.65	588.93	588.53	582.58
7	590.08	586.80	588.15	583.70	578.40	567.12	545.04	581.01	590.27	588.80	588.18	582.65
8	589.90	586.44	589.32	583.60	578.20	566.26	543.05	581.59	590.95	588.69	587.98	582.76
9	589.80	586.30	591.05	583.40	578.00	565.32	540.67	582.05	590.79	588.60	587.60	582.84
10	589.93	586.37	590.99	583.20	577.60	564.20	538.04	582.46	590.53	588.47	587.65	582.89
11	590.03	586.22	590.68	583.40	577.30	563.59	536.80	582.83	590.20	588.43	587.12	582.96
12	590.16	585.83	590.39	583.60	576.90	562.96	538.37	583.16	589.98	588.48	586.56	583.56
13	590.30	586.10	590.03	583.90	576.60	562.23	539.05	583.66	589.83	588.54	586.49	583.91
14	589.97	586.08	589.83	583.70	576.20	560.90	537.95	584.32	589.87	588.47	585.83	584.46
15	589.99	586.35	589.48	583.20	575.80	559.77	538.62	584.77	590.30	588.58	585.30	584.75
16	589.90	586.81	588.68	582.90	575.40	558.68	538.60	585.78	590.37	588.48	585.32	584.91
17	589.70	587.20	588.27	582.60	574.90	557.43	539.72	586.69	590.22	588.35	585.36	585.10
18	589.46	586.99	588.25	582.40	573.97	555.92	541.61	587.41	590.11	588.17	584.83	585.23
19	589.64	586.94	588.07	582.40	573.12	554.51	554.25	587.92	589.86	588.20	584.33	586.06
20	589.80	587.06	587.65	582.20	572.58	560.74	560.82	588.50	589.69	588.25	583.80	586.78
21	589.49	588.81	587.54	582.10	571.92	562.87	562.33	588.97	589.89	588.31	583.29	587.17
22	589.19	589.53	587.42	582.00	571.18	562.67	562.80	589.32	590.08	588.25	582.91	587.38
23	588.90	589.99	587.06	581.70	570.52	562.05	563.66	589.20	589.82	588.17	582.76	587.59
24	588.54	590.64	586.87	581.40	570.52	561.13	566.21	589.43	589.59	588.08	582.80	587.84
25	588.20	591.23	587.00	581.50	571.30	561.20	568.67	589.63	589.31	587.99	582.15	588.20
26	588.38	591.16	586.35	581.80	571.98	561.44	569.99	589.81	589.12	588.05	581.56	589.30
27	588.51	590.86	585.77	581.50	571.77	560.62	570.58	590.08	588.93	588.08	581.81	590.88
28	588.10	591.25	585.70	581.20	571.25	559.61	570.57	589.83	589.03	588.16	581.33	590.66
29	587.60	590.91	585.78	580.90	---	558.50	570.49	589.53	589.12	588.21	580.84	590.73
30	587.13	590.80	585.40	580.60	---	557.33	571.26	589.51	589.08	588.27	581.25	591.05
31	587.00	---	585.20	580.30	---	556.00	---	589.77	---	588.30	581.45	---
MEAN	589.44	587.99	588.40	582.79	575.43	562.61	552.48	584.82	589.87	588.44	585.13	585.41
MAX	591.11	591.25	591.05	585.40	580.20	570.95	571.26	590.08	590.95	588.97	588.53	591.05
MIN	587.00	585.83	585.20	580.30	570.52	554.51	536.80	572.97	588.93	587.99	580.84	581.57
(†)	1398.8	1536.0	1335.3	1178.0	924.6	576.3	924.9	1496.8	1472.4	1444.7	1214.7	1545.7
(‡)	-60.9	+52.9	-74.9	-58.7	-105	-130	+134	+214	-9.41	-10.3	-85.9	+128
CAL YR 1974	MEAN 583.53	MAX 595.20	MIN 540.00	(‡) -12.5								
WTR YR 1975	MEAN 581.14	MAX 591.25	MIN 536.80	(‡) -5.2								

† Contents, in millions of cubic feet, at end of month.

‡ Change in contents, equivalent in cubic feet per second.

NOTE.--Doubtful or no gage-height record Dec. 30 to Feb. 17.

04289000 LITTLE RIVER NEAR WATERBURY, VT.

LOCATION.--Lat 44°22'12", long 72°46'11", Washington County, 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.--Discharge: 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.

GAGE.--Water-stage recorder. Concrete control since Dec. 8, 1937. Datum of gage is 428.00 ft (130.454 m) above mean sea level (levels by Corps of Engineers). July 7 to Oct. 31, 1910, nonrecording gage at site 2 mi (3 km) upstream at different datum.

REVISIONS (WATER YEARS).--WSP 824: 1936.

REMARKS.--Records excellent. Flow completely regulated by Waterbury Reservoir (see preceding page).

AVERAGE DISCHARGE.--40 years, 233 ft³/s (6.599 m³/s), 28.51 in/yr (724 mm/yr), adjusted for storage.

EXTREMES.--Period of record: Maximum discharge, 6,520 ft³/s (185 m³/s) Mar. 18, 1936 (gage height, 19.38 ft or 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 or 4.535 m).
Current year: Maximum discharge, 735 ft³/s (20.8 m³/s) Apr. 25 (gage height, 8.11 ft or 2.472 m); minimum daily, 17 ft³/s (0.48 m³/s) Oct. 11, Nov. 16, 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	279	220	98	34	163	336	597	668	25	106	29	61
2	303	20	317	305	161	59	592	672	26	108	28	60
3	197	19	221	310	223	331	598	672	210	109	29	65
4	197	240	300	99	221	336	605	676	220	38	29	61
5	19	227	374	94	218	335	601	676	240	35	29	57
6	18	287	358	295	194	350	599	677	357	34	28	55
7	192	293	298	269	198	349	595	681	185	106	226	98
8	126	281	94	182	205	355	556	617	38	105	215	48
9	104	159	343	179	196	351	560	569	265	107	204	45
10	18	85	397	183	237	391	556	573	266	122	32	43
11	17	150	396	98	234	309	466	574	271	90	242	40
12	18	251	344	35	222	276	64	576	249	44	264	43
13	18	264	365	33	236	311	87	533	379	40	69	43
14	214	269	266	195	240	402	430	246	340	143	287	41
15	217	165	272	346	258	371	231	218	303	142	255	38
16	221	17	532	278	262	374	341	131	307	137	36	36
17	217	17	340	305	236	371	539	22	379	129	28	34
18	219	251	170	209	338	453	575	23	288	139	225	33
19	19	163	224	167	337	453	633	82	281	43	234	39
20	18	166	314	239	281	541	603	24	235	39	241	39
21	216	27	183	180	297	569	582	25	43	133	248	36
22	195	22	181	200	312	576	595	27	40	128	254	34
23	196	22	274	199	309	576	640	202	201	104	156	33
24	218	25	203	221	190	578	697	25	196	110	56	34
25	219	455	92	118	108	597	714	26	191	111	291	78
26	19	396	331	35	46	611	691	28	159	40	338	147
27	18	361	337	228	239	601	690	30	154	35	357	499
28	223	23	163	221	309	601	686	193	38	34	326	505
29	266	309	94	248	---	601	667	189	36	33	317	286
30	258	197	250	229	---	601	663	107	92	31	115	48
31	220	---	200	225	---	599	---	24	---	30	70	---
TOTAL	4679	5381	8331	5959	6470	13564	16453	9786	6014	2605	5258	2679
MEAN	151	179	269	192	231	438	548	316	200	84.0	170	89.3
MAX	303	455	532	346	338	611	714	681	379	143	357	505
MIN	17	17	92	33	46	59	64	22	25	30	28	33
MEAN†	90.0	232	194	133	126	308	683	529	191	73.7	83.7	217
CFSM†	.81	2.09	1.75	1.20	1.14	2.77	6.15	4.77	1.72	.66	.75	1.95
IN.†	.94	2.34	2.01	1.39	1.19	3.19	6.87	5.50	1.92	.77	.87	2.18
CAL YR 1974 TOTAL	106244		MEAN 291	MAX 642	MIN 13		MEAN† 279	CFSM† 2.51	IN† 34.07			
WTR YR 1975 TOTAL	87179		MEAN 239	MAX 714	MIN 17		MEAN† 238	CFSM† 2.14	IN† 29.15			

† Adjusted for change in contents in Waterbury Reservoir.

04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT.

LOCATION.--Lat 44°28'44", long 73°08'21", Chittenden County, 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).

PERIOD OF RECORD.--Discharge: October 1928 to current year.

Chemical analyses: Water year 1953 (partial-record station).

Water temperatures: Water year 1953 (partial-record station).

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.

REVISIONS (WATER YEARS).--WSP 714: 1930(M). WSP 894: Drainage area. WSP 1307: 1929(M).

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Flow regulated by powerplants above station, by Peacham Pond and Mollys Falls Reservoir (combined usable capacity, 492,000,000 ft³ or 13,900,000 m³), by Waterbury Reservoir since 1937 (see p. 124), and by East Barre and Wrightsville Detention Reservoirs since 1935 (see p. 120). See table with station 04286000 for monthend contents in Peacham Pond and Mollys Falls Reservoir.

AVERAGE DISCHARGE.--47 years, 1,672 ft³/s (47.35 m³/s), 21.75 in/yr (552 mm/yr), adjusted for storage since October 1938.

EXTREMES.--Period of record: Maximum discharge, 45,300 ft³/s (1,280 m³/s) Mar. 19, 1936 (gage height, 24.54 ft or 7.480 m, present datum), from rating curve extended above 27,000 ft³/s (765 m³/s) on basis of computations of flow over dam at gage heights 19.72, 24.54, and 51.4 ft (6.011, 7.480, and 15.67 m) and slope-area measurement at gage height 51.4 ft or 15.67 m (all at present datum); minimum daily, 24 ft³/s (0.68 m³/s) Sept. 7, 1968.

Maximum discharge since at least 1830, 113,000 ft³/s (3,200 m³/s) Nov. 4, 1927 (gage height, 51.4 ft or 15.67 m, present datum, from floodmarks), from rating curve extended above 27,000 ft³/s (765 m³/s) by method explained above.

Current year: Peak discharges above base of 12,500 ft³/s (354 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 21	0400	16,000 453	11.22 3.420	Apr. 20	0845	*22,200 629	*14.35 4.374

Minimum daily discharge, 55 ft³/s (1.56 m³/s) Oct. 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1640	792	1040	790	900	1500	2100	6090	839	411	291	322		
2	1510	584	1020	900	780	1300	2030	6680	1160	443	199	375		
3	1350	357	1470	940	720	1100	2230	6270	858	393	56	352		
4	810	713	1300	800	700	1150	2270	6090	898	267	554	468		
5	752	1190	1100	960	680	1250	2240	5520	949	282	239	560		
6	55	1420	1390	760	680	1100	1970	5130	1100	109	318	294		
7	759	1570	1260	860	700	1050	1850	4780	1880	323	371	158		
8	595	1050	1680	1090	800	1000	1800	4330	1810	275	987	372		
9	546	900	7280	1050	750	960	1740	3980	1460	305	1010	368		
10	403	727	4260	1160	700	1000	1700	3640	1390	299	204	312		
11	457	750	2790	1360	700	950	1800	3370	1090	395	444	324		
12	558	789	2300	2610	700	900	1590	3190	911	242	762	463		
13	114	1170	2030	2300	660	1150	1570	3040	1130	195	542	830		
14	598	1560	1780	1660	640	1100	1810	2540	2180	347	421	667		
15	796	1590	1520	1400	700	1050	2300	2070	1990	475	440	557		
16	1210	1520	1610	1200	760	1050	2950	2050	1690	596	272	517		
17	1170	1440	1300	1050	750	1100	4290	1910	1640	433	113	453		
18	1080	1100	1650	960	700	1250	6480	1470	1550	464	400	333		
19	993	1200	1260	880	850	1500	10600	1370	1290	221	357	434		
20	599	1150	1360	1050	950	7150	19200	1240	1070	176	512	1070		
21	711	3390	1270	950	760	12200	9570	1070	820	384	421	1700		
22	726	3740	1210	860	780	5870	6900	843	609	823	453	1100		
23	752	2260	1080	800	840	4500	6300	999	427	350	263	800		
24	735	1900	1240	900	1000	3890	8000	938	589	395	179	650		
25	791	3250	1050	920	2000	4430	9340	699	694	441	433	900		
26	496	3600	880	1200	2500	6780	7910	613	503	400	477	3200		
27	393	2540	860	1100	2000	3840	6500	682	510	308	815	5500		
28	785	1830	900	1000	1700	3350	5520	582	368	282	865	2700		
29	619	1480	1000	1000	---	3120	4750	864	217	258	697	2000		
30	694	1500	920	1050	---	2650	5050	643	458	264	559	1600		
31	731	---	1000	1250	---	2290	---	605	---	285	611	---		
TOTAL	23428	47062	50810	34810	26400	81530	142360	83298	32080	10841	14265	29379		
MEAN	756	1569	1639	1123	943	2630	4745	2687	1069	350	460	979		
MAX	1640	3740	7280	2610	2500	12200	19200	6680	2180	823	1010	5500		
MIN	55	357	860	760	640	900	1570	582	217	109	56	158		
MEAN†	670	1606	1546	1039	833	2459	5013	2898	1058	333	347	1141		
CFSM†	.64	1.54	1.48	1.00	.80	2.36	4.80	2.78	1.01	.32	.33	1.09		
IN.†	.74	1.72	1.71	1.15	.83	2.72	5.36	3.20	1.13	.37	.38	1.22		
CAL YR 1974	TOTAL	760845	MEAN	2085	MAX	18100	MIN	55	MEAN†	2069	CFSM†	1.98	IN†	26.91
WTR YR 1975	TOTAL	576263	MEAN	1579	MAX	19200	MIN	55	MEAN†	1578	CFSM†	1.51	IN†	20.52

† Adjusted for change in contents in Peacham Pond, Mollys Falls Reservoir, East Barre and Wrightsville Detention Reservoirs, and Waterbury Reservoir. Records of monthend contents in Peacham Pond and Mollys Falls Reservoir furnished by Green Mountain Power Corp.

NOTE.--No gage-height record Feb. 12 to Mar. 3, Sept. 21-30.

04292000 LAMOILLE RIVER AT JOHNSON, VT.

LOCATION.--Lat 44°37'22", long 72°40'50", Lamoille County, 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, February 1913), September 1928 to current year.

Chemical analyses: Water year 1953 (partial-record station).

Water temperatures: Water year 1953 (partial-record station).

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.

REVISIONS (WATER YEARS).--WSP 894: Drainage area. WSP 1114: 1933, 1934(M). WSP 1237: 1912(M), 1930, 1932(M).

REMARKS.--Records excellent except those for winter period, which are poor. Some regulation by powerplant above station.

AVERAGE DISCHARGE.--49 years (1911-13, 1928-75), 526 ft³/s (14.90 m³/s), 23.04 in/yr (585 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 14,400 ft³/s (408 m³/s) July 1, 1973 (gage height, 17.33 ft or 5.282 m), from rating curve extended above 8,500 ft³/s (241 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.

Current year: Peak discharges above base of 5,400 ft³/s (153 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	0130	*8,180 232	*13.13 4.002				

Minimum discharge, 21 ft³/s (0.60 m³/s) July 20; minimum daily, 27 ft³/s (0.76 m³/s) July 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	498	216	341	300	235	430	433	1750	161	82	87	159
2	395	294	333	290	230	380	423	2030	221	81	86	169
3	340	216	311	280	225	350	476	1900	255	82	72	200
4	280	157	299	275	250	320	410	1710	230	81	93	197
5	240	273	273	275	200	310	445	1480	214	81	102	146
6	210	370	269	270	220	300	409	1360	249	81	201	110
7	190	362	311	310	215	290	376	1200	662	81	226	103
8	180	329	542	350	210	280	360	1080	582	81	179	146
9	170	325	2360	380	205	270	324	945	464	81	204	345
10	165	200	1290	370	200	260	322	840	271	81	187	309
11	160	182	688	400	195	260	355	737	193	81	134	202
12	165	185	555	500	190	255	378	643	153	81	110	211
13	175	410	498	450	180	255	392	547	215	82	108	344
14	200	500	459	420	210	250	396	408	442	102	106	385
15	350	520	391	390	195	250	489	399	462	133	100	333
16	529	450	307	360	180	245	733	423	385	341	94	300
17	387	390	366	300	180	245	1210	413	373	225	84	285
18	374	340	408	210	185	240	1850	395	343	150	67	269
19	358	310	387	180	190	240	4480	385	255	94	67	226
20	265	350	370	250	195	1200	5880	342	179	27	71	229
21	143	800	358	250	200	3650	2880	255	173	56	78	334
22	216	900	358	250	210	1990	1700	231	170	329	104	313
23	341	600	341	260	220	1300	1730	225	167	288	110	307
24	253	481	329	260	250	964	2920	218	150	206	106	249
25	133	1010	329	250	400	939	2900	193	128	60	106	199
26	98	894	236	260	700	1720	2120	164	110	87	109	521
27	98	533	270	270	600	909	1790	204	97	87	431	3700
28	232	417	330	250	520	741	1550	228	91	90	329	1460
29	329	387	330	250	---	641	1300	217	84	89	216	784
30	182	358	330	250	---	573	1460	186	83	90	152	547
31	178	---	320	240	---	502	---	163	---	93	143	---
TOTAL	7834	12759	14289	9350	7190	20559	40491	21271	7562	3613	4262	13082
MEAN	253	425	461	302	257	663	1350	686	252	117	137	436
MAX	529	1010	2360	500	700	3650	5880	2030	662	341	431	3700
MIN	98	157	236	180	180	240	322	163	83	27	67	103
CFSM	.82	1.37	1.49	.97	.83	2.14	4.35	2.21	.81	.38	.44	1.41
IN.	.94	1.53	1.71	1.12	.86	2.47	4.86	2.55	.91	.43	.51	1.57
CAL YR 1974	TOTAL	241349	MEAN 661	MAX 5280	MIN 98	CFSM 2.13	IN 28.96					
WTR YR 1975	TOTAL	162262	MEAN 445	MAX 5880	MIN 27	CFSM 1.44	IN 19.47					

ST. LAWRENCE RIVER BASIN

04292500 LAMOILLE RIVER AT EAST GEORGIA, VT.

LOCATION.--Lat 44°40'45", long 73°04'23", Franklin County, 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."

Chemical analyses: Water years 1955, 1971-74 (partial-record station).

Water temperatures: Water years 1955, 1967-74 (partial-record station).

Sediment records: Water years 1967-74 (partial-record station).

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.

REVISIONS.--WSP 894: Drainage area.

REMARKS.--Records good except those for winter period, which are fair. Low flow regulated by powerplants above station.

AVERAGE DISCHARGE.--46 years, 1,211 ft³/s (34.30 m³/s), 23.97 in/yr (609 mm/yr), adjusted to present drainage area.

EXTREMES.--Period of record: Maximum discharge, 23,200 ft³/s (657 m³/s) Mar. 19, 1936 (gage height, 12.52 ft or 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.

Current year: Peak discharges above base of 10,400 ft³/s (295 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 21	0700	-	-	Apr. 20	1100	*15,900 450	10.52 3.206

† Ice jam.

Minimum daily discharge, 136 ft³/s (3.85 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150	466	1050	700	500	1050	1160	3820	521	198	198	269
2	749	721	1000	660	520	940	1100	4620	531	196	199	291
3	666	722	950	620	500	850	1190	4370	488	195	226	386
4	602	614	910	600	480	740	1140	4220	607	208	227	413
5	400	615	840	600	470	620	1140	3620	662	233	204	398
6	426	760	820	620	460	660	1060	3400	661	220	171	321
7	339	794	950	700	455	750	972	3000	1340	196	272	226
8	388	705	1700	780	450	740	946	2560	1510	180	348	170
9	359	644	7000	820	440	740	961	2310	1160	189	398	271
10	326	623	4000	820	435	620	905	2100	757	182	301	539
11	300	429	1800	900	430	640	1000	1850	590	222	290	410
12	267	484	1400	1100	425	640	1100	1710	461	271	224	487
13	327	813	1200	1000	420	800	1180	1600	608	208	223	1170
14	460	1500	1000	900	415	760	1270	1370	786	180	217	1130
15	467	1590	840	840	410	670	1680	1160	864	318	195	1080
16	820	1430	700	780	410	600	2390	1150	726	638	189	728
17	826	1070	660	660	420	620	3520	1260	728	573	164	560
18	680	1020	820	560	430	700	4920	1020	692	305	150	466
19	627	941	900	500	440	900	9180	952	642	164	147	525
20	615	917	820	410	470	3000	14500	885	486	296	137	942
21	493	2370	800	430	500	9000	8650	760	443	221	136	696
22	403	2740	790	660	500	5000	4190	654	383	415	143	644
23	337	1520	780	560	540	3300	3670	480	362	473	166	585
24	555	1420	780	560	680	2500	5000	498	307	439	222	530
25	468	3190	740	550	1000	2400	6620	514	245	425	208	616
26	340	2640	560	700	1800	4070	4990	442	287	212	184	913
27	340	1490	500	660	1500	2320	3900	445	269	153	510	3230
28	309	1300	660	620	1200	1910	3350	663	239	183	816	3890
29	325	1200	740	590	---	1690	2740	625	200	230	441	2090
30	550	1100	740	560	---	1610	2990	485	199	228	376	1310
31	395	---	720	520	---	1420	---	458	---	217	409	---
TOTAL	15309	35828	37170	20980	16740	52260	97414	53001	17754	8368	8091	25286
MEAN	494	1194	1199	677	598	1686	3247	1710	592	270	261	843
MAX	1150	3190	7000	1100	1800	9000	14500	4620	1510	638	816	3890
MIN	267	429	500	410	410	600	905	442	199	153	136	170
CFSM	.72	1.74	1.75	.99	.87	2.46	4.73	2.49	.86	.39	.38	1.23
IN.	.83	1.94	2.02	1.14	.91	2.83	5.28	2.87	.96	.45	.44	1.37

CAL YR 1974 TOTAL 545177 MEAN 1494 MAX 11300 MIN 247 CFSM 2.18 IN 29.56
WTR YR 1975 TOTAL 388201 MEAN 1064 MAX 14500 MIN 136 CFSM 1.55 IN 21.05

NOTE.--No gage-height record Dec. 6 to Mar. 4.

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LOCATION.--Lat 44°58'22", long 72°23'15", Orleans County, 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.

REMARKS.--Records good except those for winter period, which are fair. Occasional regulation at low flow caused by small powerplant above station; greater regulation prior to 1967.

EXTREMES.--Period of record: Maximum discharge, 7,980 ft³/s (226 m³/s) May 3, 1940 (gage height, 12.87 ft or 3.923 m), from rating curve extended above 3,600 ft³/s (102 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.

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Apr. 20	0315	*4,830	137	*9.98	3.042						

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	302	169	118	90	160	218	1080	146	41	42	107
2	143	368	161	113	88	140	213	1230	151	40	38	91
3	128	196	178	97	85	125	206	1130	124	63	35	190
4	113	236	154	116	81	115	195	958	126	60	143	125
5	100	231	126	108	79	110	190	866	147	48	75	100
6	92	184	158	87	78	110	181	800	283	42	48	70
7	85	156	147	114	77	110	169	668	451	40	42	74
8	82	136	469	113	76	105	163	592	344	37	47	71
9	78	123	1560	112	75	92	156	551	225	45	45	176
10	76	113	533	121	74	97	155	483	157	102	36	116
11	76	108	319	234	73	98	177	438	116	69	32	78
12	79	103	253	713	72	88	190	390	104	62	31	1150
13	82	283	225	380	71	94	199	419	223	49	30	838
14	82	352	208	216	70	90	197	329	196	50	28	888
15	150	321	156	133	70	90	313	257	121	267	26	413
16	260	267	125	131	69	86	522	359	111	163	24	219
17	178	221	161	110	69	94	844	311	135	79	23	154
18	182	281	165	99	71	100	1130	224	114	61	25	145
19	135	270	152	136	74	130	2880	190	88	49	23	373
20	119	286	147	121	74	600	3460	170	127	43	21	476
21	108	1060	143	103	74	2000	1180	148	98	354	20	396
22	102	503	139	110	74	921	662	132	67	234	27	237
23	99	280	136	105	90	653	787	120	70	100	37	168
24	93	370	137	105	140	478	1560	103	66	76	28	200
25	93	1210	125	105	220	668	1640	90	61	76	30	276
26	117	527	84	110	300	1070	968	96	48	62	68	577
27	106	289	127	105	230	485	802	493	51	48	952	987
28	91	229	141	100	180	359	648	519	49	55	153	1010
29	89	211	123	96	---	306	546	220	48	82	78	612
30	89	198	122	94	---	298	803	144	46	64	323	322
31	128	---	113	92	---	246	---	185	---	48	217	---
TOTAL	3566	9414	6956	4497	2824	10118	21354	13695	4093	2609	2747	10639
MEAN	115	314	224	145	101	326	712	442	136	84.2	88.6	355
MAX	260	1210	1560	713	300	2000	3460	1230	451	354	952	1150
MIN	76	103	84	87	69	86	155	90	46	37	20	70
CFSM	.88	2.40	1.71	1.11	.77	2.49	5.44	3.37	1.04	.64	.68	2.71
IN.	1.01	2.67	1.98	1.28	.80	2.87	6.06	3.89	1.16	.74	.78	3.02
CAL YR 1974	TOTAL	125257	MEAN	343	MAX	3520	MIN	51	CFSM	2.62	IN	35.57
WTR YR 1975	TOTAL	92512	MEAN	253	MAX	3460	MIN	20	CFSM	1.93	IN	26.27

04293500 MISSISQUOI RIVER NEAR RICHFORD, VT.

LOCATION.--Lat 44°57'30", long 72°41'55", Franklin County, on left bank 1.7 mi (2.7 km) upstream from Trout River, 3 mi (4.8 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.

Chemical analyses: Water years 1954, 1971-74 (partial-record station).

Water temperatures: Water years 1967-69, 1972-74 (partial-record station).

Sediment records: Water years 1967-74 (partial-record station).

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.

REVISIONS (WATER YEARS).--WSP 784: Drainage area. WSP 1237: 1913-14(M), 1922(M), 1923, 1929-30. WSP 1307: 1916(M). WSP 1437: 1912.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair.

Diurnal fluctuation at low flow prior to 1934.

AVERAGE DISCHARGE.--59 years, 916 ft³/s (25.94 m³/s), 25.97 in/yr (660 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 17,200 ft³/s (487 m³/s) May 4, 1940 (gage height, 15.15 ft or 4.618 m), from rating curve extended above 9,300 ft³/s (263 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.

Maximum discharge since at least 1830, 45,000 ft³/s (1,270 m³/s) during flood of November 1927 (gage height, 23.1 ft or 7.04 m, from floodmarks), from rating curve extended above 9,300 ft³/s (263 m³/s) as explained above.

Current year: Peak discharges above base of 7,600 ft³/s (215 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 20	2230	- -	*†12.28 3.743	Apr. 19	2030	*10,800 306	12.14 3.700

† Backwater from ice.

Minimum discharge, 46 ft³/s (1.30 m³/s) Aug. 16-24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	800	1400	780	420	330	640	960	2720	523	86	131	512
2	560	1950	740	400	320	580	900	3160	545	83	105	455
3	470	1500	700	380	310	520	880	3140	460	101	93	1070
4	410	1280	620	400	300	470	840	2860	424	112	108	806
5	370	1110	500	380	290	450	800	2510	475	108	196	529
6	340	893	580	350	285	430	760	2260	833	89	132	366
7	310	750	700	370	285	430	710	1910	1370	80	99	288
8	300	645	1950	390	280	440	690	1580	1340	79	95	246
9	280	573	3390	430	275	400	670	1450	962	85	83	216
10	280	540	3050	500	275	390	627	1260	677	144	75	326
11	280	496	1660	1000	270	380	666	1110	491	161	65	227
12	290	455	1220	2590	265	370	757	1010	386	123	58	1510
13	300	1090	1060	2000	265	390	834	976	486	101	56	2000
14	300	1550	953	1250	260	390	918	899	591	105	53	1800
15	500	1460	764	800	260	370	1390	730	416	127	50	1200
16	1100	1310	650	600	255	350	2220	976	333	343	47	900
17	833	1080	500	500	255	370	3190	1130	302	213	46	700
18	730	1140	700	470	250	390	4280	833	302	132	46	600
19	602	1110	640	450	260	540	8240	671	261	99	46	1100
20	465	1150	620	430	270	2500	10700	579	292	85	46	1500
21	391	3330	600	420	265	6000	8130	470	264	974	46	1200
22	350	2920	580	410	260	4000	4460	399	214	1230	46	850
23	329	1890	560	400	300	3000	3050	347	173	608	46	700
24	312	1650	520	390	450	2500	3880	305	158	351	51	800
25	302	3600	450	390	1100	3000	4820	261	140	254	53	1000
26	329	2930	350	460	1200	3800	4180	267	124	200	102	2000
27	336	1500	450	380	920	2700	3100	743	106	163	2270	3000
28	305	1100	520	350	740	1800	2460	1340	104	154	1240	3100
29	282	950	480	370	---	1500	2010	799	98	322	437	2000
30	273	860	450	400	---	1300	2150	491	93	279	626	1400
31	664	---	430	340	---	1100	---	534	---	175	1010	---
TOTAL	13393	42212	27167	18420	10795	41500	79272	37720	12943	7166	7557	32401
MEAN	432	1407	876	594	386	1339	2642	1217	431	231	244	1080
MAX	1100	3600	3390	2590	1200	6000	10700	3160	1370	1230	2270	3100
MIN	273	455	350	340	250	350	627	261	93	79	46	216
CFSM	.90	2.94	1.83	1.24	.81	2.80	5.52	2.54	.90	.48	.51	2.25
IN.	1.04	3.28	2.11	1.43	.84	3.22	6.16	2.93	1.01	.56	.59	2.52

CAL YR 1974 TOTAL 471602 MEAN 1292 MAX 12500 MIN 171 CFSM 2.70 IN 36.63
WTR YR 1975 TOTAL 330546 MEAN 906 MAX 10700 MIN 46 CFSM 1.89 IN 25.67

NOTE.--No gage-height record Oct. 1-16, Mar. 21 to Apr. 9, Sept. 13-30.

LOCATION.--Lat 43°34'55", long 73°25'19", Washington County, N.Y.-Rutland County, Vt., at midchannel directly south of navigation light, 0.2 mi (0.4 km) upstream from South Bay and 2.0 mi (3.2 km) northwest of Whitehall.

CHEMICAL ANALYSES, OCTOBER 1974 TO JUNE 1975

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 23...	6.9	<1	1	<10	20	9	<.5	100
MAY 21...	2.9	1	0	<10	10	2	<.5	0
JUNE 18...	4.0	1	1	<10	10	7	.5	10

PESTICIDE ANALYSES, MAY 1975

DATE	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)
MAY 21...	.0	0	2.6	.8	.0	.0	.0	.0	.0	.0
DATE	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	
MAY 21...	.0	.0	.0	.0	.0	.0	26	0	.0	

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04294408 LAKE CHAMPLAIN NEAR TICONDEROGA, N.Y.

LOCATION.--Lat 43°50'60", long 73°23'16", Essex County, N.Y.-Addison County, Vt., at midlake at New York-Vermont State line opposite mouth of La Chute, 0.5 mi (0.8 km) south of Fort Ticonderoga and 2.0 mi (3.2 km) southeast of Ticonderoga.

PERIOD OF RECORD.--CHEMICAL ANALYSES: August 1969 to June 1975 (discontinued).

CHEMICAL ANALYSES, OCTOBER 1974 TO JUNE 1975

DATE	TIME	DEPTH (FT)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
OCT. 23...	1230	10	.21	.00	.21	.43	.64	.07
MAY 21...	1200	11	.03	.01	.04	.29	.33	.02
JUNE 18...	1200	11	.10	.01	.11	.37	.48	.05

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)	FECAL COLI- FORM (COL. PER 100 ML)
OCT. 23...	136	8.0	9.0	20	13.2	114	6.7	.0	830
MAY 21...	177	8.7	19.0	2	10.9	122	8.0	.0	816
JUNE 18...	205	7.9	20.0	11	9.0	100	7.1	.0	22

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRU- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 23...	3.0	<1	1	0	20	9	<.5	130
MAY 21...	4.6	0	0	10	10	3	<.5	10
JUNE 18...	3.4	0	1	20	10	4	<.5	10

R NON-IDEAL COLONY COUNT.

PESTICIDE ANALYSES, MAY 1975

DATE	CHLOR-DANE IN BOTTOM MA- TERIAL (UG/KG)	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)
MAY 21...	0	9.5	.0	.0	.0	.4	.0	.0	.0
DATE	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)
MAY 21...	.0	.0	.0	.0	.0	.0	110	0	.0

LOCATION.--Lat 43°55'25", long 73°24'20", Essex County, N.Y.-Addison County, Vt., at midlake at New York-Vermont State line, approximately 1.5 mi (2.4 km) north of Fivemile Point and 2.3 mi (3.7 km) southeast of Crown Point.

PERIOD OF RECORD.--CHEMICAL ANALYSES: August 1969 to June 1975 (discontinued).

			TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
DATE	TIME	DEPTH (FT)						
OCT. 23...	1130	9.0	.17	.00	.17	.42	.59	.08
MAY 21...	1000	10	.03	.01	.04	.28	.32	.02
JUNE 18...	1100	11	.00	.01	.01	.35	.36	.04

	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)	FECAL COLI- FORM (COL. PER 100 ML)
DATE	(UNITS)								
OCT. 23...	205	7.5	9.0	30	12.0	103	.0	.0	B9
MAY 21...	166	8.5	18.0	2	10.6	115	8.8	.0	0
JUNE 18...	180	7.5	20.5	6	8.5	93	4.6	.0	BB

	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
DATE								
OCT. 23...	13	<1	1	<10	30	16	<.5	70
MAY 21...	2.3	0	0	10	10	5	<.5	10
JUNE 18...	2.9	0	1	10	0	5	<.5	10

PESTICIDE ANALYSES, MAY 1975

DATE	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)
MAY 21...	.0	0	7.4	3.2	1.9	.0	.3	.0	.0	.0

DATE	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)
MAY 21...	.0	.0	.0	.0	.0	.0	16	0	.0

ST. LAWRENCE RIVER BASIN

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT.

LOCATION.--Lat 44°28'52", long 73°13'27", Chittenden County, 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.
Chemical analyses: Water year 1971 (partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 92.86 ft (28.304 m) above mean sea level. 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.

REVISIONS (WATER YEARS).--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

EXTREMES.--Period of record: Maximum gage height observed, 8.65 ft (2.637 m) Mar. 27, 28, 1936; minimum observed, -0.25 ft (-0.076 m) Dec. 4, 1908.

Current year: Maximum gage height, 6.18 ft (1.884 m) Apr. 27, May 6, affected by seiche; minimum, 1.53 ft (0.466 m) Sept. 12, affected by seiche.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.38	1.78	2.93	2.97	2.83	2.85	4.40	6.08	4.26	2.97	2.17	1.78
2	2.41	1.80	2.94	2.95	2.82	2.87	4.37	6.08	4.20	2.91	2.16	1.75
3	2.41	1.78	2.94	2.87	2.80	2.88	4.41	6.10	4.14	2.88	2.13	1.79
4	2.38	1.80	2.91	2.86	2.77	2.87	4.54	6.12	4.10	2.83	2.11	1.81
5	2.32	1.84	2.89	2.84	2.74	2.86	4.53	6.13	4.03	2.78	2.10	1.81
6	2.32	1.86	2.88	2.79	2.75	2.84	4.51	6.15	4.00	2.72	2.08	1.81
7	2.30	1.88	2.83	2.76	2.73	2.84	4.49	6.12	4.03	2.66	2.09	1.79
8	2.27	1.89	2.86	2.74	2.68	2.87	4.45	6.08	4.00	2.68	2.09	1.74
9	2.26	1.89	3.05	2.70	2.66	2.84	4.41	6.03	3.97	2.68	2.05	1.73
10	2.22	1.88	3.25	2.68	2.63	2.80	4.36	5.98	3.91	2.66	2.04	1.71
11	2.20	1.85	3.31	2.66	2.61	2.78	4.33	5.91	3.88	2.62	2.03	1.64
12	2.14	1.81	3.34	2.83	2.57	2.71	4.32	5.85	3.84	2.57	2.04	1.67
13	2.14	1.96	3.38	2.98	2.54	2.72	4.31	5.80	3.81	2.50	2.03	1.77
14	2.02	1.84	3.40	3.05	2.51	2.75	4.30	5.74	3.81	2.50	2.02	1.82
15	2.03	1.93	3.39	3.07	2.50	2.77	4.34	5.66	3.75	2.48	2.01	1.81
16	2.07	1.97	3.34	3.06	2.48	2.74	4.40	5.61	3.72	2.47	1.98	1.80
17	2.04	1.99	3.42	3.05	2.46	2.74	4.49	5.55	3.70	2.43	1.92	1.84
18	2.04	2.01	3.40	2.96	2.43	2.71	4.60	5.42	3.65	2.42	1.90	1.85
19	2.03	2.04	3.37	3.00	2.43	2.72	4.74	5.35	3.62	2.38	1.90	1.86
20	2.03	2.07	3.36	2.99	2.41	2.93	5.13	5.26	3.57	2.40	1.87	1.88
21	1.99	2.33	3.34	2.88	2.38	3.38	5.54	5.18	3.51	2.41	1.83	1.94
22	1.92	2.48	3.31	2.86	2.36	3.72	5.69	5.09	3.45	2.38	1.79	1.95
23	1.94	2.49	3.24	2.84	2.34	3.91	5.74	5.02	3.39	2.35	1.79	1.96
24	1.92	2.47	3.23	2.81	2.36	4.04	5.77	4.94	3.33	2.33	1.75	2.01
25	1.84	2.65	3.23	2.81	2.49	4.15	5.93	4.80	3.27	2.31	1.71	2.05
26	1.86	2.84	3.17	2.84	2.64	4.32	6.06	4.66	3.22	2.31	1.73	2.11
27	1.85	2.88	3.10	2.85	2.75	4.40	6.12	4.60	3.16	2.26	1.80	2.26
28	1.80	2.92	3.09	2.85	2.81	4.43	6.13	4.51	3.12	2.24	1.82	2.40
29	1.75	2.94	3.04	2.84	-----	4.41	6.11	4.44	3.06	2.25	1.82	2.50
30	1.77	2.94	3.02	2.86	-----	4.43	6.10	4.37	3.02	2.21	1.86	2.55
31	1.76	-----	2.98	2.84	-----	4.43	-----	4.31	-----	2.17	1.84	-----
MEAN	2.08	2.16	3.16	2.87	2.59	3.28	4.95	5.45	3.68	2.51	1.95	1.91
MAX	2.41	2.94	3.42	3.07	2.83	4.43	6.13	6.15	4.26	2.97	2.17	2.55
MIN	1.75	1.78	2.83	2.66	2.34	2.71	4.30	4.31	3.02	2.17	1.71	1.64
CAL YR 1974	MEAN	4.04		MAX	7.06		MIN	1.75				
WTR YR 1975	MEAN	3.05		MAX	6.15		MIN	1.64				

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LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, on left bank at outlet of Lake Champlain in Rouses Point, and 1.0 mi (1.6 km) south of Fort Montgomery ruins.

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 Frysers Rapids, Quebec, published in Water Survey of Canada annual reports.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. 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 mi² (1,269 km²); Total volume below 92.5 ft (28.19 m) elevation, reported by Lake Champlain Studies Center, 902.2 bil ft³ (25,600 km³). Water-quality records for the current year are published in Section 2 of this report.

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, 99.08 ft (30.200 m) May 1; minimum, 94.27 ft (28.733 m) Nov. 21.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95.18	94.61	95.73	95.79	95.66	95.69	97.25	98.97	97.14	95.88	95.06	94.80
2	95.15	94.58	95.59	95.69	95.66	95.71	97.22	98.96	97.06	95.86	95.04	94.80
3	95.17	94.67	95.65	95.97	95.61	95.70	97.18	98.98	97.02	95.77	95.03	94.62
4	95.20	94.64	95.64	95.73	95.61	95.70	97.22	98.99	96.96	95.74	95.11	94.65
5	95.31	94.63	95.76	95.65	95.59	95.71	97.28	98.97	96.99	95.67	94.99	94.65
6	95.25	94.66	95.71	95.66	95.58	95.71	97.32	98.92	97.06	95.64	94.85	94.66
7	95.18	94.68	95.82	95.61	95.56	95.67	97.32	98.93	96.82	95.69	94.83	94.63
8	95.12	94.66	95.74	95.58	95.55	95.64	97.29	98.93	96.77	95.66	94.87	94.73
9	95.11	94.66	95.85	95.58	95.48	95.67	97.25	98.89	96.81	95.63	94.99	94.58
10	95.10	94.68	96.06	95.63	95.47	95.67	97.21	98.85	96.83	95.56	94.94	94.56
11	95.08	94.70	96.18	95.77	95.43	95.61	97.18	98.81	96.80	95.54	94.93	94.84
12	95.11	94.73	96.25	95.75	95.40	95.68	97.16	98.75	96.90	95.48	94.92	94.70
13	94.95	94.75	96.20	95.79	95.37	95.56	97.15	98.67	96.81	95.53	94.96	94.62
14	95.43	94.90	96.12	95.84	95.36	95.56	97.16	98.59	96.73	95.58	94.90	94.64
15	94.93	94.84	96.18	95.89	95.33	95.60	97.19	98.54	96.81	95.43	94.87	94.81
16	94.92	94.84	96.31	95.88	95.31	95.62	97.25	98.45	96.82	95.44	94.89	94.79
17	95.03	94.94	96.22	95.86	95.28	95.57	97.34	98.40	96.64	95.40	94.94	94.70
18	94.87	94.90	96.23	96.03	95.31	95.60	97.51	98.40	96.64	95.37	94.82	94.74
19	94.86	94.90	96.21	95.82	95.27	95.61	97.84	98.25	96.51	95.42	94.71	94.84
20	94.74	94.93	96.17	95.77	95.25	95.74	98.01	98.18	96.43	95.34	94.65	94.83
21	94.81	94.65	96.15	95.95	95.23	96.18	98.27	98.06	96.44	95.28	94.75	94.79
22	94.93	95.18	96.13	95.69	95.22	96.58	98.55	97.98	96.41	95.25	94.64	94.83
23	94.74	95.55	96.23	95.72	95.18	96.74	98.62	97.89	96.37	95.27	94.62	94.83
24	94.80	95.64	96.04	95.66	95.20	96.88	98.74	97.73	96.26	95.39	94.74	94.77
25	94.88	95.35	95.94	95.64	95.34	97.00	98.77	97.75	96.17	95.34	94.68	94.87
26	94.71	95.46	96.07	95.70	95.53	97.08	98.85	97.69	96.15	95.15	94.68	95.00
27	94.58	95.68	96.10	95.68	95.61	97.16	98.87	97.50	96.13	95.28	94.65	95.10
28	94.75	95.72	95.92	95.68	95.66	97.25	98.97	97.37	96.07	95.19	94.63	95.24
29	94.74	95.72	95.95	95.67	---	97.33	98.98	97.31	95.95	95.09	94.68	95.37
30	94.64	95.75	95.85	95.66	---	97.28	98.93	97.39	95.91	95.13	94.65	95.49
31	94.68	---	95.91	95.68	---	97.23	---	97.25	---	95.10	94.67	

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, N.Y.
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, at gaging station at outlet of Lake Champlain at old railroad bridge in Rouses Point and 1.0 mi (1.6 km) south of Fort Montgomery ruins.

DRAINAGE AREA.--8,277 mi² (21,437 km²).

PERIOD OF RECORD.--CHEMICAL ANALYSES: April 1969 to June 1972, October 1973 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.									
22...	1130	.9	17	4.0	4.5	1.2	53	14	6.7
28...	0900	--	--	--	--	--	56	12	6.9
NOV.									
12...	0930	.4	16	4.1	5.0	1.0	50	13	6.1
APR.									
30...	1000	1.3	17	3.6	4.5	1.0	49	13	7.2
MAY									
20...	1000	.7	16	3.7	4.2	1.2	50	11	6.7
JUNE									
17...	1600	.3	16	3.6	4.3	1.2	51	12	6.1
JULY									
16...	1130	1.0	15	3.2	4.3	1.1	50	11	7.1
AUG.									
12...	1200	1.2	17	4.1	4.6	1.1	53	12	4.7
SEP.									
09...	1230	1.1	17	4.5	4.6	1.2	57	12	4.7

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT.									
22...	.2	.14	.21	.35	.02	77	75	59	15
28...	--	.16	.47	.63	.01	--	--	--	--
NOV.									
12...	.3	1.1	.28	1.4	.00	82	71	57	16
APR.									
30...	.1	.21	.26	.47	.04	82	72	57	17
MAY									
20...	.2	.16	.26	.42	.02	79	68	55	14
JUNE									
17...	.0	.16	.49	.65	.02	98	69	55	13
JULY									
16...	.1	1.2	.32	1.5	.03	79	67	51	10
AUG.									
12...	.0	.04	.32	.36	.03	75	71	59	16
SEP.									
09...	.1	.00	.28	.28	.01	96	73	61	14

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
22...	135	7.3	6.0	3	--	--	81	<1	48
28...	140	--	--	2	--	--	--	--	--
NOV.									
12...	150	7.1	8.0	2	--	--	82	--	--
APR.									
30...	149	7.5	5.0	2	--	--	81	<1	14
MAY									
20...	144	7.4	15.0	1	--	--	2	<1	--
JUNE									
17...	142	7.4	18.0	1	--	--	20	83	4.8
JULY									
16...	140	7.8	24.0	8	--	--	82	83	--
AUG.									
12...	140	8.1	23.5	1	--	--	82000	45	3.4
SEP.									
09...	144	7.8	17.0	1	8.6	89	84	82	4.3

B NON-IDEAL COLONY COUNT.

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

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04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, N.Y.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

DATE	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)
OCT. 28...	15	6.9	4.4	1.0	.16	.00	.15	.32

DATE	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	FIXED NON- FILT- RABLE RESIDUE (MG/L)	TOTAL RESI- DUE (MG/L)	RESIDUE ON IGNI- TION (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
OCT. 28...	.00	3	3	98	72	6	12

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
OCT. 22...	1130	1	<1	1	0	<10	0	0	0	10	0	120
OCT. 28...	0900	--	--	--	--	--	--	--	--	--	--	80
APR. 30...	1000	0	0	0	0	0	10	0	0	0	0	60
JUNE 17...	1600	1	1	1	1	20	10	0	0	10	10	150
AUG. 12...	1200	0	0	0	0	<10	0	0	1	10	0	60
SEP. 09...	1230	0	0	0	0	0	0	0	0	0	0	80

DATE	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 22...	40	13	0	80	0	<.5	<.5	0	<2	20	20
OCT. 28...	--	--	--	10	--	--	--	--	--	--	--
APR. 30...	10	11	5	10	0	<.5	<.5	0	0	10	0
JUNE 17...	70	8	2	10	10	<.5	<.5	0	0	0	0
AUG. 12...	40	57	42	10	10	<.5	<.5	0	0	0	0
SEP. 09...	20	7	1	10	0	<.5	<.5	1	0	10	0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SUS- PEN- DED SEDI- MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	SUS- PEN- DED SEDI- MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 22...	1130	2	--	JUNE 17...	1600	0	100
NOV. 12...	0930	4	--	JULY 16...	1130	7	28
APR. 30...	1000	2	18	AUG. 12...	1200	3	44
MAY 20...	1000	2	76	SEP. 09...	1230	2	74

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

DATE	ORGANISM	COUNT (CELLS/ML)	PERCENT OF TOTAL	DATE	ORGANISM	COUNT (CELLS/ML)	PERCENT OF TOTAL
† OCT. 22	CHLOROPHYTA			† MAY 20	CHLOROPHYTA		
	..CHLOROPHYCEAE				..CHLOROPHYCEAE		
	..CHLOROCOCCALES				..CHLOROCOCCALES		
	..OCCYSTACEAE				..OCCYSTACEAE		
	....ANKISTRODESMUS	10	1		....TETRAEDRON	90	5
	CHRYSOPHYTA				CHRYSOPHYTA		
	..BACILLARIOPHYCEAE				..BACILLARIOPHYCEAE		
	..CENTRALES				..CENTRALES		
	..COSCINODISCACEAE				..COSCINODISCACEAE		
	....CYCLOTELLA	410	41		....CYCLOTELLA	450	25
	....STEPHANODISCUS	40	4		....STEPHANODISCUS	18	1
	..PENNALES				..PENNALES		
	..FRAGILARIACEAE				..DIATOMACEAE		
	....ASTERIONELLA	320	32		....DIATOMA	250	14
	....SYNEDRA	10	1		..FRAGILARIACEAE		
	..GOMPHONEMACEAE				....ASTERIONELLA	770	43
	....GOMPHONEMA	10	1		....FRAGILARIA	160	9
	..NAVICULACEAE				PYRRHOPHYTA		
	....NAVICULA	10	1		..DINOPHYCEAE		
	..NITZSCHIACEAE				..PERIDINIALES		
	....NITZSCHIA	10	1		..GLENODINIACEAE		
	CYANOPHYTA				....GLENODINIUM	18	1
	..MYXOPHYCEAE				TOTAL	1,800	
	..CHROOCOCCALES			† JUNE 17	CHLOROPHYTA		
	..CHROOCOCCACEAE				..CHLOROPHYCEAE		
	....ANACYSTIS	150	15		..CHLOROCOCCALES		
	TOTAL	1,000			..OCCYSTACEAE		
					....OCCYSTIS	120	4
					..SCENEDESMACEAE		
					....SCENEDESMUS	190	6
† NOV. 12	CHLOROPHYTA				CHRYSOPHYTA		
	..CHLOROPHYCEAE				..BACILLARIOPHYCEAE		
	..CHLOROCOCCALES				..CENTRALES		
	..OCCYSTACEAE				..COSCINODISCACEAE		
	....OCCYSTIS	68	2		....CYCLOTELLA	190	6
	CHRYSOPHYTA				..PENNALES		
	..BACILLARIOPHYCEAE				..ACHNANTHACEAE		
	..CENTRALES				....COCCONEIS	31	1
	..COSCINODISCACEAE				..FRAGILARIACEAE		
	....CYCLOTELLA	140	4		....ASTERIONELLA	650	21
	....STEPHANODISCUS	240	7		....FRAGILARIA	1,900	62
	..PENNALES				..NAVICULACEAE		
	..ACHNANTHACEAE				....NAVICULA	31	1
	....ACHNANTHES	34	1		TOTAL	3,100	
	..COCCONEIS	100	3				
	..RHOILOCOSPHENIA	34	1				
	..CYMBELLACEAE						
	....CYMBELLA	34	1				
	..FRAGILARIACEAE						
	....ASTERIONELLA	1,500	43				
	..FRAGILARIA	1,200	36				
	..NAVICULACEAE						
	....NAVICULA	34	1				
	..NITZSCHIACEAE						
	....NITZSCHIA	68	2				
	TOTAL	3,400					
† APR. 30	CHRYSOPHYTA						
	..BACILLARIOPHYCEAE						
	..CENTRALES						
	..COSCINODISCACEAE						
	....CYCLOTELLA	2,700	82				
	....MELOSIRA	260	8				
	..PENNALES						
	..FRAGILARIACEAE						
	....ASTERIONELLA	170	5				
	..NAVICULACEAE						
	....NAVICULA	99	3				
	PYRRHOPHYTA						
	..DINOPHYCEAE						
	..PERIDINIALES						
	..PERIDINIACEAE						
	....PERIDINIUM	99	3				
	TOTAL	3,300					

† USED DEPTH INTEGRATED SAMPLING METHOD.

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, N.Y.--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

PHYTOPLANKTON

DATE	ORGANISM	COUNT (CELLS/ML)	PERCENT OF TOTAL	DATE	ORGANISM	COUNT (CELLS/ML)	PERCENT OF TOTAL
† JULY 16	CHLOROPHYTA			† AUG. 12	CHLOROPHYTA		
	..CHLOROPHYCEAE				..CHLOROPHYCEAE		
	..CHLOROCOCCALES				..CHLOROCOCCALES		
	..CHARACIACEAE				..COELASTRACEAE		
	..SCHROEDERIA	5	3		..COELASTRUM		*
	CHRYSTOPHYTA				..OCCYSTACEAE		
	..BACILLARIOPHYCEAE				..ANKISTRODESMUS	18	1
	..CENTRALES				..OOCYSTIS		*
	..COSCINODISCAEAE				..TETRAEDRON		*
	..MELOSIRA		*		..SCENEDESMACEAE		
	..PENNALES				..SCENEDESMUS	36	2
	..ACHNANTHACEAE				..TETRASPOALES		
	..ACHNANTHES	5	3		..PALMELLACEAE		
	..COCCONEIS	15	9		..GLOEOCYSTIS	54	3
	..CYMBELLACEAE				..VOLVOCALES		
	..CYMBELLA	5	3		..VOLVOCAEAE		
	..DIATOMACEAE				..EUDORINA		*
	..DIATOMA	15	9		..ZYGNEATALES		
	..FRAGILARIACEAE				..DESMIDIACEAE		
	..ASTERIONELLA	5	3		..STAUSTRUM		*
	..FRAGILARIA	5	3		CHRYSTOPHYTA		
	..GOMPHONEMACEAE				..BACILLARIOPHYCEAE		
	..GOMPHONEMA		*		..CENTRALES		
	..NAVICULACEAE				..COSCINODISCAEAE		
	..GYROSIGMA		*		..CYCLOTELLA	400	22
	..NAVICULA	15	9		..MELOSIRA		*
	..NITZSCHACEAE				..PENNALES		
	..NITZSCHIA		*		..ACHNANTHACEAE		
	CYANOPHYTA				..ACHNANTHES	18	1
	..MYXOPHYCEAE				..COCCONEIS		*
	..CHROOCOCCALES				..CYMBELLACEAE		
	..CHROOCOCCACEAE				..CYMBELLA		*
	..AGMENELLUM		*		..FRAGILARIACEAE		
	..ANACYSTIS		*		..FRAGILARIA	110	6
	..OSCILLATORIALES				..GOMPHONEMACEAE		
	..NOSTOCACEAE				..GOMPHONEMA		*
	..ANABAENA	94	55		..NAVICULACEAE		
	EUGLENOPHYTA				..NAVICULA	18	1
	..EUGLENOPHYCEAE				..PINNULARIA		*
	..EUGLENALES				..NITZSCHACEAE		
	..EUGLENACEAE				..NITZSCHIA	18	1
	..EUGLENA	5	3		..CHRYSTOPHYCEAE		
	TOTAL	170			..CHRYSSOMONADALES		
					..MALLOMONADACEAE		
					..MALLOMONAS	36	2
					..OCHROMONADACEAE		
					..DINOBRYON		*
					CYANOPHYTA		
					..MYXOPHYCEAE		
					..CHROOCOCCALES		
					..CHROOCOCCACEAE		
					..ANACYSTIS		
					..ANACYSTIS INCERTA	630	35
					..GOMPHOSPHAERIA		*
					..OSCILLATORIALES		
					..NOSTOCACEAE		
					..ANABAENA	140	8
					..OSCILLATORIAEAE		
					..OSCILLATORIA	320	18
					PYRRHOPHYTA		
					..DINOPHYCEAE		
					..PERIDINIALES		
					..CERATIAEAE		
					..CERATIUM		*
					TOTAL	1,800	

* LESS THAN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED.

† USED DEPTH INTEGRATED SAMPLING METHOD.

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, N.Y.--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

PHYTOPLANKTON

DATE	ORGANISM	COUNT (CELLS/ML)	PERCENT OF TOTAL	SAMPLING METHOD
SEP. 09	CHLOROPHYTA			DEPTH INTEGRATED
	..CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OCCYSTACEAE			
	....DICTYOSPHAERIUM	720	13	*
	....QUADRIGULA			
	..ZYGNEMATALES			
	...ZYGNEMATACEAE			
	....MOUGEOTIA		*	
	CHRYSOPHYTA			
	..BACILLARIOPHYCEAE			
	..CENTRALES			
	..COSCINODISCACEAE			
	....CYCLOTELLA		*	
	....MELOSIRA	55	1	
	..PENNALES			
	....ACHNANTHACEAE			
	....COCCONEIS		*	
	..FRAGILARIACEAE			
	....ASTERIONELLA		*	
	....SYNEDRA	110	2	
	..GOMPHONEMATACEAE			
	....GOMPHONEMA		*	
	..NAVICULACEAE			
	....GYROSIGMA		*	
	....NAVICULA	55	1	
	..NITZSCHACEAE			
	....NITZSCHIA	55	1	
	..TABELLARIACEAE			
	....TABELLARIA		*	
	CYANOPHYTA			
	..MYXOPHYCEAE			
	..CHROOCOCCALES			
	...CHROOCOCCACEAE			
	....ANACYSTIS	940	17	
	..OSCILLATORIALES			
	...NOSTOCACEAE			
	....ANABAENA	2,500	46	
	....APHANIZOMENON	330	6	
	..OSCILLATORIA			
	....OSCILLATORIA	660	12	
	EUGLENOPHYTA			
	..EUGLENOPHYCEAE			
	..EUGLENALES			
	..EUGLENACEAE			
	....TRACHELOMONAS		*	
	PYRRHOPHYTA			
	..DINOPHYCEAE			
	..PERIDINIALES			
	..CERATIACEAE			
	....CERATIUM		*	
	TOTAL	5,500		

* LESS THAN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED.

PERIPHYTON, SEPTEMBER 1974 TO OCTOBER 1975

SAMPLING METHOD: Polyethylene strip.

PERIOD OF EXPOSURE	BIOMASS DRY WEIGHT (g/m ²)	BIOMASS ASH WEIGHT (g/m ²)	CHLOROPHYLL a (mg/m ²)	CHLOROPHYLL b (mg/m ²)	BIOMASS PIGMENT RATIO
Sept. 26-Oct. 22	1.5	0.80	1.0	0.3	0.7
Oct. 22-Nov. 26	13	12	.2	.2	7000
Apr. 30-May 29	3.5	2.3	8.0	.6	150
July 16-Aug. 12	3.9	1.0	4.6	.8	640
Aug. 12-Sept. 9	3.6	2.4	4.7	1.4	260
Sept. 12-Oct. 15	9.3	6.8	17	2.8	150

ST. LAWRENCE RIVER BASIN

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04295500 LAKE MEMPHREMAGOG AT NEWPORT, VT.

LOCATION.--Lat 44°56'15", long 72°12'21", Orleans County, 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) above mean sea level. 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.--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.

Current year: Maximum gage height, 9.61 ft (2.929 m) Apr. 27 (affected by seiche); minimum, 6.68 ft (2.036 m) Mar. 19 (affected by seiche).

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.03	7.74	8.62	8.68	7.72	7.28	7.87	9.32	9.40	8.98	8.75	8.62
2	8.02	7.82	8.61	8.66	7.65	7.24	7.82	9.27	9.42	8.94	8.70	8.62
3	8.01	7.80	8.59	8.64	7.57	7.20	7.81	9.24	9.39	8.95	8.70	8.68
4	7.97	7.81	8.55	8.64	7.50	7.15	7.79	9.19	9.39	8.89	8.69	8.62
5	7.91	7.83	8.49	8.63	7.44	7.09	7.74	9.20	9.38	8.84	8.71	8.57
6	7.93	7.82	8.44	8.57	7.42	7.05	7.68	9.28	9.39	8.82	8.69	8.49
7	7.94	7.81	8.37	8.53	7.39	7.03	7.61	9.34	9.38	8.78	8.63	8.48
8	7.90	7.81	8.38	8.47	7.35	7.02	7.56	9.34	9.37	8.71	8.60	8.40
9	7.86	7.79	8.57	8.41	7.38	6.98	7.51	9.37	9.39	8.67	8.53	8.41
10	7.83	7.77	8.68	8.36	7.35	6.93	7.45	9.39	9.39	8.69	8.53	8.35
11	7.79	7.74	8.74	8.33	7.32	6.89	7.41	9.41	9.38	8.64	8.52	8.24
12	7.74	7.71	8.78	8.40	7.30	6.84	7.36	9.38	9.40	8.60	8.51	8.33
13	7.77	7.72	8.79	8.49	7.32	6.81	7.31	9.29	9.38	8.56	8.47	8.44
14	7.68	7.75	8.81	8.49	7.33	6.83	7.26	9.22	9.35	8.56	8.45	8.53
15	7.78	7.83	8.81	8.47	7.30	6.84	7.25	9.18	9.42	8.65	8.42	8.52
16	7.80	7.87	8.78	8.44	7.34	6.79	7.31	9.21	9.38	8.69	8.37	8.51
17	7.78	7.88	8.80	8.40	7.35	6.76	7.43	9.24	9.30	8.72	8.34	8.51
18	7.79	7.91	8.76	8.35	7.36	6.76	7.63	9.25	9.33	8.75	8.32	8.47
19	7.76	7.96	8.73	8.32	7.36	6.74	8.01	9.29	9.25	8.72	8.29	8.48
20	7.79	8.02	8.71	8.28	7.34	6.83	8.72	9.29	9.15	8.75	8.22	8.50
21	7.74	8.36	8.70	8.20	7.33	7.09	9.04	9.28	9.17	8.88	8.15	8.59
22	7.67	8.42	8.70	8.18	7.32	7.30	9.15	9.26	9.20	8.92	8.15	8.59
23	7.70	8.37	8.69	8.12	7.34	7.47	9.21	9.26	9.22	8.92	8.10	8.56
24	7.66	8.38	8.71	8.07	7.36	7.59	9.29	9.27	9.17	8.92	8.05	8.55
25	7.60	8.59	8.72	8.03	7.35	7.69	9.46	9.25	9.15	8.94	8.03	8.50
26	7.64	8.77	8.70	8.01	7.38	7.87	9.55	9.24	9.09	8.93	8.05	8.51
27	7.69	8.69	8.69	7.97	7.35	7.95	9.56	9.34	9.06	8.84	8.42	8.66
28	7.61	8.67	8.69	7.91	7.32	7.97	9.52	9.41	9.02	8.85	8.46	8.85
29	7.60	8.66	8.67	7.88	-----	7.97	9.46	9.40	9.04	8.87	8.45	8.98
30	7.61	8.64	8.67	7.84	-----	7.96	9.39	9.37	9.02	8.82	8.57	9.03
31	7.65	-----	8.66	7.79	-----	7.92	-----	9.35	-----	8.79	8.62	-----
MEAN	7.78	8.06	8.66	8.31	7.39	7.22	8.21	9.29	9.28	8.79	8.44	8.55
MAX	8.03	8.77	8.81	8.68	7.72	7.97	9.56	9.41	9.42	8.98	8.75	9.03
MIN	7.60	7.71	8.37	7.79	7.30	6.74	7.25	9.18	9.02	8.56	8.03	8.24

CAL YR 1974 MEAN 9.07 MAX 10.89 MIN 7.60
WTR YR 1975 MEAN 8.34 MAX 9.56 MIN 6.74

NOTE.--No gage-height record Feb. 4 to Mar. 4.

ST. LAWRENCE RIVER BASIN

04296000 BLACK RIVER AT COVENTRY, VT.

LOCATION.--Lat 44°52'08", long 72°16'14", Orleans County, 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).

PERIOD OF RECORD.--Discharge: October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 725 ft (221 m) from topographic map.

REMARKS.--Records excellent except those for winter period and period of no gage-height record, which are fair. Occasional diurnal fluctuation at low flow by mill above station; greater regulation prior to 1960.

AVERAGE DISCHARGE.--24 years, 198 ft³/s (5.607 m³/s), 22.04 in/yr (560 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 3,650 ft³/s (103 m³/s) June 30, 1973 (gage height, 7.85 ft or 2.393 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.

Current year: Peak discharges above base of 1,700 ft³/s (48.1m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 20	0145	*2,190 62.0	*6.66 2.030				

Minimum discharge not determined; minimum daily discharge, 22 ft³/s (0.62 m³/s) Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	112	138	104	84	139	220	536	95	36	35	120
2	108	135	128	102	81	125	217	572	96	34	33	110
3	93	112	127	106	78	119	205	573	83	40	51	180
4	86	105	123	100	75	105	180	522	76	46	69	120
5	77	125	132	96	72	90	176	474	79	41	56	80
6	72	139	118	91	72	92	166	415	103	37	49	60
7	67	124	112	91	71	95	154	351	191	34	42	76
8	62	103	271	93	70	93	148	298	185	35	41	64
9	60	92	707	96	70	93	143	256	132	45	67	110
10	59	85	547	100	69	88	139	217	97	61	51	90
11	59	81	420	151	68	87	148	187	79	74	39	86
12	61	78	279	393	68	79	155	166	70	57	34	280
13	64	122	214	329	67	83	168	169	104	49	31	350
14	63	201	195	217	66	76	165	182	158	56	30	250
15	100	211	171	162	65	82	227	152	122	157	28	120
16	197	199	134	142	65	74	357	151	104	147	26	90
17	148	160	149	114	64	79	577	160	115	89	25	94
18	116	165	154	110	64	82	775	135	109	57	27	86
19	103	172	145	101	63	101	1490	117	83	45	24	160
20	88	175	137	91	63	453	1930	106	76	40	23	150
21	80	440	134	102	62	971	1470	97	74	63	22	110
22	76	404	129	90	64	723	944	90	63	102	23	82
23	73	247	129	93	72	679	805	85	56	75	30	68
24	71	211	126	88	85	549	933	80	52	53	27	67
25	69	445	120	85	149	617	960	73	48	52	30	95
26	69	391	135	88	220	749	816	69	44	49	50	206
27	69	254	130	88	189	487	745	174	42	44	450	645
28	66	198	114	89	160	414	648	195	40	42	140	613
29	62	176	111	87	---	345	542	114	39	44	100	515
30	62	150	109	88	---	292	505	84	37	42	200	349
31	72	---	105	87	---	246	---	85	---	38	170	---
TOTAL	2642	5612	5743	3774	2396	8307	16108	6885	2652	1784	2023	5426
MEAN	85.2	187	185	122	85.6	268	537	222	88.4	57.5	65.3	181
MAX	197	445	707	393	220	971	1930	573	191	157	450	645
MIN	59	78	105	85	62	74	139	69	37	34	22	60
CFSM	.70	1.53	1.52	1.00	.70	2.20	4.40	1.82	.72	.47	.54	1.48
IN.	.81	1.71	1.75	1.15	.73	2.53	4.91	2.10	.81	.54	.62	1.65

CAL YR 1974 TOTAL 97036 MEAN 266 MAX 1510 MIN 46 CFSM 2.18 IN 29.59
WTR YR 1975 TOTAL 63352 MEAN 174 MAX 1930 MIN 22 CFSM 1.43 IN 19.32

NOTE.--No gage-height record Aug. 16 to Sept. 22.

04296500 CLYDE RIVER AT NEWPORT, VT.

LOCATION.--Lat 44°56'22", long 72°11'23", Orleans County, 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).

DISCHARGE RECORDS

PERIOD OF RECORD.--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."

GAGE.--Water-stage recorder and, since Mar. 6, 1957, records of power generation. Datum of gage is 682.36 ft (207.983 m) above mean sea level. 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.

REVISIONS (WATER YEARS).--WSP 744: 1913(M), drainage area. WSP 924: 1940. WSP 1307: 1913-15(M).

REMARKS.--Records fair. Flow regulated by powerplant and reservoirs above station and, since Mar. 6, 1957, by diversion around station through canal and penstock of powerplant below station. 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.--56 years (1909-19, 1920-21, 1922-24, 1929-35, 1938-75), 255 ft³/s (7.222 m³/s), 24.39 in/yr (620 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 3,900 ft³/s (110 m³/s) Mar. 20, 1936 (gage height, 5.76 ft or 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.

Current year: Maximum daily discharge, 1,070 ft³/s (30.3 m³/s) Apr. 22; minimum daily, 7.8 ft³/s (0.22 m³/s) Aug. 20, 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	197	113	35	35	33	316	593	396	169	100	36
2	173	37	307	249	38	91	279	580	376	166	22	244
3	173	38	258	240	190	290	292	613	283	193	23	189
4	94	203	240	154	140	250	275	701	391	27	177	177
5	73	187	209	36	150	230	196	761	390	19	158	165
6	46	190	228	230	115	185	169	779	310	19	25	15
7	118	179	42	174	180	212	258	773	367	29	22	19
8	120	207	145	178	36	121	227	741	136	90	38	150
9	132	37	351	184	35	35	231	702	295	78	12	128
10	123	37	263	173	240	210	223	644	367	19	11	170
11	94	85	343	167	195	179	204	599	261	86	112	138
12	32	137	343	209	160	200	73	561	262	19	49	146
13	21	196	351	322	180	208	49	533	265	21	33	23
14	21	223	347	290	135	225	206	512	95	32	131	23
15	168	188	343	355	35	61	202	487	34	171	24	165
16	180	36	323	227	35	34	272	465	318	107	12	181
17	168	38	224	255	145	212	292	447	312	235	12	205
18	150	296	218	160	143	203	394	433	239	149	71	177
19	20	254	231	135	126	224	434	430	238	19	116	217
20	16	285	247	260	199	294	526	424	240	19	7.8	205
21	151	333	164	225	141	391	1030	367	34	173	7.8	28
22	131	297	152	210	33	343	1070	384	34	54	19	230
23	92	237	225	175	100	383	939	298	205	172	8.2	225
24	172	255	252	160	225	389	843	278	190	25	8.2	160
25	169	361	125	35	242	399	793	36	100	67	40	235
26	63	311	266	35	234	409	773	289	102	179	82	245
27	29	345	225	215	238	445	778	292	147	110	221	275
28	124	289	141	240	214	445	744	390	32	61	162	385
29	206	371	35	210	---	440	684	327	34	111	9.8	420
30	208	257	271	185	---	442	633	300	253	147	19	420
31	200	---	250	170	---	381	---	391	---	72	13	---
TOTAL	3569	6106	7232	5893	3939	7964	13405	15130	6706	2838	1745.8	5396
MEAN	115	204	233	190	141	257	447	488	224	91.5	56.3	180
MAX	208	371	351	355	242	445	1070	779	396	235	221	420
MIN	16	36	35	35	33	33	49	36	32	19	7.8	15
CFSM	.81	1.44	1.64	1.34	.99	1.81	3.15	3.44	1.58	.64	.40	1.27
IN.	.93	1.60	1.89	1.54	1.03	2.09	3.51	3.96	1.76	.74	.46	1.41

CAL YR 1974 TOTAL 127710.0 MEAN 350 MAX 1830 MIN 16 CFSM 2.46 IN 33.46
WTR YR 1975 TOTAL 79923.8 MEAN 219 MAX 1070 MIN 7.8 CFSM 1.54 IN 20.94

NOTE.--Discharge in cubic feet per second per square mile and runoff in inches may not represent natural flow because of regulation.

ST. LAWRENCE RIVER BASIN

04296500 CLYDE RIVER AT NEWPORT, VT.--Continued
(National Stream-Quality Accounting Network Station)

WATER QUALITY RECORDS

PERIOD OF RECORD.--CHEMICAL ANALYSES: October 1974 to current year.

BIOLOGICAL DETERMINATIONS: October 1974 to current year.

WATER TEMPERATURES: October 1974 to current year.

INSTRUMENTATION.--Two-parameter water-quality monitor.

EXTREMES.--Current year:

SPECIFIC CONDUCTANCE: Maximum, 309 micromhos Aug. 31; minimum, 91 micromhos May 14-18.

WATER TEMPERATURES: Maximum, 26.5°C, July 8, July 19-20; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	TOTAL PHYTOPLANKTON (CELLS PER ML)
OCT. 16...	1700	260	148	7.7	--	9.0	10.9	1600
NOV. 21...	1215	394	126	7.6	--	2.5	--	1200
DEC. 19...	0930	335	132	7.3	--	1.0	--	110
JAN. 28...	0800	238	136	7.3	-5.0	.0	--	400
FEB. 27...	0900	343	157	6.7	4.5	.0	14.6	580
MAR. 18...	0700	38	163	7.4	2.0	.0	13.7	630
APR. 28...	1000	749	120	7.7	4.0	3.5	--	480
MAY 28...	0800	395	103	--	--	19.0	--	790
JUNE 25...	1000	407	116	7.6	25.0	22.5	8.6	5300
AUG. 06...	0900	22	148	7.9	--	22.5	8.6	3800
27...	1200	398	--	--	--	20.0	8.8	8200

DATE	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT. 16...	200	820	88	.20	.49	.29	.01
NOV. 21...	520	200	178	.28	.56	.28	.02
DEC. 19...	--	96	190	.31	.57	.26	.02
JAN. 28...	400	160	100	.16	.32	.16	.02
FEB. 27...	--	--	--	.44	.79	.35	.03
MAR. 18...	265	133	75	.37	.57	.20	.01
APR. 28...	96	38	26	.43	.61	.18	.02
MAY 28...	--	--	1900	.21	.52	.31	.03
JUNE 25...	8320	832	816	.23	.63	.40	.01
AUG. 06...	850	8110	860	.04	.41	.37	.03
27...	3900	2100	3500	.06	.54	.48	.04

B NON-IDEAL COLONY COUNT.

04296500 CLYDE RIVER AT NEWPORT, VT.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

DATE	DIS-SOLVED SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	SUS-PENDED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
DEC. 19...	5.4	260	50	30	0	30	17	2.0	3.9	1.1
APR. 28...	4.9	170	70	20	10	10	16	1.6	3.4	1.0
JUNE 25...	3.8	340	70	50	50	0	15	1.5	3.5	1.1

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
DEC. 19...	49	0	40	7.3	7.0	.2	75	68	51	11
APR. 28...	48	0	39	7.3	5.2	.3	78	63	47	7
JUNE 25...	53	0	43	4.9	5.5	.2	71	62	44	0

DATE	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUS-PENDED CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUS-PENDED CHROMIUM (CR) (UG/L)
DEC. 19...	3.9	20	0	0	1	0	0	1	0	0
APR. 28...	1.5	--	0	0	0	0	0	0	0	0
JUNE 25...	2.1	13	1	1	0	0	0	0	10	0

DATE	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)
DEC. 19...	<10	0	0	0	0	0	0	0	0	1
APR. 28...	0	0	0	0	0	0	0	3	3	0
JUNE 25...	20	0	0	0	0	0	0	2	2	0

DATE	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUS-PENDED SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
DEC. 19...	<.5	.0	<.5	0	0	0	0	0	0
APR. 28...	<.5	.0	<.5	0	0	0	0	0	0
JUNE 25...	<.5	.0	<.5	0	0	0	10	10	0

04296500 CLYDE RIVER AT NEWPORT, VT.--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

PHYTOPLANKTON

DATE	TIME	ORGANISM	COUNT (CELLS/ML)	PERCENT OF TOTAL	DATE	TIME	ORGANISM	COUNT (CELLS/ML)	PERCENT OF TOTAL
†MAY 28	0800	CHLOROPHYTA			†AUG. 27	1200	CHLOROPHYTA		
		..CHLOROPHYCEAE					..CHLOROPHYCEAE		
		..CHLOROCOCCALES					..CHLOROCOCCALES		
		..CHARACIACEAE					..OCCYSTACEAE		
		....SCHROEDERIA	16	2			....OCCYSTIS	73	1
		....SCENEDESMACEAE					....SCENEDESMACEAE		
		....SCENEDESMUS	71	9			....SCENEDESMUS	73	1
		CHRYSOPTA					..TETRASPORALES		
		..BACILLARIOPHYCEAE					..PALMELLACEAE		
		..CENTRALES					....SPHAEROCYSTIS		*
		..COSCINODISCACEAE					CHRYSOPTA		
		....CYCLOTELLA	55	7			..BACILLARIOPHYCEAE		
		....MELOSIRA	100	13			..CENTRALES		
		..PENNALES					..COSCINODISCACEAE		
		..ACHNANTHACEAE					....CYCLOTELLA	18	*
		....COCCONEIS	16	2			....MELOSIRA	470	6
		..CYMBELLACEAE					..PENNALES		
		....CYMBELLA	16	2			..ACHNANTHACEAE		
		..FRAGILARIACEAE					....ACHNANTHES	18	*
		....ASTERIONELLA	55	7			....COCCONEIS	18	*
		....SYNEDRA	55	7			..CYMBELLACEAE		
		..GOMPHONEMATACEAE					....CYMBELLA	18	*
		....GOMPHONEMA	32	4			..FRAGILARIACEAE		
		..NAVICULACEAE					....FRAGILARIA	250	3
		....FRUSTULIA	16	2			..GOMPHONEMATACEAE		
		....NAVICULA	16	2			....GOMPHONEMA		*
		..NITZSCHIA					..NAVICULACEAE		
		....NITZSCHIA	160	20			....NAVICULA	36	*
		..CHRYSOPTA					..NITZSCHIA		
		..CHRYSONOMADALES					....NITZSCHIA	55	1
		..OCHROMONADACEAE					CYANOPHYTA		
		....DINOBRYON	190	24			..MYXOPHYCEAE		
		TOTAL	790				..CHROOCOCCALES		
†JUNE 25	1000	CHLOROPHYTA					..CHROOCOCCACEAE		
		..CHLOROPHYCEAE					....ANACYSTIS	6,900	84
		..CHLOROCOCCALES					..OSCILLATORIALES		
		..MICRACIACEAE					....NOSTOCACEAE		
		....GOLENKINIA	53	1			....ANABAENA	230	3
		..OCCYSTACEAE					EUGLENOPHYTA		
		....ANKISTRODESMUS	53	1			..EUGLENOPHYCEAE		
		....SELENASTRUM	53	1			..EUGLENALES		
		CHRYSOPTA					..EUGLENALEAE		
		..BACILLARIOPHYCEAE					....TRACHELOMONAS		*
		..CENTRALES					TOTAL	8,200	
		..COSCINODISCACEAE							
		....CYCLOTELLA	110	2					
		....MELOSIRA	320	6					
		..PENNALES							
		..ACHNANTHACEAE							
		....ACHNANTHES	110	2					
		..CYMBELLACEAE							
		....CYMBELLA	53	1					
		..FRAGILARIACEAE							
		....ASTERIONELLA	53	1					
		....FRAGILARIA	53	1					
		....SYNEDRA	53	1					
		..NAVICULACEAE							
		....NAVICULA	160	3					
		..NITZSCHIA							
		....NITZSCHIA	270	5					
		..TABELLARIACEAE							
		....TABELLARIA	210	4					
		..CHRYSOPTA							
		..CHRYSONOMADALES							
		..OCHROMONADACEAE							
		....DINOBRYON	160	3					
		CYANOPHYTA							
		..MYXOPHYCEAE							
		..CHROOCOCCALES							
		..CHROOCOCCACEAE							
		....ANACYSTIS	320	6					
		..OSCILLATORIALES							
		....OSCILLATORIALEAE							
		....LYNGBYA	2,900	54					
		..PHORMIDIUM	580	11					
		TOTAL	5,300						

* LESS THAN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED.

† USED DEPTH INTEGRATED SAMPLING METHOD.

ST. LAWRENCE RIVER BASIN

04296500 CLYDE RIVER AT NEWPORT, VT.--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

PHYTOPLANKTON					
DATE	TIME	ORGANISM	COUNT (CELLS/ML)	PERCENT OF TOTAL	SAMPLING METHOD
AUG. 26	0900	CHLOROPHYTA			DEPTH INTEGRATED
		..CHLOROPHYCEAE			
		...CHLOROCOCCALES			
		...COELASTRACEAE			
		....COELASTRUM		*	
		...MICRACTINIACEAE			
		...GOLENKINIA	250	7	
		...OCCYSTACEAE			
		....OOCYSTIS		*	
		....TREUBARIA		*	
		...SCENEDESMACEAE			
		...CRUCIGENIA		*	
		...SCENEDESMUS	250	7	
		..TETRASPORALES			
		...PALMELLACEAE			
		...SPHAEROCYSTIS		*	
		..ZYGNEMATALES			
		...DESMIDIACEAE			
		...COSMARIUM		*	
		CHRYSTOPHYTA			
		..BACILLARIOPHYCEAE			
		...PENNALES			
		...ACHNANTHACEAE			
		....ACHNANTHES	17	*	
		....COCCONEIS		*	
		...CYMBELLACEAE			
		....CYMBELLA		*	
		...DIATOMACEAE			
		....DIATOMA		*	
		...FRAGILARIACEAE			
		....FRAGILARIA		*	
		....SYNEDRA	17	*	
		...GOMPHONEMACEAE			
		....GOMPHONEMA		*	
		...MERIDIONACEAE			
		....MERIDION		*	
		...NAVICULACEAE			
		....NAVICULA		*	
		CYANOPHYTA			
		..MYXOPHYCEAE			
		...CHROOCOCCALES			
		...CHROOCOCCACEAE			
		....ANACYSTIS	3,200	86	
		...OSCILLATORIALES			
		...NOSTOCACEAE			
		....ANABAENA		*	
		EUGLENOPHYTA			
		..EUGLENOPHYCEAE			
		...EUGLENALES			
		...EUGLENACEAE			
		....EUGLENA		*	
		PYRRHOPHYTA			
		..DINOPHYCEAE			
		...PERIDINIALES			
		...CERATIACEAE			
		....CERATIUM		*	
		...GLENODINIACEAE			
		....GLENODINIUM		*	
		...PERIDINIACEAE			
		....PERIDINIUM		*	
		TOTAL	3,800		

* LESS THAN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED.

ST. LAWRENCE RIVER BASIN

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04296500 CLYDE RIVER AT NEWPORT, VT.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	166	142	153	162	145	155	135	132	134
2	---	---	---	161	156	158	165	147	153	134	122	127
3	---	---	---	158	154	157	165	138	152	131	119	123
4	---	---	---	168	142	153	159	122	140	132	120	127
5	---	---	---	160	142	151	171	149	157	132	130	131
6	---	---	---	159	141	151	169	131	150	132	118	123
7	---	---	---	164	138	148	154	132	148	161	119	133
8	---	---	---	153	136	143	175	129	153	160	144	154
9	---	---	---	153	144	149	135	130	133	160	145	152
10	---	---	---	150	147	149	151	127	134	163	145	152
11	---	---	---	152	145	149	129	122	126	197	146	165
12	---	---	---	150	135	144	125	123	124	181	149	160
13	---	---	---	154	134	144	126	124	125	165	146	152
14	---	---	---	148	133	141	127	124	125	162	144	148
15	---	---	---	157	138	148	127	123	125	157	143	144
16	---	---	---	159	154	156	127	124	125	157	141	147
17	172	145	154	158	151	155	144	125	131	153	140	144
18	173	149	159	159	133	142	147	129	135	154	141	150
19	176	164	169	150	133	140	149	130	139	156	140	149
20	173	170	171	147	135	140	147	124	134	157	138	145
21	170	140	155	197	127	142	140	119	131	154	137	144
22	163	145	154	152	133	139	136	114	129	154	139	146
23	164	145	156	154	133	143	140	118	129	154	140	146
24	162	144	151	155	132	144	141	128	133	151	140	146
25	160	143	151	157	137	139	141	127	137	152	150	151
26	161	144	157	159	133	146	138	125	130	152	143	150
27	157	151	155	159	138	143	136	124	129	151	137	144
28	158	142	151	158	140	146	135	125	131	148	130	138
29	157	142	150	152	141	143	136	132	135	153	129	138
30	157	140	148	157	143	148	135	123	127	147	131	138
31	161	139	150	---	---	---	134	119	126	145	129	137
MONTH	---	---	---	197	127	147	175	114	136	197	118	143
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	145	138	142	161	155	157	153	130	138	122	119	120
2	146	136	142	163	141	153	150	128	137	120	119	119
3	148	133	138	157	139	143	150	132	139	119	115	117
4	147	134	140	156	138	145	159	136	143	116	113	115
5	146	134	139	155	137	145	163	137	149	115	108	111
6	148	135	144	155	137	146	163	137	152	112	107	109
7	148	134	140	155	138	147	160	137	147	110	106	108
8	146	144	145	154	138	148	159	138	149	107	104	106
9	148	136	144	155	145	151	159	138	148	103	98	102
10	150	130	140	155	138	145	166	137	149	100	95	98
11	148	133	139	155	139	148	162	136	149	97	94	95
12	151	136	140	155	137	146	171	140	158	95	93	94
13	150	137	142	153	139	146	170	143	161	94	92	93
14	150	139	146	156	137	144	168	144	157	93	91	93
15	154	146	149	157	139	151	172	146	160	93	91	92
16	165	150	154	170	148	156	173	150	159	94	91	92
17	151	138	147	175	138	152	168	152	158	95	91	92
18	159	139	150	178	150	163	156	152	153	94	91	92
19	161	141	152	182	152	165	153	142	148	94	92	93
20	154	139	147	183	155	167	144	140	142	95	92	94
21	155	140	150	184	155	163	145	140	141	97	91	94
22	162	151	155	172	154	158	142	140	141	97	95	96
23	168	139	158	154	151	152	141	137	139	105	95	100
24	184	140	155	174	149	152	137	134	136	106	97	100
25	181	143	158	171	145	151	135	129	132	113	104	105
26	167	144	154	158	141	145	131	127	129	106	98	101
27	166	144	153	147	144	145	127	124	126	139	101	109
28	162	141	152	143	141	142	124	122	124	104	98	100
29	---	---	---	142	136	139	123	121	122	107	98	100
30	---	---	---	137	135	136	123	121	122	105	97	100
31	---	---	---	136	135	135	---	---	---	100	97	98
MONTH	184	130	147	184	135	150	173	121	144	139	91	101

ST. LAWRENCE RIVER BASIN

04296500 CLYDE RIVER AT NEWPORT, VT.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	102	98	100	128	120	124	---	---	---	177	162	169
2	106	102	102	146	120	127	---	---	---	162	142	151
3	109	104	106	142	122	129	---	---	---	163	143	153
4	107	105	105	134	131	132	---	---	---	162	144	153
5	107	104	106	138	134	136	---	---	---	165	144	154
6	117	105	108	137	135	136	---	---	---	177	167	172
7	113	103	106	140	129	136	154	153	153	172	164	169
8	114	106	111	136	127	134	155	138	152	174	145	159
9	113	106	108	163	129	142	163	156	160	177	146	161
10	110	106	107	143	139	140	165	161	163	164	145	154
11	116	105	109	145	129	140	164	131	148	162	145	155
12	114	107	110	142	140	141	152	139	147	166	146	158
13	130	109	114	144	138	143	156	140	148	167	158	160
14	120	110	117	148	140	145	151	133	143	168	162	164
15	121	116	118	161	131	145	155	146	150	162	145	155
16	126	111	114	145	132	141	161	155	158	161	144	151
17	120	112	115	145	131	138	159	158	159	157	144	150
18	119	114	116	144	133	140	159	137	150	157	143	150
19	122	115	118	146	144	144	151	135	146	163	143	152
20	125	115	119	145	143	144	154	150	152	162	142	150
21	129	125	126	171	132	146	156	153	154	158	154	155
22	128	124	126	149	134	146	164	148	158	158	143	149
23	126	118	122	150	131	141	163	159	160	157	143	149
24	129	118	123	158	145	152	164	160	162	175	145	148
25	127	118	125	157	136	148	165	146	158	170	143	151
26	129	118	126	141	137	138	178	140	162	176	143	158
27	129	119	125	153	140	145	166	147	157	178	143	156
28	130	128	129	---	---	---	163	143	152	150	144	147
29	131	122	129	---	---	---	160	142	152	146	141	143
30	132	119	123	---	---	---	179	163	175	141	141	141
31	---	---	---	---	---	---	309	177	185	---	---	---
MONTH	132	98	115	171	120	140	309	131	156	178	141	155
YEAR	309	91	140									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	8.5	8.0	8.0	2.0	0.5	1.5	1.5	0.5	1.0
2	---	---	---	8.0	7.0	7.5	2.0	0.5	1.5	1.0	0.0	0.5
3	---	---	---	8.0	6.5	7.0	2.0	1.5	1.5	1.0	0.0	0.5
4	---	---	---	7.5	7.0	7.0	1.5	0.5	1.0	1.0	0.5	0.5
5	---	---	---	7.5	7.0	7.0	1.5	0.5	1.0	0.5	0.0	0.5
6	---	---	---	7.5	6.5	7.0	1.5	1.0	1.0	0.5	0.0	0.5
7	---	---	---	7.5	6.0	6.5	2.0	0.5	1.5	1.0	0.0	0.5
8	---	---	---	7.0	6.0	6.5	2.5	1.5	2.0	1.0	0.5	0.5
9	---	---	---	6.5	5.0	6.0	2.0	1.5	1.5	1.0	0.5	1.0
10	---	---	---	6.0	5.0	5.5	1.5	0.5	1.5	1.0	1.0	1.0
11	---	---	---	6.5	4.5	5.5	1.5	1.5	1.5	2.0	1.0	1.5
12	---	---	---	7.0	5.5	6.0	1.5	1.5	1.5	1.5	0.5	1.0
13	---	---	---	6.5	6.0	6.5	1.5	1.5	1.5	1.0	0.5	1.0
14	---	---	---	6.0	5.5	6.0	1.5	1.0	1.0	1.0	0.5	1.0
15	---	---	---	6.0	5.0	5.5	1.0	1.0	1.0	1.0	0.0	0.5
16	---	---	---	5.0	4.5	4.5	1.0	1.0	1.0	1.0	0.0	0.5
17	8.5	8.0	8.0	4.5	4.0	4.5	1.0	0.5	1.0	0.5	0.0	0.5
18	7.5	6.5	7.0	4.5	4.5	4.5	1.0	1.0	1.0	0.5	0.0	0.0
19	6.5	5.5	6.0	5.0	4.5	4.5	1.0	0.5	1.0	0.5	0.0	0.5
20	5.5	4.0	5.0	4.5	4.0	4.5	1.0	0.5	1.0	0.5	0.0	0.0
21	5.5	3.5	4.5	4.5	3.0	3.5	1.5	0.5	1.0	0.5	0.0	0.0
22	6.0	4.0	5.0	3.0	1.5	2.5	1.5	0.5	1.0	0.5	0.0	0.5
23	7.0	5.0	6.0	2.5	1.0	2.0	1.5	0.5	1.0	0.5	0.0	0.0
24	6.5	4.5	5.5	3.0	2.0	2.5	1.5	1.0	1.0	0.5	0.0	0.5
25	6.0	5.5	6.0	3.0	2.0	3.0	1.0	0.0	1.0	0.5	0.0	0.5
26	7.0	5.5	6.0	2.5	1.5	2.0	1.0	0.0	0.5	1.0	0.0	0.5
27	6.0	4.5	5.5	2.0	0.5	1.5	1.0	0.0	0.5	0.5	0.0	0.0
28	5.5	3.5	4.5	2.0	0.5	1.5	1.0	0.0	1.0	0.5	0.0	0.0
29	6.0	4.5	5.5	2.0	1.0	1.5	1.0	0.0	1.0	0.5	0.0	0.0
30	6.5	5.5	6.0	2.0	1.0	1.5	1.0	0.0	1.0	0.5	0.0	0.0
31	7.5	6.5	7.0	---	---	---	1.0	0.0	0.5	0.5	0.0	0.0
MONTH	---	---	---	8.5	0.5	4.5	2.5	0.0	1.0	2.0	0.0	0.5

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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 1975								
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum			
					Date	Gage height (feet)	Dis-charge (ft ³ /s)	
Androscoggin River basin								
01054120	Josh Brook near Gorham, N.H.	Lat 44°23'15", long 71°07'58", Coos County, at culvert on U.S. Highway 2, 2 mi east of Gorham.	0.67	1973-75	3-20-75	16.54	120	
Saco River basin								
01064250	Albany Brook tributary near Bartlett, N.H.	Lat 44°04'23", long 71°18'10", Carroll County, at culvert on U.S. Highway 302, 1 mi west of Bartlett.	0.20	1973-75	6-13-75	5.18	55	
01064310	Ellis River tributary near Jackson, N.H.	Lat 44°09'42", long 71°12'57", Carroll County, at culvert on State Highway 16, 2 mi northwest of Jackson.	.78	1974-75	12- 8-74	(a)	b60	
01064380	East Branch Saco River near Lower Bartlett, N.H.	Lat 44°07'21", long 71°07'50", Carroll County, at bridge on gravel road, 1.7 mi northeast of Lower Bartlett.	32.0	1967-75	3-20-75	(c)	b1900	
01064750	Meadow Brook near Sandwich, N.H.	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	1973-75	3-20-75	6.57	46	
01064780	Square Brook near Freedom, N.H.	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	1973-75	6-13-75	6.63	14	
Piscataqua River basin								
01073750	Mill Brook at Stratham, N.H.	Lat 43°01'24", long 70°55'04", Rockingham County, at culvert on southbound lane of State Highway 101 and 108, 0.3 mi west of Stratham.	2.30	1973-75	4- 4-75	9.09	40	
01073850	Hampton Falls River near Hampton Falls, N.H.	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	1973-75	4- 4-75	16.88	145	
Merrimack River basin								
01074250	Hancock Branch tributary near Lincoln, N.H.	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	5-13-75	9.74	12	
01078800	West Alton Brook near Alton, N.H.	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	1973-75	4- 3-75	(a)	<40	
01081900	Town Line Brook tributary near Peterborough, N.H.	Lat 42°51'09", long 71°54'14", Hillsborough County, at culvert on State Highway 101, 2.8 mi west of Peterborough, and 5 mi west of West Wilton.	.75	1972-75	9-27-75	6.95	70	

a Peak stage did not reach bottom of the gage.

b Estimated.

c Not determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--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, N.H.	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	1972-75	9-27-75	18.72	115
01084500	Beards Brook near Hillsboro, N.H.	Lat 43°06'51", long 71°55'36", Hillsborough County, 300 ft above bridge on State Highway 9, 500 ft above mouth, and 1.5 mi west of Hillsboro.	55.4	1946-70†, 1971-75	4-20-75	4.39	965
01089500	Suncook River at North Chichester, N.H.	Lat 43°15'23", long 71°22'10", Merrimack County, 100 ft below bridge on Depot Rd. at North Chichester and 3.1 mi above Little Suncook River.	157	1918-27†, 1929-70†, 1972-75	3-21-75	9.70	2350
01089750	Marden Brook near Epsom, N.H.	Lat 43°12'13", long 71°23'16", Merrimack County, at culvert on State Highway 28, 2 mi south of Epsom.	1.16	1973-75	3-20-75	7.03	34
01094006	McQuade Brook near Bedford, N.H.	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	1972-75	4- 4-75	16.61	122
Connecticut River basin							
01129210	Ad Chase Brook near Pittsburg, N.H.	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	1973-75	4-19-75	18.36	90
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	1964-75	4-19-75	11.43	28
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	1966-75	4-19-75	6.93	28
01129850	Connecticut River tributary near Stratford, N.H.	Lat 44°38'42", long 71°32'38", Coos County, at culvert on U.S. Highway 3, 0.8 mi south of Stratford.	1.51	1973-75	4-19-75	(c)	b30
01129950	Upper Ammonoosuc River tributary near Stark, N.H.	Lat 44°35'48", long 71°25'30", Coos County, at culvert on State Highway 110, 1.1 mi west of Stark.	.58	1973-75	4-19-75	15.97	15
01131250	Cherry Mountain Brook tributary near Twin Mountain, N.H.	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	1973-75	9-27-75	16.23	95
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	1964-75	9-27-75	12.41	98
01137850	Ammonoosuc River tributary near Littleton, N.H.	Lat 44°18'58", long 71°47'45", Grafton County, at culvert on State Highway 18, 1 mi west of Littleton.	2.42	1975	12- 9-75	(c)	b125
01138800	Keenan Brook at Groton, N.H.	Lat 44°12'10", long 72°12'05", Caledonia County, at culvert on macadam road, 0.6 mi south of Groton.	4.26	1964-75	4-19-75	(c)	-
01140800	West Branch Ompompanoosuc River tributary at South Strafford, Vt.	Lat 43°49'56", long 72°22'20", Orange County, at culvert on dirt road at South Strafford.	1.33	1964-75	3-20-75	10.76	64

† Operated as a continuous-record gaging station.

b Estimated.

c Not determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1975--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
Connecticut River basin--Continued							
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	1964-75	4-19-75	19.59	b170
01155350	West River 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	1964-75	4-19-75	8.45	31
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	1964-75	3-20-75	9.15	110
St. Lawrence River basin							
04279400	Poultney River tributary at East Poultney,	Lat 43°32'17", long 73°12'36", Rutland County, at culvert 1.0 mi north of East Poultney.	1.13	1964-75	4-19-75	10.47	41
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	1964-75	4-19-75	11.79	128
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	1968-75	4-20-75	7.31	510
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	1963-75	4-19-75	10.65	49
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	1964-75	4-19-75	10.57	12
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	1964-75	4-19-75	11.30	23
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	1964-75	4-19-75	12.06	150
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	1964-75	4-19-75	11.02	60
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	1963-75	4-19-75	9.58	58
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	1963-75	4-19-75	12.87	78
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	1964-75	4-19-75	10.58	54
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	1964-75	4-19-75	9.81	25

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. Those that are measurements of base flow are designated by an asterisk (*).

Discharge measurements made at miscellaneous sites during water year 1975

Discharge measurements made at miscellaneous sites during water years 1970-1979						
Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis-charge (ft ³ /s)
Merrimack River basin						
Newfound River	Pemigewasset River	Lat 43°37'05", long 71°44'25", Grafton County, at outlet of Newfound Lake, near State Highway 3A, 2.3 mi north of Bristol, N.H.	96.4	-	7- 9-74	114
					7-11-74	81
					8-26-74	65
					5-20-75	67
					5-20-75	131
					5-20-75	184
		9-12-75	176			
Island Pond Outlet	Spicket River	Lat 42°51'25", long 71°12'56", Rockingham County, at outlet of Island Pond, near State Highway 111, 2.3 mi north of Salem, N.H.	17	-	9-16-75	10
Piscataqua River basin						
Cocheco River	Piscataqua River	Lat 43°16'26", long 70°58'27", Stafford County, at culvert on Pickering Rd., 1.5 mi south of Rochester, N.H.	-	-	6-27-75	27
					6-27-75	33
Isinglass River	Cocheco River	Lat 43°14'31", long 71°09'08", Stafford County, below dam at outlet of Bow Lake, at Bow Lake Village, N.H.	13	-	5-28-75	11
					6- 4-75	9
do	do	Lat 43°14'02", long 70°57'24", Stafford County, at bridge on Rochester Neck Rd., 4.3 mi northwest of Dover, N.H.	73	-	6-27-75	20

ANALYSES OF SURFACE-WATER SAMPLES COLLECTED AT MISCELLANEOUS SITES

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
MERRIMACK RIVER BASIN										
01096585 - BEAVER BROOK AT WEST WINDHAM, N.H. (LAT 42 48 23 LONG 071 21 12)										
JULY, 1975										
22...	0730	29	236	6.5	23.0	8.5	700	8100	360	.40
SEP.										
03...	0745	8.8	180	6.8	16.0	8.2	250	824	86	.31
01096590 - GOLDEN BROOK AT WINDHAM, N.H. (LAT 42 47 26 LONG 071 18 06)										
JULY, 1975										
22...	0930	.15	200	7.0	26.0	8.1	120	828	42	.01
SEP.										
03...	0815	.17	190	6.8	19.0	7.9	88	824	84	.01
01100502 - WASH POND OUTLET AT HAMPSTEAD, N.H. (LAT 42 53 02 LONG 071 11 24)										
JULY, 1975										
23...	1115	.07	104	6.9	26.0	4.0	24000	820	828	.01
SEP.										
03...	1045	.02	101	6.8	19.0	7.4	8150	812	48	.01
01100505 - SPICKET RIVER AT NORTH SALEM, N.H. (LAT 42 50 57 LONG 071 12 56)										
JULY, 1975										
22...	1240	3.9	88	7.8	28.0	8.2	200	860	490	.02
SEP.										
03...	1000	11	81	7.0	17.0	8.6	190	824	890	.01
01100507 - SPICKET RIVER NEAR SALEM, N.H. (LAT 42 49 01 LONG 071 12 13)										
JULY, 1975										
21...	1450	10	91	7.6	25.0	7.0	830	840	835	.02
SEP.										
04...	0900	7.8	81	6.8	18.0	8.6	852	84	88	.02
01100515 - CAPTAIN POND BROOK NEAR SALEM, N.H. (LAT 42 48 42 LONG 071 11 28)										
JULY, 1975										
23...	0940	.40	76	6.9	26.5	8.0	47	826	820	.01
SEP.										
03...	1130	.32	74	6.8	21.0	8.0	8100	85	38	.01
01100520 - SPICKET R ABOVE WIDOW HARRIS BRK AT SALEM, N.H. (LAT 42 48 08 LONG 071 11 46)										
JULY, 1975										
21...	1230	17	108	7.4	26.5	7.0	800	140	400	.71
SEP.										
03...	1405	12	101	5.4	18.0	8.2	180	68	230	.42
01100530 - HITTITYTITY BROOK NEAR SALEM, N.H. (LAT 42 48 18 LONG 071 13 07)										
JULY, 1975										
21...	1110	1.5	190	7.0	23.0	5.4	150	8340	1400	.07
SEP.										
04...	0815	1.6	245	6.8	14.0	7.9	230	20	160	.03

B NON-IDEAL COLONY COUNT.

ANALYSES OF SURFACE-WATER SAMPLES COLLECTED AT MISCELLANEOUS SITES

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)
MERRIMACK RIVER BASIN										
01096585 - BEAVER BROOK AT WEST WINDHAM, N.H. (LAT 42 48 23 LONG 071 21 12)										
JULY, 1975										
22...	.11	.49	1.0	.60	.06	.02	21	15	3.0	4.4
SEP.										
03...	.00	.40	.71	.40	.05	.03	19	5.3	9.4	5.1
01096590 - GOLDEN BROOK AT WINDAM, N.H. (LAT 42 47 26 LONG 071 18 06)										
JULY, 1975										
22...	.02	.34	.37	.36	.04	.01	19	2.7	2.8	.6
SEP.										
03...	.01	.47	.49	.48	.01	.01	23	5.6	8.1	1.2
01100502 - WASH POND OUTLET AT HAMPSTEAD, N.H. (LAT 42 53 02 LONG 071 11 24)										
JULY, 1975										
23...	.07	.34	.42	.41	.04	.01	14	2.6	3.6	1.2
SEP.										
03...	.02	.26	.29	.28	.01	.01	14	3.0	4.9	.7
01100505 - SPICKET RIVER AT NORTH SALEM, N.H. (LAT 42 50 57 LONG 071 12 56)										
JULY, 1975										
22...	.00	.38	.40	.38	.03	.01	16	.2	6.2	.6
SEP.										
03...	.01	.22	.24	.23	.01	.01	14	1.4	5.8	.6
01100507 - SPICKET RIVER NEAR SALEM, N.H. (LAT 42 49 01 LONG 071 12 13)										
JULY, 1975										
21...	.04	.26	.32	.30	.01	.01	14	.4	1.8	.8
SEP.										
04...	.05	.21	.28	.26	.01	.01	13	2.8	4.8	1.2
01100515 - CAPTAIN POND BROOK NEAR SALEM, N.H. (LAT 42 48 42 LONG 071 11 28)										
JULY, 1975										
23...	.01	.31	.33	.32	.03	.01	18	1.8	5.4	.8
SEP.										
03...	.03	.32	.36	.35	.03	.01	21	1.8	9.9	1.4
01100520 - SPICKET R ABOVE WIDOW HARRIS BRK AT SALEM, N.H. (LAT 42 48 08 LONG 071 11 46)										
JULY, 1975										
21...	.02	.37	1.1	.39	.03	.01	17	.8	5.8	1.3
SEP.										
03...	.04	.16	.62	.20	.01	.01	14	76	6.3	2.1
01100530 - HITTITYITY BROOK NEAR SALEM, N.H. (LAT 42 48 18 LONG 071 13 07)										
JULY, 1975										
21...	.10	.52	.69	.62	.04	.01	25	4.6	1.0	7.1
SEP.										
04...	.03	.29	.35	.32	.03	.01	52	3.0	8.7	6.5

ANALYSES OF SURFACE-WATER SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
MERRIMACK RIVER BASIN.--CONTINUED										
01096585 - BEAVER BROOK AT WEST WINDHAM, N.H. (LAT 42 48 23 LONG 071 21 12)										
JULY, 1975										
22...	480	30	12	2.1	26	3.1	29	0	24	11
SEP.										
03...	1800	30	12	1.0	19	3.0	21	0	17	13
01096590 - GOLDEN BROOK AT WINDAM, N.H. (LAT 42 47 26 LONG 071 18 06)										
JULY, 1975										
22...	270	40	10	1.5	22	2.1	17	0	14	9.0
SEP.										
03...	530	50	11	1.1	21	2.6	22	0	18	9.6
01100502 - WASH POND OUTLET AT HAMPSTEAD, N.H. (LAT 42 53 02 LONG 071 11 24)										
JULY, 1975										
23...	1000	60	7.6	1.3	9.6	1.2	13	0	11	4.5
SEP.										
03...	160	20	6.0	1.0	9.0	1.2	12	0	10	5.7
01100505 - SPICKET RIVER AT NORTH SALEM, N.H. (LAT 42 50 57 LONG 071 12 56)										
JULY, 1975										
22...	230	30	5.5	.7	6.7	.8	8	0	7	6.6
SEP.										
03...	160	60	4.5	.1	6.1	1.1	9	0	7	6.6
01100507 - SPICKET RIVER NEAR SALEM, N.H. (LAT 42 49 01 LONG 071 12 13)										
JULY, 1975										
21...	410	50	9.5	1.0	9.3	1.0	10	0	8	5.6
SEP.										
04...	580	100	5.0	.2	6.9	1.2	11	0	9	6.3
01100515 - CAPTAIN POND BROOK NEAR SALEM, N.H. (LAT 42 48 42 LONG 071 11 28)										
JULY, 1975										
23...	100	10	4.7	.9	6.1	.7	9	0	7	6.1
SEP.										
03...	110	20	4.0	.2	5.7	.9	7	0	6	7.7
01100520 - SPICKET R ABOVE WIDOW HARRIS BRK AT SALEM, N.H. (LAT 42 48 08 LONG 071 11 46)										
JULY, 1975										
21...	390	30	6.9	1.4	8.0	1.5	13	0	11	7.2
SEP.										
03...	400	30	6.0	.3	7.8	1.7	12	0	10	7.4
01100530 - HITTITY BROOK NEAR SALEM, N.H. (LAT 42 48 18 LONG 071 13 07)										
JULY, 1975										
21...	2100	1300	13	1.9	17	1.7	29	0	24	3.4
SEP.										
04...	750	260	--	--	--	--	12	0	10	16

ANALYSES OF SURFACE-WATER SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

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DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)
MERRIMACK RIVER BASIN.--CONTINUED										
01096585 - BEAVER BROOK AT WEST WINDHAM, N.H. (LAT 42 48 23 LONG 071 21 12)										
JULY, 1975										
22...	47	--	1	110	1	0	1	10	4	<.5
SEP.										
03...	33	.1	0	70	0	<10	0	0	2	<.5
01096590 - GOLDEN BROOK AT WINDAM, N.H. (LAT 42 47 26 LONG 071 18 06)										
JULY, 1975										
22...	43	--	1	10	0	10	0	10	6	<.5
SEP.										
03...	41	.0	0	0	0	<10	0	0	11	<.5
01100502 - WASH POND OUTLET AT HAMPSTEAD, N.H. (LAT 42 53 02 LONG 071 11 24)										
JULY, 1975										
23...	18	--	1	20	1	10	1	10	1	<.5
SEP.										
03...	16	.0	0	0	0	<10	0	0	7	<.5
01100505 - SPICKET RIVER AT NORTH SALEM, N.H. (LAT 42 50 57 LONG 071 12 56)										
JULY, 1975										
22...	11	--	1	0	1	20	1	0	1	<.5
SEP.										
03...	11	.0	0	0	0	0	0	0	4	<.5
01100507 - SPICKET RIVER NEAR SALEM, N.H. (LAT 42 49 01 LONG 071 12 13)										
JULY, 1975										
21...	15	--	1	30	1	10	1	0	3	<.5
SEP.										
04...	12	.1	0	10	0	<10	0	0	3	<.5
01100515 - CAPTAIN POND BROOK NEAR SALEM, N.H. (LAT 42 48 42 LONG 071 11 28)										
JULY, 1975										
23...	11	--	1	10	0	10	0	10	0	<.5
SEP.										
03...	9.2	.0	1	10	0	<10	0	0	5	<.5
01100520 - SPICKET R ABOVE WIDOW HARRIS BRK AT SALEM, N.H. (LAT 42 48 08 LONG 071 11 46)										
JULY, 1975										
21...	16	--	1	0	0	0	0	10	3	<.5
SEP.										
03...	14	.0	0	10	0	<10	0	0	2	<.5
01100530 - HITTITYITY BROOK NEAR SALEM, N.H. (LAT 42 48 18 LONG 071 13 07)										
JULY, 1975										
21...	39	--	2	10	2	<10	2	0	1	<.5
SEP.										
04...	55	.0	2	20	0	0	0	0	6	<.5

ANALYSES OF SURFACE-WATER SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
MERRIMACK RIVER BASIN.--CONTINUED										
01100535 - WIDOW HARRIS BROOK AT SALEM, N.H. (LAT 42 47 58 LONG 071 11 58)										
JULY, 1975										
21...	1150	2.3	142	7.0	23.5	5.3	400	410	7500	.15
SEP.										
03...	1330	1.7	142	5.6	17.0	7.2	400	860	280	.08
01100540 - SPICKET RIVER AT SALEM, N.H. (LAT 42 45 15 LONG 071 12 32)										
JULY, 1975										
21...	0950	31	107	7.2	24.0	6.3	890000	815000	1600	.48
SEP.										
04...	0740	24	118	7.2	16.0	7.6	8150	820	870	.50
01100545 - POLICY BROOK NEAR SALEM, N.H. (LAT 42 47 29 LONG 071 15 06)										
JULY, 1975										
22...	1110	.60	150	7.4	25.0	7.2	210	72	96	.01
SEP.										
03...	0930	.12	160	7.1	17.0	8.9	200	50	110	.01
01100684 - LITTLE RIVER AT WESTVILLE, N.H. (LAT 42 49 06 LONG 071 06 50)										
JULY, 1975										
23...	1600	11	175	6.9	24.0	7.8	815000	180	260	.23
SEP.										
03...	1315	9.2	190	5.3	17.0	8.1	81800	100	350	.26
01100825 - POWWOW RIVER NEAR KINGSTON, N.H. (LAT 42 54 58 LONG 071 04 54)										
JULY, 1975										
23...	1215	1.4	70	6.7	26.5	6.2	17000	818	816	.02
SEP.										
02...	1130	.55	86	6.7	16.0	9.3	8200	828	70	.02
01100827 - POWWOW R AT OUTLET OF GREAT POND, KINGSTON, N.H. (LAT 42 54 44 LONG 071 03 46)										
SEP., 1975										
02...	1200	3.6	75	6.3	19.5	8.6	80	88	84	.00
01100830 - COUNTRY POND OUTLET NEAR KINGSTON, N.H. (LAT 42 53 37 LONG 071 03 23)										
JULY, 1975										
23...	1300	2.1	86	7.2	29.5	7.8	2300	88	815	.01
SEP.										
02...	1400	2.8	80	6.7	21.0	8.3	830	88	810	.00
01100835 - POWWOW RIVER NEAR EAST KINGSTON, N.H. (LAT 42 54 29 LONG 071 01 01)										
JULY, 1975										
23...	1400	2.3	95	7.1	29.5	7.6	9400	824	8600	.04
SEP.										
02...	1350	2.6	73	6.7	20.0	8.8	8110	832	300	.04

H NON-IDEAL COLONY COUNT.

ANALYSES OF SURFACE-WATER SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

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DATE	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)
MERRIMACK RIVER BASIN.--CONTINUED										
01100535 - WIDOW HARRIS BROOK AT SALEM, N.H. (LAT 42 47 58 LONG 071 11 58)										
JULY, 1975										
21...	.04	.47	.66	.51	.04	.01	21	3.2	1.2	7.3
SEP.										
03...	.01	.26	.35	.27	.01	.01	19	72	9.5	6.7
01100540 - SPICKET RIVER AT SALEM, N.H. (LAT 42 45 15 LONG 071 12 32)										
JULY, 1975										
21...	.02	.29	.79	.31	.08	.02	25	1.4	1.2	1.8
SEP.										
04...	.01	.15	.66	.16	.01	.01	13	1.5	5.1	3.6
01100545 - POLICY BROOK NEAR SALEM, N.H. (LAT 42 47 29 LONG 071 15 06)										
JULY, 1975										
22...	.01	.18	.20	.19	.01	.01	11	.6	2.0	.4
SEP.										
03...	.01	.79	.81	.80	.01	.02	55	1.1	14	.7
01100684 - LITTLE RIVER AT WESTVILLE, N.H. (LAT 42 49 06 LONG 071 06 50)										
JULY, 1975										
23...	.02	.55	.80	.57	.17	.01	29	4.6	6.4	11
SEP.										
03...	.01	.32	.59	.33	.03	.02	24	--	12	10
01100825 - POWWOW RIVER NEAR KINGSTON, N.H. (LAT 42 54 58 LONG 071 04 54)										
JULY, 1975										
23...	.01	.53	.56	.54	.04	.01	29	2.6	5.4	2.0
SEP.										
02...	.00	.30	.32	.30	.01	.02	22	3.2	9.4	6.5
01100827 - POWWOW R AT OUTLET OF GREAT POND, KINGSTON, N.H. (LAT 42 54 44 LONG 071 03 46)										
SEP., 1975										
02...	.02	.24	.26	.26	.01	.01	16	8.8	6.0	2.0
01100830 - COUNTRY POND OUTLET NEAR KINGSTON, N.H. (LAT 42 53 37 LONG 071 03 23)										
JULY, 1975										
23...	.01	.40	.42	.41	.04	.01	24	.9	11	2.0
SEP.										
02...	.01	.31	.32	.32	.01	.01	21	3.5	9.6	2.1
01100835 - POWWOW RIVER NEAR EAST KINGSTON, N.H. (LAT 42 54 29 LONG 071 01 01)										
JULY, 1975										
23...	.01	.45	.50	.46	.03	.01	24	1.3	1.6	1.2
SEP.										
02...	.02	.34	.40	.36	.03	.01	20	2.2	8.8	.7

ANALYSES OF SURFACE-WATER SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

DATE	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
MERRIMACK RIVER BASIN.--CONTINUED										
01100535 - WIDOW HARRIS BROOK AT SALEM, N.H. (LAT 42 47 58 LONG 071 11 58)										
JULY, 1975										
21...	930	210	10	1.5	12	1.7	20	0	16	4.4
SEP.										
03...	410	30	9.0	.5	12	1.9	18	0	15	11
01100540 - SPICKET RIVER AT SALEM, N.H. (LAT 42 45 15 LONG 071 12 32)										
JULY, 1975										
21...	550	40	10	.9	7.9	1.4	14	0	11	5.9
SEP.										
04...	360	30	8.0	.8	9.2	2.0	15	0	12	10
01100545 - POLICY BROOK NEAR SALEM, N.H. (LAT 42 47 29 LONG 071 15 06)										
JULY, 1975										
22...	100	20	7.1	1.4	14	1.1	10	0	8	7.9
SEP.										
03...	720	200	7.5	.9	15	1.7	9	0	7	10
01100684 - LITTLE RIVER AT WESTVILLE, N.H. (LAT 42 49 06 LONG 071 06 50)										
JULY, 1975										
23...	1300	70	11	2.0	15	1.4	23	0	19	8.5
SEP.										
03...	650	50	12	2.0	18	1.6	19	0	16	18
01100825 - POWWOW RIVER NEAR KINGSTON, N.H. (LAT 42 54 58 LONG 071 04 54)										
JULY, 1975										
23...	750	50	7.0	.9	6.0	.7	8	0	7	4.6
SEP.										
02...	300	50	6.0	.7	6.5	1.0	10	0	8	11
01100827 - POWWOW R AT OUTLET OF GREAT POND, KINGSTON, N.H. (LAT 42 54 44 LONG 071 03 46)										
SEP., 1975										
02...	270	30	4.9	.1	5.9	1.1	11	0	9	6.7
01100830 - COUNTRY POND OUTLET NEAR KINGSTON, N.H. (LAT 42 53 37 LONG 071 03 23)										
JULY, 1975										
23...	310	30	7.1	1.3	8.2	.7	9	0	7	4.6
SEP.										
02...	270	30	4.0	.3	7.4	.9	11	0	9	5.6
01100835 - POWWOW RIVER NEAR EAST KINGSTON, N.H. (LAT 42 54 29 LONG 071 01 01)										
JULY, 1975										
23...	440	20	5.6	.8	7.6	.1	10	0	8	4.3
SEP.										
02...	170	10	4.0	.2	6.8	.1	7	0	6	5.0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

DATE	DIS- SOLVED CHLOR- IDE (CL) (MG/L)	DIS- SOLVED FLUOR- IDE (F) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)
MERRIMACK RIVER BASIN.--CONTINUED										
01100535 - WIDOW HARRIS BROOK AT SALEM, N.H. (LAT 42 47 58 LONG 071 11 58)										
JULY, 1975										
21... 24	--		1	20	1	<10	1	0	3	<.5
SEP.										
03... 22	.0		0	30	0	<10	0	0	5	<.5
01100540 - SPICKET RIVER AT SALEM, N.H. (LAT 42 45 15 LONG 071 12 32)										
JULY, 1975										
21... 15	--		1	20	1	20	1	0	7	<.5
SEP.										
04... 17	.0		0	10	0	<10	0	0	7	<.5
01100545 - POLICY BROOK NEAR SALEM, N.H. (LAT 42 47 29 LONG 071 15 06)										
JULY, 1975										
22... 31	--		1	20	1	10	1	0	0	<.5
SEP.										
03... 30	.0		1	10	0	<10	0	0	21	<.5
01100684 - LITTLE RIVER AT WESTVILLE, N.H. (LAT 42 49 06 LONG 071 06 50)										
JULY, 1975										
23... 28	--		1	40	1	10	1	10	2	<.5
SEP.										
03... 33	.1		1	20	0	<10	0	0	3	<.5
01100825 - POWWOW RIVER NEAR KINGSTON, N.H. (LAT 42 54 58 LONG 071 04 54)										
JULY, 1975										
23... 10	--		0	20	1	10	1	10	3	<.5
SEP.										
02... 14	.0		0	60	0	<10	0	0	1	<.5
01100827 - POWWOW R AT OUTLET OF GREAT POND, KINGSTON, N.H. (LAT 42 54 44 LONG 071 03 46)										
SEP., 1975										
02... 10	.0		0	0	0	<10	0	0	4	<.5
01100830 - COUNTRY POND OUTLET NEAR KINGSTON, N.H. (LAT 42 53 37 LONG 071 03 23)										
JULY, 1975										
23... 13	--		1	20	1	<10	1	0	2	<.5
SEP.										
02... 13	.1		0	40	0	<10	0	0	3	<.5
01100835 - POWWOW RIVER NEAR EAST KINGSTON, N.H. (LAT 42 54 29 LONG 071 01 01)										
JULY, 1975										
23... 14	--		0	20	1	10	1	10	2	<.5
SEP.										
02... 12	.0		1	0	0	<10	0	0	3	<.5

ANALYSES OF SURFACE-WATER SAMPLES COLLECTED AT MISCELLANEOUS SITES

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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ANALYSES OF SURFACE-WATER SAMPLES COLLECTED AT MISCELLANEOUS SITES

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PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

DATE	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	PCB IN BOTTOM MA- TERIAL (UG/KG)
MERRIMACK RIVER BASIN.--CONTINUED												
01100535 - WIDOW HARRIS BROOK AT SALEM, N.H. (LAT 42 47 58 LONG 071 11 58)												
JULY, 1975 21...	.0	36	.0	.0	12	.0	.0	.0	.0	.0	0	38
01100540 - SPICKET RIVER AT SALEM, N.H. (LAT 42 45 15 LONG 071 12 32)												
JULY, 1975 21...	.0	0	.0	1.2	2.1	.0	.0	.0	.0	.0	0	3
01100545 - POLICY BROOK NEAR SALEM, N.H. (LAT 42 47 29 LONG 071 15 06)												
JULY, 1975 22...	.0	0	9.9	5.9	2.9	.6	.0	.0	.0	.0	0	14
01100684 - LITTLE RIVER AT WESTVILLE, N.H. (LAT 42 49 06 LONG 071 06 50)												
JULY, 1975 23...	.0	0	.0	.0	1.9	.0	.0	.0	.0	.0	0	0
01100825 - POWWOW RIVER NEAR KINGSTON, N.H. (LAT 42 54 58 LONG 071 04 54)												
JULY, 1975 23...	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
01100830 - COUNTRY POND OUTLET NEAR KINGSTON, N.H. (LAT 42 53 37 LONG 071 03 23)												
JULY, 1975 23...	.0	0	.5	.0	.0	.0	.0	.0	.0	.0	0	0
01100835 - POWWOW RIVER NEAR EAST KINGSTON, N.H. (LAT 42 54 29 LONG 071 01 01)												
JULY, 1975 23...	.0	0	.0	.0	.0	.0	.0	.0	1.9	.0	0	18

ANALYSES OF SURFACE-WATER SAMPLES COLLECTED AT MISCELLANEOUS SITES

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PERIPHYTON

DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS(G/SQ M)		CHLOROPHYLL	CHLOROPHYLL	BIOMASS	SAMPLING METHOD
		DRY WEIGHT	ASH WEIGHT	A (MG/SQ M)	B (MG/SQ M)	PIGMENT RATIO	
MERRIMACK RIVER BASIN							
01096585 - BEAVER BROOK AT WEST WINDHAM, N.H. (LAT 42 48 23 LONG 071 21 12)							
JULY, 1975 22...	15	3.30	1.80	12.0	.700	120	POLYETHYLENE STRIP
01096590 - GOLDEN BROOK AT WINDHAM, N.H. (LAT 42 47 26 LONG 071 18 06)							
JULY, 1975 22...	15	.700	.500	.600	.100	380	"
01100502 - WASH POND OUTLET AT HAMPSTEAD, N.H. (LAT 42 53 02 LONG 071 11 24)							
JULY, 1975 23...	15	4.00	1.00	1.00	.200	3,100	"
01100505 - SPICKET RIVER AT NORTH SALEM, N.H. (LAT 42 50 57 LONG 071 12 56)							
JULY, 1975 22...	15	14.0	6.50	19.0	2.10	380	"
01100507 - SPICKET RIVER NEAR SALEM, N.H. (LAT 42 49 01 LONG 071 12 13)							
JULY, 1975 21...	15	7.80	4.80	8.20	1.40	370	"
01100520 - SPICKET RIVER ABOVE WIDOW HARRIS BROOK AT SALEM, N.H. (LAT 42 48 08 LONG 071 11 46)							
JULY, 1975 21...	15	2.80	.700	5.10	.700	410	"
01100530 - HITTITITY BROOK NEAR SALEM, N.H. (LAT 42 48 18 LONG 071 13 07)							
JULY, 1975 21...	15	2.50	.800	3.60	1.60	490	"
01100535 - WIDOW HARRIS BROOK AT SALEM, N.H. (LAT 42 47 58 LONG 071 11 58)							
JULY, 1975 21...	15	7.20	2.00	3.00	.400	1,800	"
01100540 - SPICKET RIVER AT SALEM, N.H. (LAT 42 45 15 LONG 071 12 32)							
JULY, 1975 21...	15	5.30	2.80	4.10	1.00	610	"
01100545 - POLICY BROOK NEAR SALEM, N.H. (LAT 42 47 29 LONG 071 15 06)							
JULY, 1975 22...	15	.000	.000	.000	.000	0.0	"
01100684 - LITTLE RIVER AT WESTVILLE, N.H. (LAT 42 49 06 LONG 071 06 50)							
JULY, 1975 23...	15	5.80	3.30	14.0	2.70	180	"
01100825 - POWWOW RIVER NEAR KINGSTON, N.H. (LAT 42 54 58 LONG 071 04 54)							
JULY, 1975 23...	15	2.40	.300	.700	.200	3,100	"
01100830 - COUNTRY POND OUTLET NEAR KINGSTON, N.H. (LAT 42 53 37 LONG 071 03 23)							
JULY, 1975 23...	15	.300	.100	3.90	.500	59	"
01100835 - POWWOW RIVER NEAR EAST KINGSTON, N.H. (LAT 42 54 29 LONG 071 01 01)							
JULY, 1975 23...	15	2.30	.400	3.40	.600	570	"

DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)
SACO RIVER BASIN											
01064300 ELLIS RIVER NEAR JACKSON, N.H.											
OCT. 02	1200	4.5	JAN. 09	1300	0.0	APR. 16	1400	0.0	JULY 15	1400	12.5
NOV. 04	1200	5.5	FEB. 25	1100	0.0	JUNE 02	1200	7.0	SEP. 04	1100	12.5
DEC. 04	1300	0.0									
01064400 LUCY BROOK NEAR NORTH CONWAY, N.H.											
OCT. 02	1630	4.5	JAN. 09	1445	0.0	APR. 16	1230	0.0	JULY 16	0900	12.0
NOV. 04	1400	4.5	FEB. 25	1100	1.0	JUNE 02	1330	7.0	SEP. 04	1245	12.0
DEC. 04	1400	0.0									
01065000 OSSIPPEE RIVER AT EFFINGHAM, N.H.											
SEP. 03	1030	10.0	DEC. 05	0930	2.0	APR. 21	1300	4.0	SEP. 09	1100	17.5
PISCATAQUA RIVER BASIN											
01072100 SALMON FALLS RIVER AT MILTON, N.H.											
NOV. 27	1300	3.5	MAR. 19	1400	2.0	JULY 01	1130	24.5	SEP. 29	1200	16.5
FEB. 20	1430	2.0	MAY 16	0945	17.0	AUG. 15	1200	26.0			
01072850 MOHAWK BROOK NEAR CENTER STRAFFORD, N.H.											
OCT. 22	1100	5.0	FEB. 14	1500	0.0	MAY 16	1200	16.5	JULY 01	1400	26.0
JAN. 03	1030	0.0	MAR. 19	1000	1.0						
01073000 OYSTER RIVER NEAR DURHAM, N.H.											
OCT. 22	1520	6.0	FEB. 18	1230	1.0	JUNE 18	1017	18.5	AUG. 12	1250	21.5
JAN. 03	1220	1.0	MAR. 19	1220	1.0						
01073500 LAMPREY RIVER NEAR NEWMARKET, N.H.											
OCT. 25	1400	4.5	FEB. 24	1400	1.0	JUNE 24	1000	24.0	AUG. 25	1200	20.0
NOV. 25	1400	4.5	MAR. 21	1500	1.0	JULY 22	1100	23.0	SEP. 22	1000	13.5
DEC. 23	1400	0.0	MAY 23	1200	18.5						
01073600 DUDLEY BROOK NEAR EXETER, N.H.											
OCT. 25	1230	5.5	DEC. 23	1145	0.0	MAR. 25	1200	2.0	JUNE 18	1245	22.0
NOV. 25	1130	4.5	FEB. 24	1200	1.0	MAY 08	1000	13.0	AUG. 13	1245	23.0
MERRIMACK RIVER BASIN											
01075000 PEMIGEWASSET RIVER AT WOODSTOCK, N.H.											
SEP. 19	1235	10.5	JAN. 03	1030	1.0	JUNE 12	1000	15.0	AUG. 06	1130	20.0
OCT. 18	1000	4.5	FEB. 13	1330	1.0	JULY 17	1000	13.0	OCT. 28	1030	8.0
NOV. 29	1100	0.5	APR. 30	1000	5.0						
01075800 STEVENS BROOK NEAR WENTWORTH, N.H.											
SEP. 06	0930	11.5	DEC. 31	1000	1.0	APR. 28	1000	2.5	AUG. 11	1030	17.0
OCT. 16	1030	7.0	FEB. 10	1020	1.0	JUNE 06	0940	10.0	SEP. 18	1000	10.5
NOV. 26	0940	1.5	MAR. 19	0930	2.0	JULY 01	1030	14.0	OCT. 30	0945	2.0
01076000 BAKER RIVER NEAR RUMNEY, N.H.											
OCT. 16	1230	9.0	FEB. 10	1200	1.0	JUNE 06	1130	13.0	AUG. 11	1100	20.0
NOV. 26	1200	1.5	MAR. 19	1100	3.0	JULY 16	1000	17.0	SEP. 18	1130	13.5
DEC. 31	1200	1.0	APR. 28	1230	3.0						

DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)
MERRIMACK RIVER BASIN--CONTINUED											
01076500 PEMIGEWASSET RIVER AT PLYMOUTH, N.H.											
OCT. 25	1030	4.5	JAN. 27	1200	1.0	APR. 24	1200	4.5	JULY 23	1230	19.0
NOV. 25	1130	3.5	FEB. 24	1130	1.0	MAY 23	1100	17.0	AUG. 25	1100	17.0
DEC. 23	1030	2.0	MAR. 25	1130	3.0	JUNE 23	1330	21.0	SEP. 22	1135	15.0
01077000 SQUAM RIVER AT ASHLAND, N.H.											
SEP. 19	1100	18.0	FEB. 13	1500	4.0	JUNE 12	1200	19.0	OCT. 29	1300	12.0
NOV. 29	1330	3.5	APR. 29	1330	5.0	AUG. 29	1100	26.0			
01078000 SMITH RIVER NEAR BRISTOL, N.H.											
SEP. 16	0945	13.0	JAN. 02	1000	1.0	APR. 29	1000	3.0	AUG. 05	1100	21.0
OCT. 17	0930	7.0	JULY 13	1100	0.0	JUNE 09	1250	15.0	SEP. 15	1030	09.0
NOV. 27	0955	3.5	MAR. 19	1300	3.0	JULY 16	1330	18.0	OCT. 29	1400	9.0
01081000 WINNIPESAUKEE RIVER AT TILTON, N.H.											
OCT. 01	0900	14.0	DEC. 19	1000	2.0	JUNE 02	0930	20.0	SEP. 29	1100	17.0
NOV. 11	1200	10.5	JAN. 31	1200	3.0	JULY 08	0900	25.0			
01081500 MERRIMACK RIVER FRANKLIN JUNCTION, N.H.											
OCT. 01	1100	14.5	APR. 21	1000	4.0	JULY 08	1200	25.0	AUG. 19	1130	26.0
DEC. 19	1230	2.0	JUNE 02	1300	20.0						
01082000 CONTOOCOOK RIVER AT PETERBOROUGH, N.H.											
SEP. 05	0845	12.5	FEB. 07	0930	1.0	JUNE 03	1000	17.0	AUG. 13	0930	21.0
OCT. 15	0930	10.5	MAR. 17	0930	3.0	JULY 11	1000	23.0	NOV. 07	1000	8.0
DEC. 30	0930	2.0	APR. 22	0930	5.0						
01083000 NUBANUSIT BROOK NEAR PETERBOROUGH, N.H.											
SEP. 05	1100	15.0	DEC. 30	1100	3.0	APR. 22	1130	5.0	AUG. 13	1130	22.0
OCT. 15	1100	12.0	FEB. 07	1100	1.0	JUNE 03	1200	17.0	SEP. 26	1130	14.0
DEC. 06	0950	1.0	MAR. 17	1130	3.0	JULY 11	1100	23.0			
01085000 CONTOOCOOK RIVER NEAR HENNIKER, N.H.											
SEP. 17	1030	14.5	DEC. 04	1150	2.0	JUNE 17	1230	19.5	NOV. 19	1100	5.0
OCT. 22	1035	4.5	MAR. 28	1230	4.0	AUG. 26	1000	17.0			
01085500 CONTOOCOOK RIVER BELOW HOPKINTON DAM, AT WEST HOPKINTON, N.H.											
OCT. 01	1000	14.0	FEB. 07	1300	3.0	APR. 28	1500	6.0	AUG. 04	1400	24.0
NOV. 01	1000	5.0	MAR. 17	1400	3.0	JULY 08	1000	24.0	SEP. 10	1300	16.5
JAN. 02	1500	1.0	APR. 05	1200	2.0						
01085800 WEST BRANCH WARNER RIVER NEAR BRADFORD, N.H.											
OCT. 22	0900	4.0	JAN. 10	0900	1.0	MAY 05	0900	7.0	JULY 15	0900	17.0
DEC. 04	0900	0.5	FEB. 18	0900	1.0	JUNE 16	1000	16.0	AUG. 26	0830	15.0
01086000 WARNER RIVER AT DAVISVILLE, N.H.											
NOV. 26	1330	3.5	APR. 05	1030	1.0	JUNE 09	1300	10.0	SEP. 10	1130	14.0
MAR. 17	1200	1.0									
01087000 BLACKWATER RIVER NEAR WEBSTER, N.H.											
OCT. 21	1100	2.0	JAN. 02	1030	1.0	APR. 28	1200	5.0	SEP. 10	0930	13.0
NOV. 26	1100	4.5	MAR. 17	1000	1.0	JULY 24	1000	20.0	OCT. 28	1100	7.0

DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)
CONNECTICUT RIVER BASIN--CONTINUED											
01130000 UPPER AMMONOOSUC RIVER NEAR GROVETON, N.H.											
OCT. 18	1100	4.5	JAN. 13	1530	0.5	MAY 14	0900	5.5	AUG. 06	1130	19.0
NOV. 13	1000	5.0	FEB. 26	1130	0.0	JUNE 23	1400	18.0	SEP. 17	1200	9.0
DEC. 11	1100	0.5	APR. 07	1230	0.0						
01131500 CONNECTICUT RIVER NEAR DALTON, N.H.											
NOV. 06	1200	6.0	JAN. 15	1030	0.0	APR. 09	1200	2.0	SEP. 23	1100	16.0
DEC. 11	1430	0.5	FEB. 26	1430	0.5	MAY 21	1130	14.0			
01133000 EAST BRANCH PASSUMPSIC RIVER NEAR EAST HAVEN, VT.											
NOV. 06	1530	7.0	MAY 13	1100	10.0	AUG. 05	1500	22.0	SEP. 15	1230	9.5
JAN. 16	1200	0.0	JUNE 24	1400	22.0						
01134500 MOOSE RIVER AT VICTORY, VT.											
NOV. 13	1200	5.5	MAR. 05	1400	0.5	JUNE 03	1100	18.0	JULY 23	1600	21.0
JAN. 15	1330	0.0									
01135000 MOOSE RIVER AT ST. JOHNSBURY, VT.											
MAY 12	1700	15.0	JULY 30	1230	24.5	DEC. 12	1230	0.5	FEB. 27	1230	0.5
JUNE 24	1800	27.0	NOV. 13	1630	5.0	JAN. 15	1630	0.0			
01135500 PASSUMPSIC RIVER AT PASSUMPSIC, VT.											
OCT. 25	1000	7.0	JAN. 23	1430	0.0	MAR. 20	1430	0.0	JUNE 03	1500	15.0
NOV. 25	1430	2.5									
01137500 AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, N.H.											
NOV. 06	1330	5.0	JAN. 13	1230	0.5	APR. 09	1330	2.0	JULY 02	1330	22.0
NOV. 07	1630	7.0	JAN. 17	1000	0.0	MAY 12	1400	12.0	AUG. 12	1300	21.0
DEC. 19	1500	0.5	FEB. 28	1300	1.5						
01138000 AMMONOOSUC RIVER NEAR BATH, N.H.											
DEC. 19	1200	0.5	JUNE 04	1000	14.5	JULY 23	1200	23.0			
01138500 CONNECTICUT RIVER AT WELLS RIVER, VT.											
JAN. 16	1600	1.0	FEB. 28	1000	1.0						
01139000 WELLS RIVER AT WELLS RIVER, VT.											
OCT. 01	1400	10.0	MAR. 06	1400	0.5	JULY 02	1430	21.5	SEP. 23	1100	14.0
DEC. 19	1000	0.5	MAY 20	1700	19.0						
01139800 EAST ORANGE BRANCH AT EAST ORANGE, VT.											
OCT. 01	1600	8.5	MAY 12	1530	13.0	JULY 16	1200	15.5	SEP. 11	1400	16.0
MAR. 31	1800	1.5									
01141500 OMPOMPANOSUC RIVER AT UNION VILLAGE, VT.											
OCT. 04	1200	10.5	DEC. 16	1630	1.5	MAR. 31	1200	1.5	JULY 16	1530	22.5
NOV. 14	1700	6.5	FEB. 10	1400	0.0	MAY 06	0800	7.0	SEP. 11	1600	16.0
01141800 MINK BROOK NEAR ETNA, N.H.											
OCT. 04	1330	9.5	DEC. 19	1600	0.5	MAY 05	1500	9.5	JUNE 19	1400	18.0
NOV. 15	0930	5.5	MAR. 31	1100	1.5						

TEMPER- ATURE (DEG C)			TEMPER- ATURE (DEG C)			TEMPER- ATURE (DEG C)			TEMPER- ATURE (DEG C)		
DATE	TIME		DATE	TIME		DATE	TIME		DATE	TIME	
CONNECTICUT RIVER BASIN--CONTINUED											
01142500 AYERS BROOK AT RANDOLPH, VT.											
OCT. 03	1630	8.0	MAR. 20	1000	0.0	MAY 06	1100	7.0	SEP. 11	0900	16.5
NOV. 14	1300	6.0	MAR. 31	1400	1.5	AUG. 21	1630	19.0	SEP. 22	1600	15.0
DEC. 19	1400	1.0									
01144000 WHITE RIVER AT WEST HARTFORD, VT.											
NOV. 11	1600	6.5	MAR. 24	1100	2.5	JULY 14	1800	22.5	AUG. 22	1000	18.0
FEB. 27	1800	1.5	MAY 05	1200	8.0	JULY 18	1100	23.0			
01144500 CONNECTICUT RIVER AT WHITE RIVER JUNCTION, VT.											
JUNE 19	1300	17.0									
01145000 MASCOMA RIVER AT WEST CANAAN, N.H.											
DEC. 03	0900	1.0	APR. 22	1200	3.0	JUNE 09	1400	13.0	JULY 28	1400	24.0
FEB. 14	1200	1.0									
01150500 MASCOMA RIVER AT MASCOMA, N.H.											
DEC. 03	1200	2.0	MAR. 24	1000	5.0	APR. 24	1000	3.0	JULY 29	0800	22.5
JAN. 06	1200	3.0	APR. 22	1500	3.0	JUNE 09	1600	15.0			
01151500 OTTAUQUECHEE RIVER AT NORTH HARTLAND, VT.											
OCT. 04	0930	9.5	DEC. 16	1400	1.0	MAY 12	1230	14.0	JUNE 19	1100	18.0
NOV. 11	1500	6.5									
01152500 SUGAR RIVER AT WEST CLAREMONT, N.H.											
NOV. 18	1630	4.5	MAR. 11	1130	1.0	MAY 29	1200	17.0	JULY 15	1130	20.0
FEB. 13	1200	0.5	APR. 16	1230	4.0						
01153000 BLACK RIVER AT NORTH SPRINGFIELD, VT.											
NOV. 18	1230	3.5	FEB. 13	1530	1.0	MAY 29	1400	21.0	JULY 08	1400	26.5
JAN. 15	1330	0.5	MAR. 11	1430	0.5						
01153500 WILLIAMS RIVER AT BROCKWAYS MILLS, VT.											
NOV. 15	1530	4.5	MAR. 11	1700	1.0	JUNE 04	1500	13.5	AUG. 19	1330	19.5
JAN. 10	1300	0.5	APR. 22	1230	3.0	JULY 10	1700	23.0	SEP. 30	1230	11.5
FEB. 14	1200	0.5	MAY 29	1600	21.0	JULY 15	1330	19.5			
01154000 SAXTONS RIVER AT SAXTONS RIVER, VT.											
NOV. 14	1330	4.5	MAR. 13	1300	2.0	JUNE 02	1200	17.0	JULY 15	1630	19.0
JAN. 10	1530	1.0	APR. 17	1530	7.5	JUNE 04	1400	14.0	AUG. 19	1130	18.0
FEB. 18	1600	0.5	APR. 18	1430	4.5	JULY 08	1600	28.0			
01154500 CONNECTICUT RIVER AT NORTH WALPOLE, N.H.											
OCT. 17	1600	9.0	FEB. 19	1300	0.5	APR. 15	1130	5.0	AUG. 27	1200	22.0
01155000 COLD RIVER AT DREWSVILLE, N.H.											
NOV. 14	1130	4.5	MAR. 14	1130	0.0	JUNE 02	1330	18.0	AUG. 19	0900	16.5
JAN. 14	1630	0.5	APR. 15	1430	4.5	JULY 08	1030	20.5	SEP. 30	1035	12.0
FEB. 18	1730	0.5	APR. 22	1000	2.0						
01155500 WEST RIVER AT JAMAICA, VT.											
OCT. 29	1430	4.5	MAY 28	1430	21.5	JULY 17	1400	23.0	AUG. 22	1200	20.0
APR. 14	1500	4.5									

DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)
CONNECTICUT RIVER BASIN--CONTINUED											
01156000 WEST RIVER AT NEWFANE, VT.											
NOV. 13	1200	5.5	MAR. 12	1230	0.5	JULY 11	1000	23.0	AUG. 21	1700	20.5
JAN. 22	1500	0.0	MAY 28	1730	22.0						
01157000 ASHUELOT RIVER NEAR GILSUM, N.H.											
OCT. 17	1230	9.0	APR. 21	1900	4.5	JULY 07	1400	23.5	AUG. 28	0930	16.0
JAN. 09	1230	0.5	MAY 27	1200	17.0						
01158000 ASHUELOT RIVER BELOW SURRY MOUNTAIN DAM, NEAR KEENE, N.H.											
OCT. 03	1300	11.0	MAR. 07	1300	1.0	MAY 27	1600	20.5	JULY 16	1230	20.5
JAN. 09	1530	1.0	APR. 22	1530	5.0	JUNE 03	1100	20.5	AUG. 18	1430	23.0
FEB. 11	1400	2.0									
01158600 OTTER BROOK BELOW OTTER BROOK DAM, NEAR KEENE, N.H.											
NOV. 22	1500	3.5	FEB. 11	1630	0.5	APR. 21	1330	4.0	JULY 14	1300	21.0
JAN. 14	1400	0.0	MAR. 10	1330	1.0	JUNE 03	1300	20.5			
01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, N.H.											
OCT. 07	1200	10.0	APR. 22	1700	7.0	JULY 07	1100	21.0	AUG. 28	1200	18.5
MAR. 07	1600	1.5	MAY 30	1030	16.5						
01161000 ASHUELOT RIVER AT HINSDALE, N.H.											
JAN. 08	1600	1.0	MAR. 10	1630	1.5	JUNE 03	1700	19.5	AUG. 21	1430	21.0
FEB. 19	1630	1.0	MAR. 12	1500	1.5	JULY 11	1230	24.5			
HUDSON RIVER BASIN											
01329000 BATTEN KILL AT ARLINGTON, VT.											
FEB. 04	1200	0.0	APR. 22	1630	5.0	JUNE 19	1400	16.5	AUG. 21	1430	26.0
MAR. 24	1230	1.0	MAY 21	1200	16.5	JULY 21	1330	21.5	SEP. 22	1430	14.0
01334000 WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT.											
DEC. 11	0930	1.0	MAY 23	1030	16.0	JULY 31	1200	25.0	SEP. 19	1230	14.0
FEB. 04	1100	0.0	JUNE 19	1230	14.5						
ST. LAWRENCE RIVER BASIN											
04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT.											
OCT. 10	1700	9.5	NOV. 14	1100	6.0	DEC. 19	1000	1.5	AUG. 19	1130	18.0
04281500 EAST CREEK AT RUTLAND, VT.											
OCT. 10	1430	8.0	NOV. 13	1630	6.0	APR. 15	1030	11.0	JULY 29	1600	24.0
04282000 OTTER CREEK AT CENTER RUTLAND, VT.											
OCT. 11	1030	8.0	MAY 15	1300	11.0	JUNE 15	0830	17.0	AUG. 19	1700	16.0
04282500 OTTER CREEK AT MIDDLEBURY, VT.											
OCT. 03	1400	10.5	MAY 14	1400	11.5	AUG. 20	1430	18.0			

DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)
ST. LAWRENCE RIVER BASIN--CONTINUED											
04284000 JAIL BRANCH AT EAST BARRE, VT.											
OCT. 01	1730	10.0	DEC. 17	1230	1.0	MAY 12	1100	7.5	SEP. 11	1330	16.0
NOV. 12	1130	5.0	APR. 01	0800	1.5						
04285500 NORTH BRANCH WINOOSKI RIVER AT WRIGHTSVILLE, VT.											
OCT. 02	1130	10.5	DEC. 12	1500	5.5	APR. 01	1000	1.5	MAY 12	1830	12.0
04286000 WINOOSKI RIVER AT MONTPELIER, VT.											
NOV. 12	1630	6.5	MAR. 25	1230	3.0	SEP. 11	1200	16.0	SEP. 25	1030	15.0
DEC. 17	1400	1.0	MAY 13	0900	12.5						
04287000 DOG RIVER AT NORTHFIELD FALLS, VT.											
OCT. 02	0830	9.0	DEC. 17	1600	1.0	MAR. 31	1600	1.5	MAY 06	1400	7.5
NOV. 12	1300	5.5	FEB. 20	1200	0.0						
04288000 MAD RIVER NEAR MORETOWN, VT.											
OCT. 02	1500	9.5	DEC. 18	1000	1.0	APR. 01	1100	1.5	MAY 07	1600	7.5
04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT.											
OCT. 15	1800	11.0									
04292000 LAMOILLE RIVER AT JOHNSON, VT.											
OCT. 17	1500	7.0	DEC. 18	1500	0.5	APR. 01	1630	1.5	MAY 13	1530	11.5
NOV. 11	1200	7.5									
04292500 LAMOILLE RIVER AT EAST GEORGIA, VT.											
OCT. 16	0900	9.0	DEC. 17	0800	0.5	MAY 13	1600	2.0	AUG. 21	1300	18.0
NOV. 12	0800	5.5									
04293000 MISSISSQUOI RIVER NEAR NORTH TROY, VT.											
NOV. 12	1400	5.0	JAN. 21	1430	0.0	JUNE 02	1500	18.0	AUG. 15	1100	22.0
DEC. 17	1330	0.5	MAR. 04	1500	0.0						
04293500 MISSISSQUOI RIVER NEAR RICHFORD, VT.											
OCT. 16	1500	9.5	MAR. 04	1200	0.0	MAY 27	1730	18.5	JULY 24	1230	23.5
NOV. 12	1130	5.0									
04296000 BLACK RIVER AT COVENTRY, VT.											
OCT. 17	1030	7.0	DEC. 18	1200	0.5	MAR. 05	1000	0.0	AUG. 05	1230	23.5
NOV. 07	1230	7.0	JAN. 22	1030	0.0	JUNE 02	1730	20.5	SEP. 22	1800	16.0
04296500 CLYDE RIVER AT NEWPORT, VT.											
NOV. 07	1000	7.0	JUNE 10	1400	18.0	AUG. 08	0800	22.5			

HILLSBORO COUNTY

424705071284801. Local number Nashua 101. Pennichuck Water Works. At east side of Manchester Street, about 600 ft (180 m) north of intersection of Henri A. Burque Highway and Manchester Street. Dug water-table well in sand and gravel of Pleistocene age, diam 36 in (91.4 cm), depth 19 ft (5.8 m), lined with stone. Lsd about 170 ft (52 m) above msl. MP southeast edge of northwest slab of granite, 0.50 ft (0.15 m) above lsd. Highest water level 3.83 ft (1.17 m) below lsd, Apr. 23, 1969; lowest dry, at times in 1956, 1963-1966. Records available: 1955-56, 1958. April, 1976, well destroyed.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	9.68	OCT. 29, 1973	15.17	JUNE 26, 1974	11.05	FEB. 25, 1975	11.31
FEB. 26	10.92	NOV. 26	12.84	JULY 29	12.96	MAR. 27	8.80
MAR. 27	8.17	DEC. 26	7.94	AUG. 26	13.90	APR. 28	10.10
APR. 26	9.70	JAN. 28, 1974	6.70	SEP. 25	9.83	MAY 28	11.81
MAY 29	8.88	FEB. 26	7.85	OCT. 29	11.35	JUNE 25	11.35
JUNE 26	11.49	MAR. 27	7.74	NOV. 25	10.49	JULY 29	11.75
JULY 26	10.73	APR. 25	9.47	DEC. 23	9.52	AUG. 27	12.32
AUG. 27	12.33	MAY 28	9.84	JAN. 27, 1975	10.67	SEP. 26	10.25
SEP. 27	12.77						

MERRIMACK COUNTY

431526071345501. Local number Concord 1. U.S. Geol. Survey. At south side of Bog Road, about 750 ft (230 m) west of intersection of U.S. Routes 3 and 4 and Bog Road. Driven observation water-table well in stratified sand, diam 3/4 in (1.9 cm), depth 11 ft (3.4 m), 2 ft (0.6 m), well point 9-11 ft (2.7-3.4 m). Lsd about 345 ft (105 m) above msl. MP top of 3/4-in (1.9 cm) steel pipe, 2.80 ft (0.85 m) above lsd. Highest water level 0.09 ft (0.03 m) below lsd, Apr. 4, 1960; lowest 7.32 ft (2.23 m) below lsd, Nov. 1, 1965. Records available: 1955-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	1.47	OCT. 29, 1973	4.67	JUNE 26, 1974	2.70	FEB. 25, 1975	3.05
FEB. 27	2.03	NOV. 26	4.42	JULY 29	4.24	MAR. 27	1.37
MAR. 27	.95	DEC. 26	2.45	AUG. 26	5.24	APR. 28	1.72
APR. 26	2.10	JAN. 28, 1974	.96	SEP. 25	4.92	MAY 28	2.94
MAY 29	1.00	FEB. 25	1.73	OCT. 29	4.95	JUNE 25	3.25
JUNE 26	2.70	MAR. 26	.60	NOV. 26	4.07	JULY 29	4.19
JULY 27	3.18	APR. 24	1.40	DEC. 24	3.54	AUG. 27	5.03
AUG. 27	3.97	MAY 28	1.71	JAN. 27, 1975	3.30	SEP. 26	4.65
SEP. 27	4.07						

432343071570901. Local number New London 1. W.S. Mariner. At north side of Golf Course Road about 500 ft (150 m) east of intersection of N.H. Route 114 and Golf Course Road. Dug water-table well in sandy glacial till, diam 36 in (91.4 cm), depth 21 ft (6.4 m), lined with fieldstone. Lsd about 1,020 ft (310 m) above msl. MP cross chiseled on east side of rock casing, at lsd. Since Nov. 12, 1973, MP top of 2-inch casing 4.00 ft (1.22 m) above chiseled cross. Highest water level 0.80 ft (0.24 m) below lsd, Apr. 2, 1963; lowest 16.90 ft (5.15 m) below lsd, Dec. 28, 1964. Records available: 1947-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 30, 1973	5.35	OCT. 23, 1973	13.41	JUNE 24, 1974	8.47	FEB. 26, 1975	9.33
FEB. 26	7.60	NOV. 24	13.30	JULY 22	10.46	MAR. 23	3.24
MAR. 22	2.25	DEC. 28	4.67	AUG. 24	12.65	APR. 23	2.73
APR. 21	4.20	JAN. 22, 1974	7.15	SEP. 26	11.72	MAY 24	7.69
MAY 22	3.86	FEB. 21	7.12	OCT. 23	13.01	JUNE 26	9.38
JUNE 21	7.89	MAR. 23	6.24	NOV. 24	13.68	JULY 29	11.06
JULY 22	7.98	APR. 22	4.16	DEC. 23	9.59	AUG. 26	12.37
AUG. 20	10.28	MAY 22	5.46	JAN. 22, 1975	9.84	SEP. 23	12.62
SEP. 25	12.52						

STRAFFORD COUNTY

430721071005001. Local number Lee 1. Mildred Carlson. Off southwest side of Bennett Road about 200 ft (60 m) from the west corner of the Lee Town Green. Dug water-table well in sand and gravel of Pleistocene age, diam 42 in (107 cm), depth 33 ft (10.1 m), lined with stone. Lsd about 190 ft (58 m) above msl. MP top of stone cover, at lsd. Highest water level 29.34 ft (8.94 m) below lsd, Jan. 31, 1958; lowest 32.35 ft (9.86 m) below lsd, Nov. 1, 27, 1965. Records available: 1953-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 22, 1973	30.99	SEP. 25, 1973	31.44	MAY 23, 1974	30.70	FEB. 24, 1975	31.12
FEB. 22	30.78	OCT. 24	31.55	JULY 26	31.36	MAR. 24	30.57
MAR. 22	30.04	NOV. 26	31.41	AUG. 25	31.62	APR. 24	30.78
APR. 23	30.23	DEC. 23	30.44	SEP. 26	31.79	MAY 23	31.02
MAY 26	29.46	JAN. 25, 1974	31.05	OCT. 26	31.48	JUNE 25	30.95
JUNE 23	30.71	FEB. 23	30.64	NOV. 25	31.56	JULY 24	31.21
JULY 24	30.98	MAR. 23	30.82	DEC. 26	31.00	AUG. 25	31.50
AUG. 28	31.25	APR. 24	30.43	JAN. 24, 1975	31.04	SEP. 24	31.64

BENNINGTON COUNTY

424810073160401. Local number Pownal 1. Robert Rudd, Sr. At North Pownal. Dug unused water-table well in sand and gravel, diam 24 in (61 cm), depth 18 ft (5.5 m), cased with stone. Lsd about 515 ft (157 m) above msl. MP top of 3/4-in (1.9 cm) diam hole drilled in center of 3/8-in (9.7 cm) thick steel cover, at lsd. Highest water level 10.88 ft (3.32 m) below lsd, Apr. 9, 1970; lowest 16.59 ft (5.06 m) below lsd, Oct. 19, 1964. Records available: 1964-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 25, 1973	12.91	OCT. 27, 1973	15.85	JUNE 22, 1974	13.50	FEB. 22, 1975	13.44
FEB. 25	13.20	NOV. 24	15.08	JULY 29	14.00	MAR. 22	12.83
MAR. 23	12.02	DEC. 22	13.28	AUG. 24	14.21	APR. 26	12.42
APR. 22	13.07	JAN. 25, 1974	12.67	SEP. 21	13.67	MAY 23	13.56
MAY 23	13.38	FEB. 23	12.62	OCT. 24	13.92	JUNE 26	13.82
JUNE 24	13.70	MAR. 23	12.11	NOV. 27	13.51	JULY 26	13.61
JULY 29	13.70	APR. 26	12.58	JAN. 11, 1975	13.47	AUG. 28	13.72
AUG. 24	14.16	MAY 24	12.94	JAN. 26	12.99	SEP. 23	13.60
SEP. 26	15.08						

CHITTENDEN COUNTY

443646073124901. Local number Milton 3. U.S. Geol. Survey. At Sandbar Waterfowl Development Area, near Milton. Driven observation water-table well in glacial sand and gravel of Pleistocene age, diam 1-1/4 in (3.2 cm), depth 40 ft (12.2 m), well point 38-40 ft (11.6-12.2 m). Lsd about 160 ft (49 m) above msl. MP top of casing, 4.00 ft (1.22 m) above lsd. Highest water level 21.97 ft (6.70 m) below lsd, May 29, 1974; lowest 37.82 ft (11.53 m) below lsd, Feb. 26, 1965. Records available: 1956-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	33.16	OCT. 26, 1973	27.62	JUNE 24, 1974	22.05	FEB. 24, 1975	33.20
FEB. 26	31.23	NOV. 27	29.13	JULY 26	23.65	MAR. 26	33.35
MAR. 26	28.58	DEC. 20	29.79	AUG. 26	25.45	APR. 28	28.71
APR. 26	25.45	JAN. 28, 1974	26.66	SEP. 26	27.38	MAY 27	28.75
MAY 29	24.65	FEB. 25	26.37	OCT. 29	29.23	JUNE 27	29.80
JUNE 26	22.62	MAR. 25	27.05	NOV. 25	30.61	JULY 28	30.89
JULY 27	22.50	APR. 25	25.02	DEC. 26	31.95	AUG. 26	32.01
AUG. 24	24.09	MAY 29	21.97	JAN. 28, 1975	32.86	SEP. 23	33.17
SEP. 24	25.94						

ESSEX COUNTY

444731071514701. Local number Brighton 1. U.S. Geol. Survey. Island Pond. At Brighton State Park Beach, south of the road and just west of the parking lot. Augered observation water-table well in medium and coarse sand, diam 1 1/4 in (3.2 cm), depth 35 ft (10.7 m), well point 33-35 ft (10.1-10.7 m). Lsd about 1,180 ft (360 m) above msl. MP top of casing, 4.00 ft (1.22 m) above lsd. Highest water level 1.940 ft (0.59 m) below lsd, Apr. 25, 1974; lowest 4.94 ft (1.51 m) below lsd, July 27, 1975. Records available: 1966-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	3.39	SEP. 24, 1973	3.84	JUNE 24, 1974	3.80	FEB. 23, 1975	4.37
FEB. 26	3.91	OCT. 26	3.96	JULY 26	4.07	MAR. 24	3.98
MAR. 26	3.03	NOV. 27	3.55	AUG. 26	4.50	APR. 28	2.96
APR. 26	2.86	JAN. 28, 1974	3.59	SEP. 22	4.37	MAY 26	3.48
MAY 29	3.14	FEB. 25	3.63	OCT. 26	4.36	JUNE 23	3.93
JUNE 26	2.87	MAR. 25	3.68	NOV. 22	3.50	JULY 27	4.94
JULY 27	3.85	APR. 25	1.94	DEC. 20	3.20	AUG. 25	3.53
AUG. 24	4.27	MAY 29	2.69	JAN. 27, 1975	4.24	SEP. 23	4.19

FRANKLIN COUNTY

445603072422901. Local number Berkshire 1. U.S. Geol. Survey. On Route 118 right-of-way, southeast end of bridge over Missisquoi River, East Berkshire. Augered observation water-table well in fine sand and gravel, diam 1 1/4 in (3.2 cm), depth 51 ft (15.5 m), well point 49-51 ft (14.9-15.5 m). Lsd about 425 ft (129 m) above msl. MP top of casing, 4.00 ft (1.22 m) above lsd. Highest water level 10.15 ft (3.09 m) below lsd, Apr. 25, 1974; lowest 16.43 ft (5.01 m) below lsd, Aug. 26, 1975. Records available: 1966-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	11.06	OCT. 26, 1973	15.06	JUNE 24, 1974	14.63	FEB. 24, 1975	14.18
FEB. 26	13.64	NOV. 27	14.06	JULY 26	14.68	MAR. 26	11.28
MAR. 26	12.73	DEC. 20	12.61	AUG. 26	15.49	APR. 28	11.41
APR. 26	13.22	JAN. 28, 1974	12.22	SEP. 26	14.94	MAY 27	14.70
MAY 29	13.11	FEB. 25	12.94	OCT. 29	15.35	JUNE 27	15.64
JUNE 26	13.61	MAR. 25	13.63	NOV. 25	12.80	JULY 28	15.70
JULY 27	15.25	APR. 25	10.15	DEC. 26	14.54	AUG. 26	16.43
AUG. 24	15.83	MAY 29	12.10	JAN. 28, 1975	13.70	SEP. 23	14.38
SEP. 24	13.80						

LAMOILLE COUNTY

443405072323501. Local number Morrissetown 1. U.S. Geol. Survey. Vermont Highway Department right-of-way off Route 15, approximately 3 mi (4.8 km) east of Morrisville. Augured observation water-table well in silty, fine to medium sand, diam 1 1/4 in (3.2 cm), depth 50 ft (15.2 m), well point 48-50 ft (14.6-15.2 m). Lsd approximately 660 ft (201 m) above msl. MP top of casing, approximately 4.00 ft (1.22 m) above lsd. Highest water level 16.26 ft (4.96 m) below lsd, Apr. 24, 1969; lowest 20.35 ft (6.20 m) below lsd, Aug. 26, 1975. Records available: 1966-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	17.92	OCT. 26, 1973	19.17	JUNE 24, 1974	18.26	FEB. 24, 1975	19.51
FEB. 26	18.78	NOV. 27	18.85	JULY 26	19.06	MAR. 26	18.11
MAR. 26	17.47	DEC. 20	17.64	AUG. 26	19.58	APR. 28	17.27
APR. 26	17.47	JAN. 28, 1974	17.71	SEP. 26	19.80	MAY 27	18.66
MAY 29	17.16	FEB. 25	18.13	OCT. 29	19.87	JUNE 27	19.34
JUNE 26	17.25	MAR. 25	18.45	NOV. 25	18.92	JULY 28	20.03
JULY 27	18.11	APR. 25	16.85	DEC. 26	19.19	AUG. 26	20.35
AUG. 24	19.10	MAY 29	16.85	JAN. 28, 1975	19.11	SEP. 23	19.96
SEP. 24	18.72						

ORANGE COUNTY

435343072151801. Local number West Fairlee 1. U.S. Geol. Survey. At Vermont Highway Department garage, 60 ft (18.3 m) west of salt shed, approximately 1.3 mi (2.1 km) south-southeast of West Fairlee Village. Augured observation water-table well in sand, diam 1 1/4 in (3.2 cm), depth 54 ft (16.5 m), well point 52-54 ft (15.9-16.5 m). Lsd approximately 700 ft (213 m) above msl. MP top of casing, approximately 2.00 ft (0.61 m) above lsd. Highest water level 0.88 ft (0.27 m) below lsd, Apr. 24, 1969; lowest 5.43 ft (1.66 m) below lsd, Nov. 18, 1970. Records available: 1966-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	2.65	OCT. 26, 1973	4.81	JUNE 24, 1974	3.24	FEB. 24, 1975	4.29
FEB. 26	3.11	NOV. 27	4.50	JULY 25	4.22	MAR. 26	2.49
MAR. 26	1.27	DEC. 20	3.87	AUG. 25	4.81	APR. 26	2.04
APR. 26	2.20	JAN. 28, 1974	2.70	SEP. 25	4.36	MAY 26	3.29
MAY 29	2.08	FEB. 26	2.16	OCT. 28	4.34	JUNE 25	3.61
JUNE 25	2.92	MAR. 25	1.98	NOV. 22	3.91	JULY 28	4.38
JULY 26	2.79	APR. 25	1.33	DEC. 26	3.98	AUG. 25	4.96
AUG. 27	4.09	MAY 28	2.21	JAN. 27, 1975	4.07	SEP. 24	4.88
SEP. 24	4.53						

ORLEANS COUNTY

443952072114001. Local number Glover 1. U.S. Geol. Survey. Vermont Highway Department salt shed off Route 16, south of Glover Village. Augured observation water-table well in sand and gravel, diam 1 1/4 in (3.2 cm), depth 82 ft (25 m), sand point 80-82 ft (24.4-25 m). Lsd approximately 1,200 ft (366 m) above msl. MP top of casing, approximately 4.00 ft (1.22 m) above lsd. Highest water level 12.11 ft (3.69 m) below lsd, May 23, 1969; lowest 18.95 ft (5.78 m) below lsd, Mar. 28, 1967. Records available: 1966-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	16.85	OCT. 26, 1973	15.94	JUNE 24, 1974	14.49	FEB. 24, 1975	17.69
FEB. 26	16.95	NOV. 27	16.22	JULY 26	15.15	MAR. 26	17.17
MAR. 26	15.77	DEC. 20	15.87	AUG. 26	16.02	APR. 28	15.27
APR. 26	13.77	JAN. 28, 1974	15.54	SEP. 26	16.45	MAY 27	15.75
MAY 29	13.17	FEB. 25	15.74	OCT. 29	17.15	JUNE 27	16.47
JUNE 26	13.32	MAR. 25	16.05	NOV. 25	17.12	JULY 28	16.96
JULY 27	14.26	APR. 25	13.47	DEC. 26	16.97	AUG. 26	17.54
AUG. 24	15.39	MAY 29	12.72	JAN. 28, 1975	17.37	SEP. 23	17.77
SEP. 24	15.53						

445158072155001. Local number Irasburg 1. Normand Beaulieu. Near Irasburg. Dug unused water-table well in glacial till of Pleistocene age, diam 30 in (76 cm), depth 15 ft (4.6 m), lined with stone. Lsd about 910 ft (277 m) above msl. MP top edge of notch chiseled in top of concrete well curb, on east side, 0.50 ft (0.15 m) above lsd. Highest water level 0.79 ft (0.24 m) below lsd, May 1, 1971; lowest 13.4 ft (4.08 m) below lsd, Nov. 12, 1964. Records available: 1964-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	3.45	SEP. 24, 1973	6.23	MAY 29, 1974	3.07	FEB. 24, 1975	9.78
FEB. 26	7.35	OCT. 26	6.23	JUNE 24	5.13	MAR. 26	2.20
MAR. 26	3.84	NOV. 27	4.75	JULY 26	5.57	APR. 28	3.69
APR. 26	5.48	DEC. 20	5.02	AUG. 26	6.28	MAY 27	7.08
MAY 29	4.57	JAN. 28, 1974	5.20	SEP. 26	5.87	JUNE 27	7.40
JUNE 26	4.83	FEB. 25	8.45	OCT. 29	6.77	JULY 28	6.90
JULY 27	7.35	MAR. 25	7.51	NOV. 25	3.69	AUG. 26	9.92
AUG. 27	7.72	APR. 25	2.57	DEC. 26	5.90	SEP. 23	5.56

RUTLAND COUNTY

434217073010601. Local number Pittsford 8. U.S. Geol. Survey. In St. Alphonsus Cemetery, near Pittsford. Bored and driven observation water-table well in fine sand, diam 1 1/4 in (3.2 cm), depth 42 ft (12.8 m), well point 40-42 ft (12.2-12.8 m). Lsd about 490 ft (149 m) above msl. MP top of casing, 2.00 ft (0.61 m) above lsd. Highest water level 35.89 ft (10.94 m) below lsd, May 25, 1970; lowest 39.59 ft (12.07 m) below lsd, Oct. 18, 1957. Records available: 1957-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	35.80	OCT. 26, 1973	36.31	JUNE 24, 1974	35.55	FEB. 24, 1975	35.60
FEB. 26	35.72	NOV. 27	36.45	JULY 25	35.77	MAR. 26	35.43
MAR. 26	35.37	DEC. 20	36.70	AUG. 25	35.90	APR. 26	35.35
APR. 26	35.46	JAN. 28, 1974	35.93	SEP. 25	35.65	MAY 24	35.57
MAY 29	35.30	FEB. 26	35.72	OCT. 28	35.72	JUNE 25	35.67
JUNE 25	35.50	MAR. 25	35.73	NOV. 22	35.65	JULY 28	36.00
JULY 26	35.54	APR. 25	35.57	DEC. 26	35.60	AUG. 25	36.19
AUG. 27	35.83	MAY 28	35.44	JAN. 28, 1975	35.55	SEP. 24	36.31
SEP. 24	36.21						

WASHINGTON COUNTY

441829072413901. Local number Middlesex 3. U.S. Geol. Survey. At Vermont Highway Department garage area adjacent to salt shed, off U.S. Route 2. Augured observation water-table well in sand and gravel, diam 1-1/4 in (3.2 cm), depth 50 ft (15.2 m), well point 48-50 ft (14.6-15.2 m). Lsd approximately 460 ft (140 m) above msl. MP top of casing, approximately 3.00 ft (0.91 m) above lsd (since Feb. 2, 1975). Highest water level 16.89 ft (5.15 m) below lsd, Apr. 24, 1969; lowest 23.49 ft (7.16 m) below lsd, Sept. 25, 1968. Records available: 1966-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	18.95	NOV. 27, 1973	21.56	AUG. 26, 1974	22.86	MAR. 26, 1975	19.15
APR. 26	20.03	DEC. 20	20.87	SEP. 25	21.92	APR. 28	18.45
MAY 29	19.88	JAN. 28, 1974	19.25	OCT. 28	22.43	MAY 27	22.35
JUNE 25	20.23	FEB. 26	19.65	NOV. 22	20.94	JUNE 25	22.51
JULY 26	22.35	MAY 28	19.35	DEC. 26	21.82	JULY 28	23.10
AUG. 27	22.92	JUNE 24	21.82	JAN. 28, 1975	21.16	AUG. 25	23.36
SEP. 24	21.27	JULY 25	21.99	FEB. 24	21.81	SEP. 24	22.18
OCT. 26	21.93						

441552072341901. Local number Montpelier 2. U.S. Geol. Survey. At 9 Winter St., Montpelier. Augured observation water-table well in medium to coarse sand, diam 1 1/4 (3.2 cm), depth 26 ft (7.9 m), well point 24-26 ft (7.3-7.9 m). Lsd approximately 520 ft (158 m) above msl. MP top of casing, approximately 0.10 ft (0.03 m) above lsd (since Oct. 21, 1974). Highest water level 11.09 ft (3.38 m) below lsd, Apr. 24, 1969; lowest 16.74 ft (5.10 m) below lsd, Sept. 26, 1972. Records available: 1966-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	14.27	OCT. 26, 1973	15.77	JUNE 24, 1974	14.85	FEB. 24, 1975	17.09
FEB. 26	15.30	NOV. 27	15.37	JULY 25	14.85	MAR. 26	14.32
MAR. 26	12.57	DEC. 20	14.84	AUG. 24	15.93	APR. 28	12.53
APR. 26	12.81	JAN. 28, 1974	14.99	SEP. 25	15.92	MAY 27	14.66
MAY 29	12.86	FEB. 26	14.86	OCT. 29	16.00	JUNE 27	15.72
JUNE 26	12.53	MAR. 25	14.77	NOV. 25	15.27	JULY 28	16.40
JULY 27	14.35	APR. 25	12.44	DEC. 26	15.38	AUG. 26	16.64
AUG. 24	15.70	MAY 29	13.55	JAN. 28, 1975	15.74	SEP. 23	15.98
SEP. 24	15.40						

WINDSOR COUNTY

431551072350601. Local number Chester 1. U.S. Geol. Survey. At Vermont Highway Department salt shed, southeast of Chester. Augured observation water-table well in sand, diam 1-1/4 in (3.2 cm), depth 22 ft (6.7 m), well point 20-22 ft (6.1-6.7 m). Lsd approximately 580 ft (177 m) above msl. MP top of casing, 2.00 ft (0.61 m) above lsd. Highest water level 2.27 ft (0.69 m) below lsd, Mar. 26, 1975; lowest 6.31 ft (1.92 m) below lsd, Sept. 28, 1967. Records available: 1966-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	3.72	OCT. 26, 1973	6.05	JUNE 24, 1974	5.40	FEB. 24, 1975	4.90
FEB. 26	5.01	NOV. 27	5.82	JULY 25	5.95	MAR. 26	2.27
MAR. 26	2.53	DEC. 20	5.40	AUG. 25	6.21	APR. 26	3.31
APR. 26	4.25	JAN. 28, 1974	3.82	SEP. 25	5.53	MAY 26	5.50
MAY 29	3.47	FEB. 26	4.78	OCT. 28	5.43	JUNE 25	5.30
JUNE 25	5.44	MAR. 25	3.74	NOV. 22	4.41	JULY 28	5.12
JULY 26	5.55	APR. 25	3.69	DEC. 26	5.31	AUG. 25	5.20
AUG. 27	6.03	MAY 28	4.55	JAN. 28, 1975	4.60	SEP. 24	4.90
SEP. 24	5.86						

435129072483301. Local number Rochester 1. U.S. Geol. Survey. At Vermont Highway Department garage adjacent to salt shed, approximately 1.3 mi (2.1 km) south of Rochester Village. Augured observation water-table well in sand, diam 1 1/4 in (3.2 cm), depth 73 ft (22.3 m), well point 71-73 ft (21.6-22.3 m). Lsd approximately 800 ft (244 m) above msl. MP top of casing, approximately 4.00 ft (1.22 m) above lsd. Highest water level 4.50 ft (1.37 m) below lsd, Mar. 26, 1968; lowest 13.05 ft (3.98 m) below lsd, Aug. 25, 1975. Records available: 1966-current year.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN. 26, 1973	8.36	OCT. 26, 1973	13.00	JUNE 24, 1974	11.45	FEB. 24, 1975	11.47
FEB. 26	11.15	NOV. 27	12.26	JULY 25	11.88	MAR. 26	8.69
MAR. 26	6.65	DEC. 20	11.04	AUG. 25	11.76	APR. 26	6.48
APR. 26	8.91	JAN. 28, 1974	8.86	SEP. 25	9.95	MAY 24	10.62
MAY 29	8.42	FEB. 26	9.26	OCT. 28	11.52	JUNE 25	11.72
JUNE 25	9.98	MAR. 25	10.74	NOV. 22	9.55	JULY 28	12.77
JULY 26	11.41	APR. 25	6.63	DEC. 26	11.12	AUG. 25	13.05
AUG. 27	12.59	MAY 28	8.80	JAN. 28, 1975	10.89	SEP. 24	12.04
SEP. 24	12.87						

ANALYSES OF GROUND-WATER SAMPLES COLLECTED AT MISCELLANEOUS SITES IN NEW HAMPSHIRE

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

STATION NUMBER	CITY OR TOWN	LAT- ITUDE	LONG- ITUDE	SEQ. NO.	DATE OF SAMPLE	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CAL- CIUM (CA) (MG/L)
424506071112101	SALEM	42 45 06	071 11 21	01	75-08-11	14	250	130	42
424609071183601	WINDHAM	42 46 09	071 18 36	01	75-08-11	16	200	10	18
424615071133701	SALEM	42 46 15	071 13 37	01	75-08-13	16	90	120	42
424733071173301	WINDHAM	42 47 33	071 17 33	01	75-08-11	8.6	120	10	--
424822071163301	WINDHAM	42 48 22	071 16 33	01	75-08-11	20	2700	560	--
424849071143001	SALEM	42 48 49	071 14 30	01	75-08-11	17	2100	990	57
424914071095001	ATKINSON	42 49 14	071 09 50	01	75-08-12	21	1700	60	14
424915071114901	SALEM	42 49 15	071 11 49	01	75-08-11	14	110	100	35
424937071203701	WINDHAM	42 49 37	071 20 37	01	75-08-11	12	170	30	27
425015071055601	PLAISTOW	42 50 15	071 05 56	01	75-08-12	19	460	10	28
425037071065401	PLAISTOW	42 50 37	071 06 54	01	75-08-12	17	260	50	15
425058071065001	PLAISTOW	42 50 58	071 06 50	01	75-08-12	17	430	310	20
425226071105401	HAMPSTEAD	42 52 26	071 10 54	01	75-08-12	12	--	--	--
425316071105801	HAMPSTEAD	42 53 16	071 10 58	01	75-08-12	17	350	20	29
425517071041001	KINGSTON	42 55 17	071 04 10	01	75-08-12	13	670	200	16
425626071033001	KINGSTON	42 56 26	071 03 30	01	75-08-12	14	5200	140	6.0

STATION NUMBER	DATE OF SAMPLE	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	HICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
424506071112101	75-08-11	9.5	14	3.6	87	0	71	16	80	.3	.01
424609071183601	75-08-11	2.3	13	2.4	89	0	73	15	10	.3	.10
424615071133701	75-08-13	7.9	8.8	2.6	141	0	116	19	17	.3	.71
424733071173301	75-08-11	--	--	--	13	0	11	9.1	14	.0	2.6
424822071163301	75-08-11	--	--	--	159	0	130	23	130	.0	.01
424849071143001	75-08-11	5.5	20	3.6	133	0	109	14	83	.2	.01
424914071095001	75-08-12	3.1	22	2.3	89	0	73	20	2.0	.3	.02
424915071114901	75-08-11	3.5	6.7	3.2	103	0	84	19	38	.2	.02
424937071203701	75-08-11	3.0	5.6	3.4	71	0	58	24	11	.2	7.4
425015071055601	75-08-12	8.5	30	4.6	59	0	48	30	66	.1	2.6
425037071065401	75-08-12	5.4	10	2.7	93	0	76	40	2.9	.4	.01
425058071065001	75-08-12	4.5	23	1.2	109	0	89	11	18	.9	.01
425226071105401	75-08-12	--	--	--	142	0	116	34	420	.0	3.3
425316071105801	75-08-12	6.0	17	3.3	85	0	70	23	140	.1	2.1
425517071041001	75-08-12	2.0	37	4.2	10	0	8	20	65	.1	8.4
425626071033001	75-08-12	.2	9.0	1.2	11	0	9	17	15	.0	.03

STATION NUMBER	DATE OF SAMPLE	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
424506071112101	75-08-11	.01	.00	.02	.01	.01	330	6.1	18.0	2.3	3
424609071183601	75-08-11	.00	.04	.14	.04	.01	180	6.5	19.0	6.3	0
424615071133701	75-08-13	.01	.00	.71	.00	.01	400	6.7	14.5	4.2	3
424733071173301	75-08-11	.00	.02	2.6	.02	.01	128	5.3	17.0	9.0	0
424822071163301	75-08-11	.01	.03	.05	.04	.01	500	6.0	20.0	3.0	5
424849071143001	75-08-11	.04	.06	.11	.10	.01	520	6.9	19.0	3.2	11
424914071095001	75-08-12	.01	.00	.03	.01	.14	200	6.3	13.0	2.5	2
424915071114901	75-08-11	.00	.04	.06	.04	.03	290	7.2	13.5	1.3	3
424937071203701	75-08-11	.00	.11	7.5	.11	.01	235	7.5	14.5	7.1	4
425015071055601	75-08-12	.03	.08	2.7	.11	.01	500	6.5	32.0	2.8	6
425037071065401	75-08-12	.00	.00	.01	.00	.05	210	6.9	26.0	4.5	3
425058071065001	75-08-12	.00	.01	.02	.01	.01	260	6.4	20.0	3.7	6
425226071105401	75-08-12	.13	.10	3.5	.23	.01	1700	6.4	19.5	3.6	3
425316071105801	75-08-12	.00	.06	2.2	.06	.01	350	6.3	22.5	8.2	3
425517071041001	75-08-12	.00	.12	8.5	.12	.06	350	5.6	17.0	3.0	8
425626071033001	75-08-12	.30	.25	.58	.55	.03	125	5.3	26.0	2.4	16

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975.--Continued

STATION NUMBER	DATE OF SAMPLE	CARBON DIOXIDE (CO ₂) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
424506071112101	75-08-11	99	1.8	0	50	0	<10	0	10	8
424609071183601	75-08-11	45	3.8	5	10	0	0	0	20	6
424615071133701	75-08-13	45	2.2	1	10	0	<10	0	20	6
424733071173301	75-08-11	104	.9	1	0	0	<10	0	120	14
424822071163301	75-08-11	254	4.1	4	0	0	<10	0	0	10
424849071143001	75-08-11	27	5.1	0	20	0	<10	0	0	10
424914071095001	75-08-12	71	6.9	2	0	0	10	0	10	6
424915071114901	75-08-11	10	1.3	12	0	0	10	1	10	0
424937071203701	75-08-11	3.6	3.4	0	20	0	<10	0	120	10
425015071055601	75-08-12	30	2.8	0	40	1	20	0	1100	28
425037071065401	75-08-12	19	4.3	12	0	0	<10	0	120	8
425058071065001	75-08-12	69	7.7	3	0	0	<10	0	10	8
425226071105401	75-08-12	90	7.5	--	80	--	--	--	--	--
425316071105801	75-08-12	68	1.7	0	70	0	0	0	80	12
425517071041001	75-08-12	40	3.0	0	360	0	30	0	30	12
425626071033001	75-08-12	88	7.6	3	20	0	0	0	210	14

STATION NUMBER	DATE OF SAMPLE	TOTAL MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
424506071112101	75-08-11	<.5	<5	60
424609071183601	75-08-11	<.5	<5	20
424615071133701	75-08-13	<.5	<5	30
424733071173301	75-08-11	<.5	<5	30
424822071163301	75-08-11	<.5	<5	20
424849071143001	75-08-11	<.5	<5	20
424914071095001	75-08-12	<.5	<5	30
424915071114901	75-08-11	<.5	<5	40
424937071203701	75-08-11	<.5	<5	370
425015071055601	75-08-12	<.5	<5	130
425037071065401	75-08-12	<.0	<5	0
425058071065001	75-08-12	<.5	<5	20
425226071105401	75-08-12	--	--	--
425316071105801	75-08-12	<.5	<5	50
425517071041001	75-08-12	<.5	<5	80
425626071033001	75-08-12	<.5	<5	200

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

STATION NUMBER	DATE OF SAMPLE	TOTAL ALDRIN (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL PCB (UG/L)
424506071112101	75-08-11	.00	.00	.00	.00	.00	.00	0	.00	.00
424609071183601	75-08-11	.00	.00	.00	.00	.00	.00	0	.00	.00
424615071133701	75-08-13	.00	.00	.00	.00	.00	.00	0	.00	.00
424733071173301	75-08-11	.00	.00	.00	.00	.00	.00	0	.00	.00
424822071163301	75-08-11	.00	.00	.00	.00	.00	.00	0	.00	.00
424849071143001	75-08-11	.00	.00	.00	.00	.00	.00	0	.00	.00
424914071095001	75-08-12	.00	.00	.00	.00	.00	.00	0	.00	.00
424915071114901	75-08-11	.00	.00	.00	.00	.00	.00	0	.00	.00
424937071203701	75-08-11	.00	.00	.00	.00	.00	.00	0	.00	.00
425015071055601	75-08-12	.00	.00	.00	.00	.00	.00	0	.00	.00
425037071065401	75-08-12	.00	.00	.00	.00	.00	.00	0	.00	.00
425058071065001	75-08-12	.00	.00	.00	.00	.00	.00	0	.00	.00
425226071105401	75-08-12	.00	.00	.00	.00	.00	.00	0	.00	.00
425316071105801	75-08-12	.00	.00	.00	.00	.00	.00	0	.00	.00
425517071041001	75-08-12	.00	.00	.00	.00	<.01	.00	0	.00	.00
425626071033001	75-08-12	.00	.00	.00	.00	.00	.00	0	.00	.00

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