Water Resources Data for New Hampshire and Vermont

Water Year 1976

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NH-VT-76-1

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

CALENDAR FOR WATER YEAR 1976

1975

OCTOBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

NOVEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

DECEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

1976

JANUARY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29						

MARCH

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

APRIL

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

MAY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

JUNE

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

JULY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

AUGUST

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

SEPTEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

BIBLIOGRAPHIC DATA SHEET	1. Report No. USGS/WRD/HD-77/047	2.	3. Recipient's Accession No.
4. Title and Subtitle Water Resources Data for New Hampshire and Vermont, 1976			5. Report Date August 1977 6.
7. Author(s)			8. Performing Organization Rept. No. USGS-WDR-NH-VT-76-1
9. Performing Organization Name and Address U.S. Geological Survey Water Resources Division 150 Causeway Street Boston, MA 02114			10. Project/Task/Work Unit No. 11. Contract/Grant No.
12. Sponsoring Organization Name and Address U.S. Geological Survey Water Resources Division 150 Causeway Street Boston, MA 02114			13. Type of Report & Period Covered Annual: Oct.1, 1975 to Sept. 30, 1976 14.

15. Supplementary Notes
This report was prepared in cooperation with the States of New Hampshire and Vermont and with other agencies.

16. Abstracts Water-resources data for the 1976 water year for New Hampshire and Vermont consist of records of stage, discharge, and water quality of streams; contents of lakes and reservoirs; and ground-water levels. This report contains discharge records for 92 gaging stations, stage records for 4 lakes, monthend contents for 28 lakes and reservoirs, water quality for 9 gaging stations, and water levels for 18 observation wells. Also included are data for 41 crest-stage and 13 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. A few pertinent stations (not included above) in bordering States and Province of Quebec are also included in this report. These data represent that portion of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in New Hampshire and Vermont.

17. Key Words and Document Analysis. 17a. Descriptors
*New Hampshire, *Vermont, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses.

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group

18. Availability Statement	19. Security Class (This Report)	21. No. of Pages
No restriction on distribution This report may be purchased from: National Technical Information Service Springfield, VA 22161	UNCLASSIFIED	216
	20. Security Class (This Page) UNCLASSIFIED	22. Price

PREFACE

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

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

Water Resources Data for New Hampshire and Vermont Water Year 1976

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NH-VT-76-1

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

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

V. E. McKelvey, Director

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey
150 Causeway Street
Boston, MA 02114

1977

CONTENTS

ILLUSTRATIONS

TABLES

SURFACE-WATER AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

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

WATER RESOURCES DATA FOR NEW HAMPSHIRE AND VERMONT, 1976

INTRODUCTION

Water-resources data for the 1976 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 92 gaging stations, stage records for 4 lakes, monthend contents for 28 lakes and reservoirs, water-quality data for 9 gaging stations, and water levels for 18 observation wells. Also included are data for 41 crest-stage partial-record stations and 13 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. Locations of gaging stations, partial-record stations, and observation wells are shown in figure 1. A few pertinent stations (not included above) in bordering States and Province of Quebec are also included in this report. These data represent that portion of the National Water Data System 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 September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of surface waters of the United States." Records of ground-water levels were published from 1939 to 1974 in a series of water-supply papers entitled, "Ground-water levels in the United States." Water-supply papers may be consulted in libraries of the principal cities of the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey water-data report NH-VT-76-1." Water-data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

COOPERATION

Organizations that assisted in collecting data through cooperative agreements with the Geological Survey in 1976 are:

New Hampshire: State Water Resources Board, George M. McGee, Sr., chairman; State Water Supply and Pollution Control Commission, William A. Healy, executive director; Strafford-Rockingham 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 for 27 gaging stations, and by the U.S. Environmental Protection Agency, for 2 water-quality stations published in this report.

Organizations supplying data are acknowledged in the station descriptions.

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

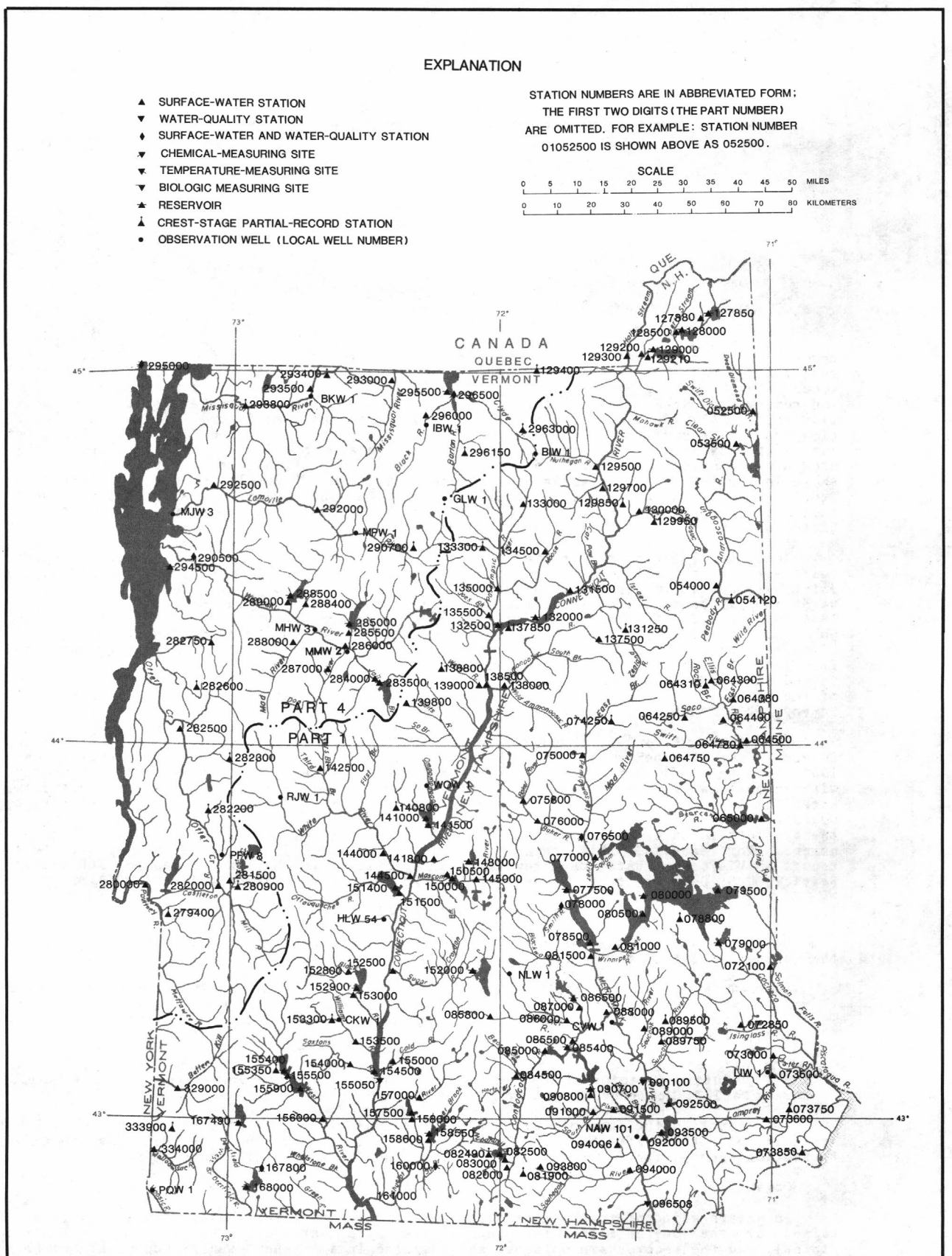

FIGURE 1. LOCATION OF DATA-COLLECTION SITES

HYDROLOGIC CONDITIONS

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

Cumulative runoff for October to March was excessive throughout New Hampshire and Vermont. The highest October runoff for period of record occurred at the index gaging stations, Lamprey River near Newmarket, NH (July 1934-), and Batten Kill at Arlington, VT (October 1928-). The highest February runoff for period of record occurred at Batten Kill at Arlington, VT, and White River at West Hartford, VT (June 1915-).

Cumulative runoff for April to September was excessive except in southeastern New Hampshire, where it ranged from excessive in the interior section to deficient (in the lower quartile of record) in the coastal area.

Moderate to substantial peak discharges occurred about Apr. 1 as the result of a general rain and(or) snowmelt; however, flooding was confined to the usual lowland areas. Recurrence intervals of peak discharges in central and northern Vermont ranged from about 5 to 15 years. At Black River at Coventry, VT, the peak discharge was the highest for period of record (October 1951-). A new maximum daily discharge for April for period of record occurred Apr. 2 at Passumpsic River at Passumpsic, VT (October 1928-). At the gage on Lake Champlain at Burlington, VT, a new maximum gage height for period of record (May 1907-) occurred Apr. 4, exceeding by 0.15 ft the previous maximum which occurred Mar. 27, 28, 1936.

The highest August runoff for period of record occurred at Passumpsic River at Passumpsic, VT, White River at West Hartford, VT, and Batten Kill at Arlington, VT. Heavy rains associated with Hurricane Belle falling on ground already soaked by previous generally heavy rains produced high rises in much of Vermont and severe flooding in southern Vermont on Aug. 10-11. Flood damage in southern Vermont was so extreme that this section was declared a disaster area by the Federal Government.

Recurrence intervals of significant peak discharges ranged from about 8 to more than 50 years. The maximum instantaneous discharge for period of record occurred Aug. 10 at the following gaging stations: Williams River at Brockways Mills, VT (June 1940-), Saxtons River at Saxtons River, VT (June 1940-), and Beaver Brook at Wilmington, VT (February 1963-). Also on Aug. 10, the second and third highest instantaneous discharges for period of record occurred at East Orange Branch at East Orange, VT (June 1958-) and Mad River near Moretown, VT (October 1928-), respectively. A new maximum daily discharge for August for period of record occurred Aug. 10 at White River at West Hartford, VT, and Aug. 11 at Batten Kill at Arlington, VT.

Cumulative runoff for the water year was excessive throughout New Hampshire and Vermont and was the highest for period of record at Batten Kill at Arlington, VT, the second highest at White River at West Hartford, VT, the third highest at Passumpsic River at Passumpsic, VT, and the fourth highest at Pemigewasset River at Plymouth, NH.

At the end of the water year, runoff was excessive except in southern New Hampshire and extreme southeastern Vermont, where it was in the normal range.

Figure 2 on page 4, for which records of two long-term index gaging stations were used, shows a comparison of the monthly and yearly mean discharge for the 1976 water year with the median discharge for the period 1941-70.

At the beginning of the water year, ground-water levels in New Hampshire and Vermont were generally above normal range, and continued above normal until April except during December and January when levels dropped to normal in the northern parts of the two States. Several observation wells in both States reached record monthly highs during the October through February period, and 30 percent of the observation wells in Vermont reached all-time highs during February.

By the end of April, ground-water levels in the southern parts of both New Hampshire and Vermont had declined to below their normal range while in the northern parts they remained above normal.

Seasonal water-level declines began in the spring and continued through the summer throughout the two-State area. During this period, water levels remained in the above normal to normal monthly range in the central and northern parts of New Hampshire and Vermont, but gradually changed from below normal range in the southern parts of both States to above normal in southern Vermont and southwestern New Hampshire and to normal in southeastern New Hampshire.

DEFINITION OF TERMS

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

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

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

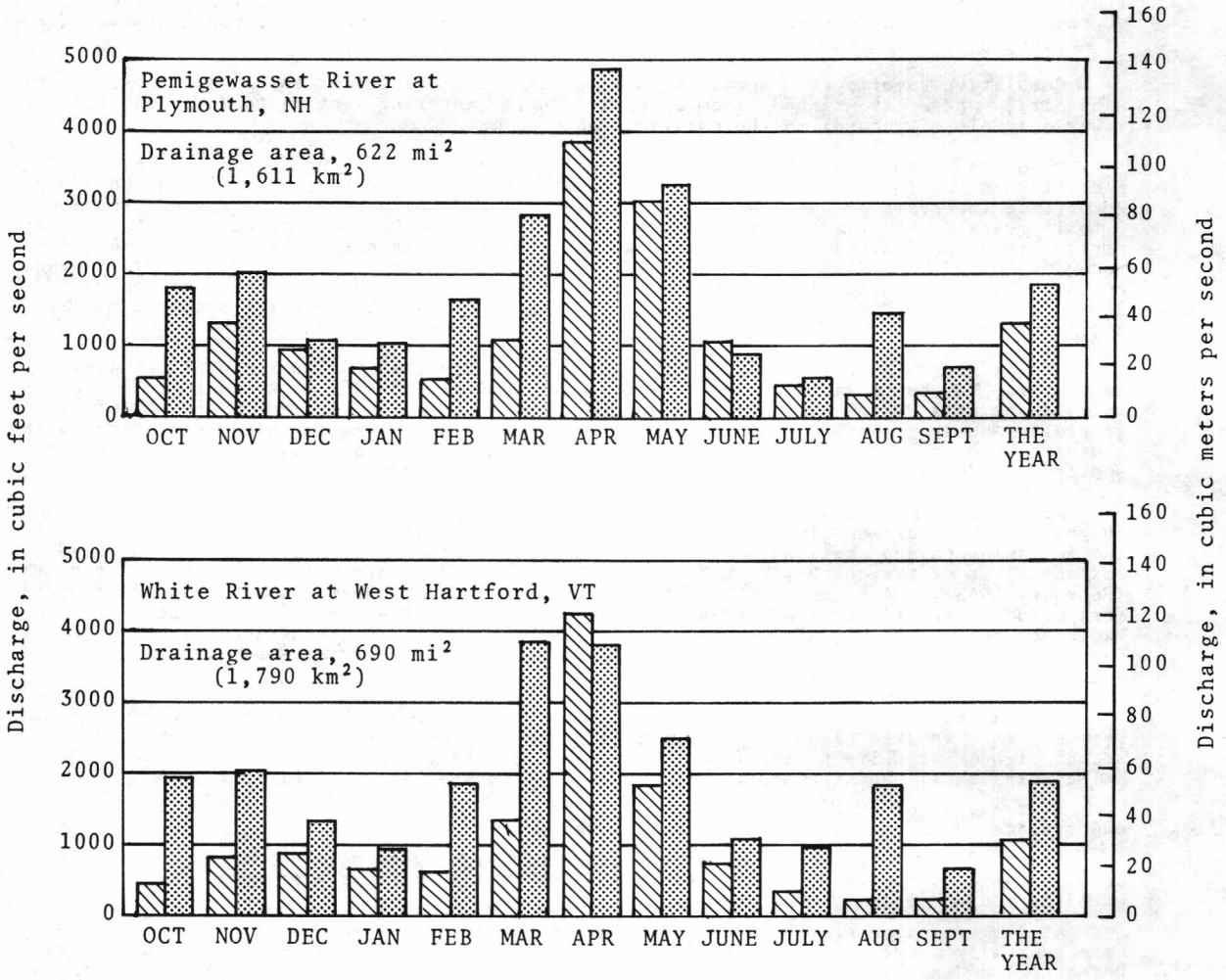

Figure 2.--Comparison of discharge at three long-term index gaging stations during 1976 water year with median discharge for period 1941-70.

Bacteria are microscopic unicellular organisms, spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies.

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 organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ±1.0°C on M-Endo medium (nutrient medium for bacterial growth). Concentrations are expressed as number of colonies per 100 mL (milliliters) of sample.

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

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

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

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, 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/m^3 (grams per cubic meter), and the ash-weight values of periphyton and benthic organisms are expressed in g/m^2 (grams per square meter).

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

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.

Bottom material: See Bed material.

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

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

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

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

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

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

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

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

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

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

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

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

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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for estimating the dissolved-solids content of the water. Commonly, the concentration 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 (stage) and the volume of water per unit of time flowing in a channel.

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

Substrate is the physical surface upon which an organism lived.

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

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

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 REVISED RECORDS paragraph to refer to previously published District annual basic-data reports.

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

DOWNSTREAM ORDER AND STATION NUMBER

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

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

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

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

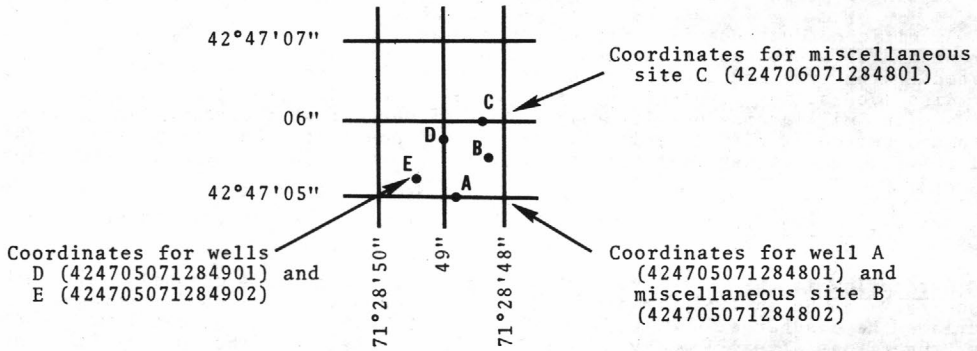

Figure 3.--System for numbering wells and miscellaneous sites (latitude and longitude)

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

SPECIAL NETWORKS AND PROGRAMS

National stream-quality accounting network (NASQAN) is a collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network

design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

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

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

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

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

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

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

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

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

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

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge and stage. 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."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information obtained later. Revisions of such records are usually published along with 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 "REVISED RECORDS" 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 are effected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage 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 and to conditions that affect the natural flow at the gaging station is given under "REMARKS." For reservoir stations, information on the dam forming the reservoir, the capacity, outlet works, and spillway, and purpose and use of the reservoir is given under "REMARKS."

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

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

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."). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

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

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

Data collected at partial-record stations and miscellaneous sites are contained in 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 Field Data and Computed Results

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

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

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

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

Other Data Available

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

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

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

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

For ground-water records, no descriptive statements are given; however, well number, date of sampling, and(or) other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

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

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

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between 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.

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

Water Temperature

Water temperatures are measured at most 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 diel temperature change while small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

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

Sediment

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

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the Data

Only ground-water-level data from a basic network of 44 observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

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

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

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

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U. S. Geological Survey have been published to date in the series on techniques describing the procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U. S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please refer to "U. S. Geological Survey Techniques of Water-Resources Investigations" and give the title, book number, and chapter number.

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

Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W.S. Wood: Book 1, Chap. D2. 1976. 24 p. $0.85.

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

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

General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: Book 3, Chap. A1. 1967. 30 p. $1.00.

Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M.A. Benson: Book 3, Chap. A2. 1967. 12 p., $0.20.

Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: Book 3, Chap. A3. 1968. 60 p. $0.40.

Measurement of peak discharge at width contractions by indirect methods, by H. F. Matthai: Book 3, Chap. A4. 1967. 44 p. $1.00.

Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: Book 3, Chap. A5. 1967. 29 p. $0.30.

General procedure for gaging streams, by R.W. Carter and Jacob Davidian: Book 3, Chap. A6, 1968. 13 p. $0.20.

Stage measurements at gaging stations, by T.J. Buchanan and W.P. Somers: Book 3, Chap. A7. 1968. 28 p. $0.45.

Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: Book 3, Chap. A8. 1969. 65 p. $1.25.

Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: Book 3, Chap. A11. 1969. 22 p. $0.40.

Fluorometric procedures for dye tracing, by J. F. Wilson, Jr.: Book 3, Chap. A12. 1968. 31 p. $0.35. Not currently available.

Aquifer-test design, observation, and data analysis, by R. W. Stallman: Book 3, Chap. B1. 1971. 26 p. $0.70.

Introduction to ground-water hydraulics -- a programed text for self-instruction, by D.S. Bennett: Book 3, Chap. B2. 1976. 172 p. $2.50.

Fluvial sediment concepts, by H. P. Guy: Book 3, Chap. C1. 1970. 55 p. $0.65.

Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: Book 3, Chap. C2. 1970. 59 p. $2.50.

Computation of fluvial-sediment discharge, by George Porterfield: Book 3, Chap. C3. 1972. 66 p. $1.15.

Some statistical tools in hydrology, by H. C. Riggs: Book 4, Chap. A1. 1968. 39 p. $0.30.

Frequency curves, by H. C. Riggs: Book 4, Chap. A2. 1968. 15 p. $0.20.

Low-flow investigations, by H. C. Riggs: Book 4, Chap. B1. 1972, 18 p. $0.65.

Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: Book 4, Chap. B2. 1973. 20 p. $0.75.

Regional analyses of streamflow characteristics, by H. C. Riggs: Book 4, Chap. B3. 1973. 15 p. $0.65.

Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: Book 4, Chap. D1. 1970. 17 p. $0.65.

Methods for collection and analysis of water samples for dissolved minerals and gases, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: Book 5, Chap. A1. 1970. 160 p. $2.40.

Determination of minor elements in water by emission spectroscopy , by P. R. Barnett and E. C. Mallory, Jr.: Book 5, Chap. A2. 1971. 31 p. $0.80.

Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: Book 5, Chap. A3. 1972. 40 p. $0.90.

Methods for collection and analysis of aquatic biological and microbiological samples, by K.V. Slack, R.C. Averett, P.E. Greeson, and R.G. Lipscomb: Book 5, Chap. A4. 1973. 165 p. $2.85.

Methods for determination of radioactive substances in water and fluvial sediments, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: Book 5, Chap. A5. 1977. 95 p. $16.00. (Looseleaf format. Available only by subscription. Additional supplements will be issued to subscribers at no extra cost.)

Laboratory theory and methods for sediment analysis, by H.P. Guy: Book 5, Chap. C1. 1969. 58 p. $0.65.

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

Methods of measuring water levels in deep wells, by M.S. Garber and F.C. Koopman: Book 8, Chap. A1. 1968. 23 p. $0.70.

Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: Book 8, Chap. B2. 1968. 15 p. $0.40.

01052500 DIAMOND RIVER NEAR WENTWORTH LOCATION, NH

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

DRAINAGE AREA.--153 mi^2 (396 km^2).

PERIOD OF RECORD.--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 good except those for winter period, which are fair.

AVERAGE DISCHARGE.--35 years, 349 ft^3/s (9.884 m^3/s), 30.98 in/yr (787 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,630 ft^3/s (244 m^3/s) June 16, 1943, gage height, 10.66 ft (3.249 m), from rating curve extended above 3,900 ft^3/s (110 m^3/s); minimum, 6.8 ft^3/s (0.19 m^3/s) Aug. 27, 28, 1949, Sept. 1, 1952, gage height, 0.81 ft (0.247 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft^3/s (102 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1400	3,640	103	7.41	2.259	Apr. 18	2000	*5,200	147	*8.57	2.612
Apr. 2	1100	3,930	111	7.64	2.329						

Minimum discharge, 32 ft^3/s (0.91 m^3/s) July 23, 24, gage height, 1.42 ft (0.433 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	177	290	150	885	275	2330	599	548	172	332	179
2	197	181	352	135	1020	220	3650	1160	371	145	769	202
3	190	181	270	125	1510	200	2500	1240	267	106	316	170
4	170	215	178	120	1450	190	1570	1710	234	92	185	138
5	166	221	144	115	1150	200	1070	925	195	75	137	129
6	143	170	203	110	800	240	840	747	166	58	126	161
7	128	154	237	105	584	230	815	798	151	48	131	148
8	113	155	183	100	462	210	738	860	168	46	117	114
9	102	252	163	95	337	190	639	660	163	106	127	95
10	94	208	183	92	262	285	637	541	144	90	891	83
11	91	426	237	89	214	125	706	484	117	56	1530	342
12	538	304	169	88	193	170	501	1160	144	66	578	288
13	549	602	121	84	171	170	469	1630	118	104	319	177
14	316	1100	139	80	164	165	494	799	96	186	310	129
15	255	900	195	79	154	165	660	764	81	146	459	104
16	484	515	270	77	166	160	1900	617	70	96	2150	92
17	482	400	205	76	202	175	3700	484	86	77	961	87
18	924	375	165	75	191	210	4500	471	84	75	502	90
19	928	361	145	71	188	180	4480	1150	64	63	334	112
20	2170	310	130	68	194	200	3730	1720	58	55	251	121
21	2550	321	130	68	175	400	2440	1120	89	44	200	107
22	961	734	140	67	236	880	1730	977	94	38	167	102
23	582	465	155	67	300	775	1590	835	94	34	142	100
24	444	320	170	65	350	695	1220	1080	71	79	120	93
25	368	289	175	62	295	660	868	766	73	115	101	81
26	332	242	155	62	270	695	732	586	245	65	86	75
27	288	184	165	223	330	800	677	486	190	174	287	534
28	252	233	190	1920	380	1880	735	405	167	593	226	493
29	229	206	215	1620	300	1590	697	338	105	222	402	256
30	223	194	185	1430	---	1250	667	291	122	150	404	184
31	198	---	160	1150	---	1430	---	256	---	180	232	---
TOTAL	14703	10395	5819	8668	12933	15015	47285	25659	4575	3556	12892	4986
MEAN	474	347	188	280	446	484	1576	828	153	115	416	166
MAX	2550	1100	352	1920	1510	1880	4500	1720	548	593	2150	534
MIN	91	154	121	62	154	125	469	256	58	34	86	75
CFSM	3.10	2.27	1.23	1.83	2.92	3.16	10.3	5.41	1.00	.75	2.72	1.08
IN.	3.57	2.53	1.41	2.11	3.14	3.65	11.50	6.24	1.11	.86	3.13	1.21

CAL YR 1975 TOTAL 120801.5 MEAN 331 MAX 2690 MIN 9.5 CFSM 2.16 IN 29.37
WTR YR 1976 TOTAL 166486.0 MEAN 455 MAX 4500 MIN 34 CFSM 2.97 IN 40.48

01053500 ANDROSCOGGIN RIVER AT ERROL, NH

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

DRAINAGE AREA.--1,045 mi^2 (2,707 km^2).

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).

REVISED RECORDS.--WSP 1001: Drainage area.

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.

REMARKS.--Records good. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Aziscohos, and Umbagog Lakes, combined usable capacity, 28,100,000,000 ft^3 (796,000,000 m^3), with final regulation at Errol Dam.

AVERAGE DISCHARGE.--71 years, 1,899 ft^3/s (53.78 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 16,100 ft^3/s (456 m^3/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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,950 ft^3/s (197 m^3/s) May 20, gage height, 5.82 ft (1.774 m); minimum daily, 734 ft^3/s (20.8 m^3/s) Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1560	1760	1670	1840	1430	1510	3790	4480	1830	1640	1550	2020
2	1600	1760	1450	1870	1340	1570	4390	4470	1720	1550	1270	1980
3	1630	1770	1440	1860	1370	1550	4880	4520	1760	1640	1550	1960
4	1700	1760	1600	1860	1400	1460	4880	4600	1830	1720	1700	1980
5	1710	1770	1800	1880	1420	1400	3350	4980	1810	1770	1790	2050
6	1670	1800	1840	1920	1470	1440	2670	5000	1880	1800	1810	2110
7	1620	1780	1760	1900	1580	1590	3380	5330	1960	1860	1800	2090
8	1620	1760	1780	1920	1570	1550	4270	5310	1970	1840	1810	2080
9	1630	1710	1800	1930	1590	1580	4030	4960	1950	1760	1810	2090
10	1660	1650	1730	1940	1630	1640	3720	4200	1980	1750	1540	2090
11	1680	1500	1680	1940	1620	1670	3510	2470	1850	1840	1080	1990
12	1440	1450	1740	1940	1620	1660	3470	3720	1950	1880	1640	1960
13	1350	1230	1780	1940	1620	1730	3280	5940	1990	1880	1500	2030
14	1480	1040	1790	1930	1640	1800	3080	6240	1980	1830	1590	2060
15	1560	848	1780	1930	1680	1730	2550	6430	2000	1860	1670	2090
16	1420	1090	1790	1930	1660	1800	1050	6310	2010	1890	1410	2130
17	1240	1450	1800	1930	1630	1850	3410	5870	2010	1880	1630	2130
18	876	1520	1760	1930	1630	1850	4900	5690	2020	1870	1720	2110
19	734	1560	1850	1930	1620	1850	5600	5560	2040	1890	1690	2130
20	1190	1590	1890	1920	1610	1850	5200	6680	2030	1920	1740	2140
21	1670	1600	1910	1900	1570	1860	4850	6880	1960	1920	1780	2150
22	845	1600	1860	1880	1400	1860	4660	6850	1790	1920	1790	2150
23	1240	1610	1850	1910	1350	1950	6330	6830	1960	1920	1880	2160
24	1270	1610	1890	1920	1310	2450	5790	6360	1960	1790	1970	2160
25	1360	1560	1870	1930	1330	2200	5180	5940	1890	1600	1950	2170
26	1470	1590	1870	1840	1350	1690	5660	4540	1740	1820	2000	2160
27	1510	1690	1850	1580	1350	1710	5790	3290	1770	1770	2000	1850
28	1530	1710	1840	1160	1360	2590	5320	3570	1890	1380	1990	1970
29	1580	1700	1920	1430	1410	3130	4890	2460	1840	1700	1990	1960
30	1630	1690	1920	1470	---	3370	4510	1910	1810	1730	1990	2030
31	1710	---	1840	1420	---	3620	---	1900	---	1630	1990	---
TOTAL	45185	47158	55350	56680	43560	59510	128390	153290	57180	55250	53630	61980
MEAN	1458	1572	1785	1828	1502	1920	4280	4945	1906	1782	1730	2066
MAX	1710	1800	1920	1940	1680	3620	6330	6880	2040	1920	2000	2170
MIN	734	848	1440	1160	1310	1400	1050	1900	1720	1380	1080	1850

CAL YR 1975 TOTAL 614253 MEAN 1683 MAX 4250 MIN 664
WTR YR 1976 TOTAL 817163 MEAN 2233 MAX 6880 MIN 734

01054000 ANDROSCOGGIN RIVER NEAR GORHAM, NH

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

DRAINAGE AREA.--1,363 mi^2 (3,530 km^2).

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

REVISED RECORDS.--WSP 1001: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 832.88 ft (253.862 m) 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.

REMARKS.--Records good. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Aziscohos, and Umbagog Lakes, combined usable capacity, 28,100,000,000 ft^3 (796,000,000 m^3), 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.--63 years, 2,457 ft^3/s (69.58 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 20,000 ft^3/s (566 m^3/s) June 18, 1917, Apr. 30, 1923; minimum daily, 795 ft^3/s (22.5 m^3/s) Mar. 15, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,400 ft^3/s (295 m^3/s) Apr. 2, gage height, 7.70 ft (2.347 m); minimum daily, 1,730 ft^3/s (49.0 m^3/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1770	2040	2220	2120	2160	2120	7630	5370	2430	2230	2260	2190
2	1770	2080	2370	2080	2230	2070	9980	5540	2450	2110	2640	2290
3	1810	2060	2040	2120	2100	2100	8750	5690	2100	1940	1980	2190
4	1840	2070	1940	2140	2220	2150	7910	6140	2220	1980	2030	2100
5	1900	2050	1970	2040	2140	2240	6890	5920	2170	2070	1990	2200
6	1870	2050	2250	2070	2020	2630	4800	5980	2130	2080	2010	2240
7	1760	2070	2170	2110	2010	2620	4790	6140	2230	1900	2000	2230
8	1780	2090	2040	2170	2020	2420	5640	6680	2290	2000	1990	2190
9	1780	2150	2090	2060	2070	2370	5590	6190	2240	2030	2030	2190
10	1740	2120	2170	2080	2040	2290	5220	5560	2210	1890	2860	2180
11	1730	2270	2140	2060	2060	2250	5070	4290	2240	1850	3230	2440
12	2200	2140	2060	2160	2070	2200	4630	3520	2080	2010	2380	2390
13	2100	2390	2020	2140	2040	2280	4300	7870	2220	2060	2160	2240
14	1950	3010	2120	2150	2030	2240	4160	7640	2200	2090	1970	2260
15	2000	2970	2150	2120	2020	2240	4200	7930	2190	2070	1990	2220
16	2200	1980	2280	2060	2070	2340	3950	7800	2190	2050	2780	2220
17	2000	2140	2230	2070	2110	2260	5010	7060	2260	2050	2360	2250
18	2450	2200	2120	2020	2060	2230	8430	6690	2230	2020	2180	2240
19	2200	2150	1880	2080	2090	2310	9210	6790	2190	2000	2030	2220
20	4300	2140	1980	2130	2090	2370	8890	8810	2190	2010	1960	2260
21	4900	2150	2160	2190	2070	2770	7010	8570	2320	2000	1970	2240
22	2600	2630	2160	2130	2200	3630	6720	8410	2360	1990	1960	2250
23	2200	2550	2080	2080	2300	3880	7240	8100	2180	2000	1970	2230
24	2030	2300	2050	2080	2370	4150	7940	7860	2170	2200	2040	2250
25	1950	2170	2100	2140	2230	4070	6900	7120	2280	2070	2100	2240
26	2100	2050	2110	2190	2160	3790	6940	6380	2370	1910	2070	2260
27	2200	2070	2210	2260	2180	3730	7180	4460	2200	2260	2210	2460
28	2000	2150	2070	2490	2250	5360	7180	3740	2210	2620	2290	2550
29	1950	2130	2070	2300	2180	6190	6290	4390	2160	2120	2310	2340
30	1960	2090	2140	2490	---	5920	5770	2060	2090	2180	2490	2200
31	1980	---	2170	2250	---	6350	---	2440	---	2120	2300	---
TOTAL	67020	66460	65560	66580	61590	95570	194220	191140	66800	63910	68540	67760
MEAN	2162	2215	2115	2148	2124	3083	6474	6166	2227	2062	2211	2259
MAX	4900	3010	2370	2490	2370	6350	9980	8810	2450	2620	3230	2550
MIN	1730	1980	1880	2020	2010	2070	3950	2060	2080	1850	1960	2100

CAL YR 1975 TOTAL 808780 MEAN 2216 MAX 6950 MIN 1670
WTR YR 1976 TOTAL 1075150 MEAN 2938 MAX 9980 MIN 1730

01064300 ELLIS RIVER NEAR JACKSON, NH

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

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

PERIOD OF RECORD.--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 period of no gage-height record, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years (water years 1965-76), 34.0 ft^3/s (0.963 m^3/s), 42.36 in/yr (1,076 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft^3/s (11.3 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 28	0345	437	12.4	3.22	0.981	May 19	1530	504	14.3	3.40	1.036
Apr. 1	1845	*†910	25.8	*4.31	1.314	Aug. 10	2115	758	21.5	4.00	1.219

† From rating extended above 390 ft^3/s (11.0 m^3/s) on basis of slope-area measurement at gage height 8.99 ft (2.740 m).

Minimum discharge not determined, minimum daily, 7.5 ft^3/s (0.21 m^3/s) Jan. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	21	39	13	15	15	360	25	42	57	31	16
2	25	21	31	13	35	14	205	150	34	34	55	23
3	22	20	26	12	28	13	82	75	31	27	24	15
4	20	22	25	12	23	13	65	60	29	24	19	13
5	18	19	23	12	19	25	48	45	28	21	17	13
6	18	17	25	11	16	40	45	37	26	19	16	12
7	17	16	28	11	14	23	45	45	26	17	15	11
8	15	19	22	11	13	18	42	38	25	18	17	11
9	14	22	20	10	12	22	38	33	24	19	19	9.8
10	14	25	25	10	11	17	37	29	22	15	233	15
11	15	39	30	9.8	11	16	38	26	24	15	194	88
12	76	26	28	9.7	10	14	33	80	26	17	55	26
13	50	71	26	9.6	9.5	13	31	70	21	15	35	19
14	30	154	24	10	9.5	12	32	57	20	15	31	16
15	26	58	23	12	9.5	12	34	82	19	14	35	14
16	35	40	22	11	9.5	11	50	55	18	13	52	15
17	27	34	21	10	9.4	11	110	59	30	13	31	15
18	82	31	20	9.5	9.3	11	80	61	21	13	26	15
19	49	25	19	9.0	9.2	10	60	254	19	12	24	15
20	114	25	18	8.8	9.1	10	45	116	21	11	22	14
21	63	36	17	8.5	9.1	30	35	88	21	11	20	13
22	44	55	20	8.3	17	50	38	85	22	11	18	13
23	35	34	18	8.0	21	35	37	74	18	12	16	12
24	29	27	17	7.8	22	30	30	72	16	21	16	11
25	29	20	16	7.6	14	30	27	61	78	17	15	11
26	38	23	15	7.6	12	45	32	52	45	13	15	13
27	29	22	18	7.5	18	60	29	59	31	14	16	49
28	26	23	16	100	17	199	28	52	26	16	15	23
29	25	22	15	70	16	77	27	44	27	13	15	18
30	23	21	14	35	---	65	26	39	27	17	14	15
31	21	---	14	20	---	74	---	36	---	24	13	---
TOTAL	1057	988	675	494.7	428.1	1015	1789	2059	817	558	1124	553.8
MEAN	34.1	32.9	21.8	16.0	14.8	32.7	59.6	66.4	27.2	18.0	36.3	18.5
MAX	114	154	39	100	35	199	360	254	78	57	233	88
MIN	14	16	14	7.5	9.1	10	26	25	16	11	13	9.8
CFSM	3.13	3.02	2.00	1.47	1.36	3.00	5.47	6.09	2.50	1.65	3.33	1.70
IN.	3.61	3.37	2.30	1.69	1.46	3.46	6.11	7.03	2.79	1.90	3.84	1.89

CAL YR 1975 TOTAL 11331.9 MEAN 31.0 MAX 302 MIN 5.0 CFSM 2.84 IN 38.67
WTR YR 1976 TOTAL 11558.6 MEAN 31.6 MAX 360 MIN 7.5 CFSM 2.90 IN 39.44

NOTE.--No gage-height record Dec. 17 to Feb. 4, Feb. 22 to Mar. 25, Apr. 12 to May 13.

01064400 LUCY BROOK NEAR NORTH CONWAY, NH

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

DRAINAGE AREA.--4.68 mi^2 (12.12 km^2).

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 and period of no gage-height record, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years, 11.0 ft^3/s (0.312 m^3/s), 31.92 in/yr (811 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 992 ft^3/s (28.1 m^3/s) Nov. 3, 1966, Apr. 25, 1968, June 30, 1973, gage height, 9.20 ft (2.804 m), from floodmarks, from rating curve extended above 50 ft^3/s (1.42 m^3/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 ft^3/s (0.009 m^3/s) Sept. 2, 3, 29, 30, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 190 ft^3/s (5.38 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 1	1815	*445	12.6	*7.26	2.213	Aug. 10	-	200	5.66	-	-

Minimum discharge, 1.4 ft^3/s (0.040 m^3/s) Jan. 18-22, July 22-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	12	21	2.4	10	14	153	14	10	20	8.0	3.0
2	3.0	11	22	2.3	15	13	118	99	7.1	9.1	8.0	3.7
3	2.3	11	18	2.2	23	12	75	46	6.4	5.9	4.8	3.2
4	2.1	10	15	2.2	18	11	55	38	5.9	4.6	3.9	2.7
5	1.8	10	12	2.1	17	16	42	24	5.1	4.2	3.4	2.7
6	1.8	7.9	8.4	2.0	14	37	34	19	4.6	3.9	3.0	2.6
7	1.7	7.9	5.0	1.9	12	20	31	23	4.4	3.5	2.6	2.2
8	1.5	9.2	4.0	1.9	11	15	26	23	4.2	3.9	3.0	2.2
9	1.5	11	4.0	1.8	11	20	23	17	3.9	3.4	3.3	2.2
10	1.5	13	9.7	1.8	10	13	22	15	3.7	2.6	50	2.4
11	1.6	25	11	1.7	9.7	11	21	12	3.4	2.4	42	8.5
12	26	18	7.0	1.7	9.6	11	17	45	3.5	3.9	12	4.1
13	14	66	6.1	1.6	9.3	10	16	29	3.2	2.6	8.6	3.2
14	8.4	95	5.8	1.6	9.2	9.2	17	18	2.9	2.4	6.8	2.6
15	5.8	51	6.1	1.6	12	8.8	18	15	2.7	2.3	15	2.4
16	5.2	34	7.4	1.5	8.8	8.8	46	13	2.4	2.2	26	2.4
17	4.3	27	6.7	1.5	8.8	19	63	12	2.9	2.3	18	2.4
18	62	23	5.5	1.4	9.7	12	51	15	2.4	2.1	12	2.9
19	35	21	5.2	1.4	10	15	38	64	2.2	1.9	9.0	2.7
20	78	19	4.8	1.4	10	13	26	64	2.2	1.8	7.8	2.3
21	44	31	4.5	1.4	9.7	31	19	39	2.9	1.7	6.6	2.2
22	26	48	4.2	1.4	12	42	21	30	3.4	1.5	6.0	1.7
23	20	30	3.8	1.6	15	23	23	20	2.4	1.4	5.4	1.7
24	17	24	3.7	1.8	16	16	17	16	2.1	4.8	4.9	1.7
25	17	22	3.5	2.2	12	18	14	14	5.5	2.3	4.5	1.7
26	28	20	3.3	4.0	10	32	17	12	3.9	1.9	4.2	2.2
27	19	18	3.1	10	15	39	15	11	3.4	1.9	3.9	9.5
28	17	17	2.9	50	17	99	14	9.5	2.9	1.9	3.9	4.8
29	15	16	2.8	20	15	56	14	8.5	2.4	1.8	4.1	3.9
30	14	15	2.7	13	---	45	13	7.7	5.5	3.9	3.9	3.5
31	13	---	2.5	11	---	42	---	7.1	---	5.3	3.4	---
TOTAL	491.1	723.0	221.7	152.4	359.8	731.8	1059	779.8	117.5	113.4	298.0	93.3
MEAN	15.8	24.1	7.15	4.92	12.4	23.6	35.3	25.2	3.92	3.66	9.61	3.11
MAX	78	95	22	50	23	99	153	99	10	20	50	9.5
MIN	1.5	7.9	2.5	1.4	8.8	8.8	13	7.1	2.1	1.4	2.6	1.7
CFSM	3.38	5.15	1.53	1.05	2.65	5.04	7.54	5.38	.84	.78	2.05	.66
IN.	3.90	5.75	1.76	1.21	2.86	5.82	8.42	6.20	.93	.90	2.37	.74

CAL YR 1975 TOTAL 4155.60 MEAN 11.4 MAX 168 MIN .80 CFSM 2.44 IN 33.02
WTR YR 1976 TOTAL 5140.80 MEAN 14.0 MAX 153 MIN 1.4 CFSM 2.99 IN 40.85

NOTE.--No gage-height record Aug. 9-25.

01064500 SACO RIVER NEAR CONWAY, NH

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

DRAINAGE AREA.--386 mi^2 (1,000 km^2).

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

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

GAGE.--Water-stage recorder. Datum of gage is 418.19 ft (127.464 m) 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.

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

AVERAGE DISCHARGE.--53 years (water years 1904-9, 1930-76), 926 ft^3/s (26.22 m^3/s), 32.58 in/yr (828 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43,900 ft^3/s (1,240 m^3/s) Mar. 27, 1953, gage height, 17.20 ft (5.243 m), from rating curve extended above 23,000 ft^3/s (651 m^3/s) on basis of slope-area measurement of peak flow; minimum, 40 ft^3/s (1.13 m^3/s) Mar. 16, 1932, gage height, 1.61 ft (0.491 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,700 ft^3/s (246 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 2	0300	*17,900	507	-	-	Aug. 10	2000	10,500	297	8.58	2.615

Minimum discharge, 218 ft^3/s (6.17 m^3/s) July 23, gage height, 2.41 ft (0.735 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	549	643	1110	470	1270	1120	6320	1350	1120	1800	585	363
2	478	616	1330	435	1760	1060	12000	5470	961	1200	1100	537
3	425	586	1040	415	2450	1070	6510	3570	836	760	615	475
4	388	618	885	395	1780	1020	4780	3300	782	570	448	387
5	357	614	746	385	1380	968	3670	2320	708	450	380	356
6	339	535	804	375	1250	2610	3060	1920	654	370	336	330
7	327	505	810	370	1130	1780	2890	2390	628	320	321	307
8	312	515	683	360	1030	1350	2600	2530	620	370	363	290
9	298	667	744	355	940	1130	2270	1940	559	480	389	282
10	289	617	892	350	870	1120	2070	1630	512	390	4210	282
11	289	1420	1270	345	790	989	2070	1480	481	320	3980	990
12	1160	1040	881	350	730	866	1790	2840	515	330	1550	693
13	1290	2360	783	355	680	891	1590	3170	484	360	1010	469
14	811	4050	700	370	630	873	1590	2030	438	350	808	389
15	648	3270	670	375	590	794	1710	1830	413	330	1530	348
16	596	1990	615	360	570	719	2690	1580	385	312	5920	330
17	590	1550	580	345	540	661	4850	1430	491	310	2450	322
18	1550	1320	540	340	530	775	5290	1420	502	299	1410	341
19	2170	1180	490	335	520	687	4640	3200	405	274	1070	370
20	2870	1070	425	330	575	817	3980	4580	380	258	881	331
21	3230	1130	495	325	580	1720	2850	3130	580	244	2150	308
22	1770	2690	550	320	630	3380	2380	2910	810	235	659	287
23	1310	1690	515	315	1980	1840	3160	2350	520	224	582	277
24	1090	1340	460	310	1290	1520	2270	1970	350	424	527	272
25	955	1190	430	310	1100	1690	1810	1720	600	548	480	260
26	1210	1060	470	310	964	2110	1850	1520	1020	346	442	260
27	1020	1010	580	310	1080	2570	1730	1400	700	291	425	1180
28	875	981	670	1300	1400	5950	1630	1260	500	293	422	944
29	797	894	590	2750	1300	4480	1550	1120	440	274	420	594
30	759	836	540	2020	---	3620	1460	1010	460	315	460	478
31	693	---	495	1500	---	3420	---	937	---	560	389	---
TOTAL	29445	37987	21793	17185	30339	53600	97060	69307	17854	13607	36312	13052
MEAN	950	1266	703	554	1046	1729	3235	2236	595	439	1171	435
MAX	3230	4050	1330	2750	2450	5950	12000	5470	1120	1800	5920	1180
MIN	289	505	425	310	520	661	1460	937	350	224	321	260
CFSM	2.46	3.28	1.82	1.44	2.71	4.48	8.38	5.79	1.54	1.14	3.03	1.13
IN.	2.84	3.66	2.10	1.66	2.92	5.17	9.35	6.68	1.72	1.31	3.50	1.26

CAL YR 1975 TOTAL 323231 MEAN 886 MAX 4740 MIN 130 CFSM 2.30 IN 31.15
WTR YR 1976 TOTAL 437541 MEAN 1195 MAX 12000 MIN 224 CFSM 3.10 IN 42.17

01065000 OSSIPEE RIVER AT EFFINGHAM FALLS, NH

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

DRAINAGE AREA.--330 mi^2 (855 km^2).

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 ft^3 (40,500,000 m^3). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--34 years, 690 ft^3/s (19.54 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft^3/s (331 m^3/s) Mar. 28, 1953, gage height, 11.64 ft (3.548 m); minimum, about 5 ft^3/s (0.14 m^3/s) during part of several days Nov. 4-20, 1968 (caused by unusual regulation); minimum daily, 11 ft^3/s (0.31 m^3/s) Oct. 10, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,530 ft^3/s (128 m^3/s) Apr. 3, gage height, 8.79 ft (2.679 m); minimum, 153 ft^3/s (4.33 m^3/s) June 15, 16, 18, 19; minimum daily, 154 ft^3/s (4.36 m^3/s) June 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	783	484	1080	640	675	944	2760	1030	598	283	933	170
2	767	483	742	533	803	946	3730	1120	503	384	918	169
3	748	483	753	426	955	943	4470	1460	512	429	914	170
4	731	483	720	427	1060	909	4370	1600	558	417	647	169
5	710	481	858	427	1270	919	4000	1570	619	403	397	170
6	692	479	935	425	1430	925	3560	1490	611	326	264	169
7	667	477	921	425	1310	928	3210	1410	606	285	180	169
8	648	478	658	425	1210	892	2900	1400	602	287	181	167
9	627	479	471	423	1130	941	2610	1350	597	212	400	169
10	535	482	601	422	1130	932	2360	1280	591	173	866	174
11	476	492	703	420	1150	920	2150	1210	387	175	983	174
12	479	524	707	420	1110	898	1970	1170	280	195	992	172
13	488	876	708	420	1080	887	1780	1230	302	231	974	171
14	554	1400	706	421	1020	869	1640	831	237	258	953	174
15	591	1620	702	420	1020	851	1520	554	189	260	931	180
16	585	1630	700	420	962	826	1150	598	154	310	929	233
17	577	1540	704	421	944	810	997	912	155	336	946	253
18	580	1430	700	418	954	783	1100	1090	155	324	938	252
19	602	1320	694	417	940	762	1140	1080	156	244	921	251
20	630	1230	677	414	918	744	1140	1240	159	198	647	249
21	678	1180	676	414	901	750	1090	1390	157	195	487	247
22	706	1270	669	413	894	818	1050	1440	157	192	485	246
23	717	1340	677	408	902	878	1070	1430	159	188	302	244
24	720	1330	672	407	917	909	1060	1370	162	203	169	243
25	721	1280	662	404	921	933	1040	1310	166	225	169	242
26	723	1230	654	404	918	968	1050	1140	169	224	169	240
27	726	1180	648	409	914	1030	1100	1020	177	216	170	243
28	725	1150	654	432	923	1150	1130	861	240	217	171	247
29	724	1120	651	467	940	2100	1110	755	271	212	171	249
30	721	1100	647	498	---	2720	1080	744	269	352	171	248
31	582	---	638	586	---	2730	---	739	---	735	170	---
TOTAL	20213	29051	21988	13606	29301	32615	59337	35824	9898	8689	17548	6254
MEAN	652	968	709	439	1010	1052	1978	1156	330	280	566	208
MAX	783	1630	1080	640	1430	2730	4470	1600	619	735	992	253
MIN	476	477	471	404	675	744	997	554	154	173	169	167

CAL YR 1975 TOTAL 239843 MEAN 657 MAX 2540 MIN 165
WTR YR 1976 TOTAL 284324 MEAN 777 MAX 4470 MIN 154

01072100 SALMON FALLS RIVER AT MILTON, NH

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

DRAINAGE AREA.--108 mi^2 (280 km^2).

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. 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 ft^3 (36,250,000 m^3). See table below for figures of monthend contents. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--8 years, 207 ft^3/s (5.862 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,730 ft^3/s (49.0 m^3/s) Feb. 12, 1970, gage height, 5.49 ft (1.673 m); minimum daily, 19 ft^3/s (0.54 m^3/s) Aug. 30, Sept. 13, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,490 ft^3/s (42.2 m^3/s) Apr. 2, gage height, 5.29 ft (1.612 m); minimum daily, 24 ft^3/s (0.64 m^3/s) July 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	246	138	340	140	470	389	782	186	130	25	72	29
2	214	135	320	130	531	389	1400	380	85	25	144	28
3	185	135	300	120	628	389	1350	408	91	25	173	28
4	167	135	290	115	608	366	1000	322	98	25	147	28
5	149	143	270	110	550	357	677	313	98	25	114	28
6	132	143	330	102	480	357	519	297	98	24	67	28
7	138	140	270	104	418	370	326	289	85	25	44	49
8	140	138	240	110	350	375	237	273	72	25	44	29
9	122	138	210	120	290	352	277	264	72	25	85	29
10	128	140	290	130	234	326	289	261	72	25	361	34
11	132	161	310	140	164	245	285	243	54	25	209	38
12	138	228	320	150	182	179	281	189	40	25	100	38
13	146	302	330	160	192	186	264	141	40	27	122	38
14	149	507	310	171	202	199	199	158	36	27	119	57
15	146	581	280	190	202	153	100	182	34	27	117	72
16	132	514	290	210	202	114	102	219	34	28	122	67
17	161	433	270	219	212	133	70	237	34	28	115	98
18	207	384	260	219	226	141	70	249	34	28	113	127
19	238	348	240	199	230	147	68	519	34	27	94	125
20	260	317	220	209	245	153	68	790	34	27	86	125
21	280	223	210	190	264	179	68	519	34	27	80	125
22	280	182	208	185	273	273	67	389	34	27	77	125
23	256	253	205	179	297	339	65	394	34	27	73	125
24	218	348	202	167	317	348	65	361	34	27	73	125
25	191	445	199	150	322	357	65	305	34	27	55	125
26	176	337	199	150	335	394	95	257	35	27	49	122
27	176	350	190	153	348	454	202	237	35	27	45	138
28	173	340	180	209	361	569	249	223	32	27	35	150
29	161	340	170	322	384	767	230	202	27	27	43	141
30	155	340	160	450	---	775	205	189	25	34	42	138
31	146	---	150	460	---	649	---	176	---	56	29	---
TOTAL	5542	8318	7763	5663	9517	10424	9675	9172	1599	851	3049	2409
MEAN	179	277	250	183	328	336	323	296	53.3	27.5	98.4	80.3
MAX	280	581	340	460	628	775	1400	790	130	56	361	150
MIN	122	135	150	102	164	114	65	141	25	24	29	28
(†)	846.9	884.0	810.7	738.9	814.5	1045.0	1242.7	1221.2	1169.0	1169.0	1133.1	936.5

CAL YR 1975 TOTAL 68233 MEAN 187 MAX 1050 MIN 26
WTR YR 1976 TOTAL 73982 MEAN 202 MAX 1400 MIN 24

† 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.

01072850 MOHAWK BROOK NEAR CENTER STRAFFORD, NH

LOCATION.--Lat 43°15'47", long 71°05'50", Strafford County, Hydrologic Unit 01070002, 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 mi^2 (22.97 km^2).

PERIOD OF RECORD.--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, which are fair and those for periods of no gage-height record, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years, 12.2 ft^3/s (0.346 m^3/s), 18.68 in/yr (475 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 934 ft^3/s (26.5 m^3/s) Apr. 3, 1975, gage height, 4.82 ft (1.469 m), from rating curve extended above 230 ft^3/s (6.51 m^3/s); maximum gage height, 6.02 ft (1.835 m) Feb. 11, 1970, backwater from ice; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft^3/s (2.83 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 28	-	100	3.83	Ice jam		Apr. 1	2100	*263	7.45	*3.53	1.076
Feb. 2	-	120	3.40	Ice jam							

Minimum discharge not determined; minimum daily, 0.25 ft^3/s (0.007 m^3/s), Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	9.9	19	16	26	24	89	6.1	5.9	1.2	4.4	.65
2	3.3	8.6	16	14	85	23	106	33	5.9	1.5	5.4	.60
3	2.5	8.3	15	13	90	24	43	24	5.4	1.3	3.4	.70
4	1.8	8.0	13	12	65	22	30	20	5.0	1.1	2.3	.70
5	1.5	8.0	11	11	33	24	24	14	4.6	.85	1.6	.60
6	1.3	7.1	11	10	24	44	20	11	3.9	.70	1.3	.60
7	1.2	6.4	11	9.8	20	32	17	9.9	3.9	.55	1.1	.50
8	.98	8.9	9.6	9.6	17	24	15	12	3.9	.45	1.1	.35
9	.91	14	9.2	9.4	15	22	13	12	3.7	.50	1.6	.30
10	.91	15	51	9.0	14	16	12	9.2	3.1	.35	8.9	.25
11	1.3	29	40	8.8	14	15	11	7.4	2.6	.60	8.9	.60
12	38	20	24	8.6	13	15	9.9	11	2.3	1.2	4.6	.70
13	23	70	19	8.4	12	16	9.2	13	2.3	1.2	3.0	.60
14	14	81	17	51	11	22	8.9	9.2	2.1	1.8	2.2	.50
15	10	42	15	44	10	19	8.3	9.6	2.1	1.9	2.0	.30
16	7.7	29	12	22	13	16	7.7	8.9	1.8	1.4	2.5	.35
17	6.1	23	11	16	16	15	6.9	8.3	1.7	1.0	1.5	.40
18	26	19	9.8	12	18	14	6.1	19	1.7	.72	1.3	.60
19	32	16	9.0	11	25	13	5.0	56	1.6	.52	1.0	.95
20	27	14	8.4	10	29	15	5.0	45	1.5	.35	.98	.90
21	29	15	8.8	9.8	20	39	4.8	30	1.5	.35	.84	.70
22	19	39	9.0	9.6	31	56	4.8	24	1.1	.50	.72	.60
23	14	25	9.5	9.2	43	33	5.0	19	1.0	1.5	.66	.55
24	11	19	9.0	9.0	29	27	5.0	15	.98	3.1	.61	.40
25	11	18	8.5	9.0	20	34	5.4	13	.90	3.6	.55	.35
26	22	15	33	13	20	42	16	12	.90	1.9	.45	.30
27	18	25	66	43	29	40	15	12	.95	1.2	.38	.40
28	13	43	43	85	37	52	10	9.2	1.0	1.0	.40	2.0
29	11	27	30	80	29	42	8.3	7.7	.95	.84	.50	1.7
30	11	21	22	53	---	33	7.1	6.9	.85	1.0	.75	1.2
31	11	---	19	34	---	28	---	6.6	---	3.4	1.1	---
TOTAL	373.40	684.2	588.8	660.2	808	841	528.4	494.0	75.13	37.58	66.04	19.35
MEAN	12.0	22.8	19.0	21.3	27.9	27.1	17.6	15.9	2.50	1.21	2.13	.65
MAX	38	81	66	85	90	56	106	56	5.9	3.6	8.9	2.0
MIN	.91	6.4	8.4	8.4	10	13	4.8	6.1	.85	.35	.38	.25
CFSM	1.35	2.57	2.14	2.40	3.15	3.06	1.98	1.79	.28	.14	.24	.07
IN.	1.57	2.87	2.47	2.77	3.39	3.53	2.22	2.07	.32	.16	.28	.08

CAL YR 1975 TOTAL 5077.93 MEAN 13.9 MAX 305 MIN .07 CFSM 1.57 IN 21.29
WTR YR 1976 TOTAL 5176.10 MEAN 14.1 MAX 106 MIN .25 CFSM 1.59 IN 21.71

NOTE.--No gage-height record June 22 to July 11, July 20-23, Aug. 16, 17, Aug. 25 to Sept. 30.

01073000 OYSTER RIVER NEAR DURHAM, NH

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

DRAINAGE AREA.--12.1 mi^2 (31.3 km^2).

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. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--42 years, 19.3 ft^3/s (0.547 m^3/s), 21.66 in/yr (550 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 862 ft^3/s (24.4 m^3/s) Sept. 11, 1954, gage height, 6.47 ft (1.972 m), present datum; maximum gage height, 8.45 ft (2.576 m), present datum, Mar. 19, 1936; minimum discharge, 0.23 ft^3/s (0.007 m^3/s) Aug. 18, 19, 25, 26, 27, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 170 ft^3/s (4.81 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 10	0630	*179	5.07	*3.24	.988						

Minimum discharge, 0.40 ft^3/s (0.011 m^3/s) Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	15	39	32	47	47	78	15	7.0	2.4	5.4	1.0
2	8.3	13	33	28	88	35	109	46	7.0	2.4	5.2	1.2
3	6.7	12	29	25	90	34	72	37	5.9	2.0	2.4	1.1
4	7.7	12	26	24	72	37	57	31	5.9	1.9	1.7	.92
5	10	12	21	21	53	45	46	24	4.7	2.1	1.4	1.2
6	9.1	10	21	18	42	75	39	19	4.3	1.9	1.2	1.1
7	7.8	9.4	22	19	33	65	33	20	5.0	1.9	1.3	.92
8	6.9	12	18	26	29	46	25	21	4.7	1.9	2.1	.84
9	6.1	15	18	23	26	35	26	18	3.9	2.1	5.9	.84
10	5.7	20	135	19	24	39	27	15	4.3	1.5	17	.92
11	6.1	41	96	18	27	38	25	13	3.9	.84	5.4	1.5
12	45	32	63	17	29	32	22	21	2.8	5.9	2.9	1.2
13	33	114	45	16	29	40	20	20	2.0	2.8	2.0	1.1
14	23	131	40	36	32	47	18	14	2.1	2.1	1.9	1.5
15	18	84	33	39	26	41	15	16	2.3	1.9	2.3	1.3
16	14	59	29	36	32	32	16	15	2.1	1.7	3.1	1.1
17	12	46	25	31	35	25	18	14	2.1	1.4	2.1	1.0
18	50	38	22	26	41	28	17	19	2.1	1.2	1.5	1.1
19	55	34	20	22	47	25	16	31	2.0	2.0	1.2	1.2
20	53	28	19	20	56	33	14	31	1.9	2.0	1.1	1.1
21	48	27	19	18	46	65	13	25	1.9	2.0	1.0	.92
22	33	63	20	17	59	94	13	24	1.7	2.0	.92	1.0
23	23	42	21	16	71	68	15	20	1.6	1.9	.92	.90
24	17	31	20	15	52	56	13	16	1.9	4.5	.76	.80
25	17	27	19	14	44	62	14	14	1.7	2.6	.69	.74
26	37	39	26	19	45	67	37	13	1.7	1.6	.62	.68
27	27	64	45	29	55	65	29	13	2.0	1.3	.76	1.3
28	21	86	45	81	64	74	22	10	2.1	2.4	.92	1.5
29	16	62	40	78	51	63	19	8.7	2.0	1.7	1.0	1.0
30	19	46	34	71	---	51	17	8.1	1.7	1.9	2.1	.80
31	18	---	33	57	---	44	---	7.6	---	5.4	1.2	---
TOTAL	663.4	1224.4	1076	911	1345	1508	885	599.4	94.3	69.24	77.99	31.78
MEAN	21.4	40.8	34.7	29.4	46.4	48.6	29.5	19.3	3.14	2.23	2.52	1.06
MAX	55	131	135	81	90	94	109	46	7.0	5.9	17	1.5
MIN	5.7	9.4	18	14	24	25	13	7.6	1.6	.84	.62	.68
CFSM	1.77	3.37	2.87	2.43	3.83	4.02	2.44	1.60	.26	.18	.21	.09
IN.	2.04	3.76	3.31	2.80	4.13	4.64	2.72	1.84	.29	.21	.24	.10

CAL YR 1975 TOTAL 8032.85 MEAN 22.0 MAX 255 MIN .76 CFSM 1.82 IN 24.69
WTR YR 1976 TOTAL 8485.51 MEAN 23.2 MAX 135 MIN .62 CFSM 1.92 IN 26.09

01073500 LAMPREY RIVER NEAR NEWMARKET, NH

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

DRAINAGE AREA.--183 mi^2 (474 km^2).

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).

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

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

REMARKS.--Records excellent. Some regulation by Pawtuckaway and Mendums Ponds, combined capacity, about 600,000,000 ft^3 (17,000,000 m^3). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--42 years, 279 ft^3/s (7.901 m^3/s), 20.70 in/yr (526 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,490 ft^3/s (155 m^3/s) Mar. 20, 1936, gage height, 14.88 ft (4.535 m), from rating curve extended above 3,100 ft^3/s (87.8 m^3/s) on basis of computation of flow over dam at gage height 14.69 ft (4.478 m); minimum daily, 1 ft^3/s (0.028 m^3/s) Oct. 21, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,540 ft^3/s (43.6 m^3/s) Nov. 15, gage height, 6.23 ft (1.899 m); minimum daily, 8.7 ft^3/s (0.25 m^3/s) Sept. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	345	467	629	466	946	692	755	234	144	27	50	18
2	270	412	555	426	987	590	1130	383	132	28	47	19
3	230	365	500	397	1030	493	1220	461	120	27	45	17
4	193	339	451	376	1020	533	1050	497	109	26	40	17
5	158	319	400	339	977	595	758	439	97	24	35	18
6	135	294	372	309	839	804	595	366	87	21	31	16
7	119	273	361	302	657	861	495	319	84	20	30	18
8	107	278	328	347	536	780	434	302	86	19	32	15
9	107	304	317	348	462	635	393	284	81	17	39	11
10	99	330	887	316	415	547	363	264	77	15	77	11
11	99	459	933	285	397	491	341	236	67	15	74	14
12	274	463	835	271	401	439	321	246	56	35	67	13
13	403	858	696	263	394	441	299	286	51	54	56	15
14	541	1270	581	390	412	523	279	277	46	58	48	16
15	486	1460	534	478	379	534	266	279	44	54	48	15
16	448	1410	510	471	412	509	251	262	41	41	47	14
17	445	1050	464	473	481	409	242	247	40	35	43	13
18	534	793	434	426	516	470	230	245	38	29	37	14
19	694	649	340	366	570	430	216	318	32	25	32	14
20	758	554	290	328	647	442	202	436	31	24	28	12
21	768	530	279	303	629	643	185	511	31	27	25	12
22	741	704	295	293	725	942	173	503	32	23	22	10
23	686	726	320	262	823	1010	161	439	28	20	22	11
24	561	696	296	248	788	935	170	372	26	28	20	9.7
25	481	619	286	233	748	826	174	316	23	35	17	8.7
26	514	553	325	229	687	832	293	276	22	32	16	8.7
27	482	605	499	287	686	866	332	246	24	33	16	10
28	458	815	542	657	739	931	338	219	25	31	15	12
29	410	800	562	815	717	949	301	193	25	26	16	13
30	403	729	531	990	---	894	263	179	24	27	21	27
31	451	---	491	1060	---	723	---	159	---	43	21	---
TOTAL	12400	19124	14843	12754	19020	20769	12230	9794	1723	919	1117	422.1
MEAN	400	637	479	411	656	670	408	316	57.4	29.6	36.0	14.1
MAX	768	1460	933	1060	1030	1010	1220	511	144	58	77	27
MIN	99	273	279	229	379	409	161	159	22	15	15	8.7
CFSM	2.19	3.48	2.62	2.25	3.58	3.66	2.23	1.73	.31	.16	.20	.08
IN.	2.52	3.89	3.02	2.59	3.87	4.22	2.49	1.99	.35	.19	.23	.09

CAL YR 1975 TOTAL 119931.0 MEAN 329 MAX 2100 MIN 20 CFSM 1.80 IN 24.38
WTR YR 1976 TOTAL 125115.1 MEAN 342 MAX 1460 MIN 8.7 CFSM 1.87 IN 25.43

01073600 DUDLEY BROOK NEAR EXETER, NH

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

DRAINAGE AREA.--4.97 mi^2 (12.87 km^2).

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. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 7.08 ft^3/s (0.201 m^3/s), 19.35 in/yr (491 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 358 ft^3/s (10.14 m^3/s) Apr. 2, 1973, gage height, 7.74 ft (2.36 m), from rating curve extended above 210 ft^3/s (5.95 m^3/s); no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 87 ft^3/s (2.46 m^3/s), Nov. 13, gage height, 5.56 ft (1.695 m); no peak above base of 100 ft^3/s (2.83 m^3/s); maximum gage height, 5.82 ft (1.774 m) Feb. 22, ice jam; minimum discharge, 0.03 ft^3/s (0.001 m^3/s) July 11, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	6.8	13	14	22	20	30	4.4	.93	.14	.34	.14
2	2.6	5.4	11	12	40	17	54	24	.93	.19	.30	.12
3	1.9	4.6	10	11	45	12	22	24	.89	.15	.19	.15
4	1.7	4.3	9.0	10	35	11	14	14	.74	.12	.10	.15
5	1.4	4.9	8.0	9.4	29	15	9.9	9.2	.55	.10	.06	.13
6	1.1	4.6	7.0	8.8	20	27	8.2	5.9	.48	.07	.05	.13
7	1.1	3.8	6.4	8.0	16	20	7.1	5.2	.58	.06	.07	.11
8	.93	3.9	6.2	7.6	13	16	6.2	5.4	.74	.05	.18	.08
9	.83	7.8	5.9	7.3	12	12	5.9	5.3	.62	.06	.58	.06
10	.74	8.8	31	7.0	11	10	5.5	3.9	.45	.04	1.7	.05
11	1.2	16	22	6.8	10	9.7	5.4	3.2	.36	.04	2.2	.13
12	19	13	18	6.6	9.3	10	4.9	4.6	.30	.11	1.4	.15
13	24	61	13	6.4	8.8	12	4.1	8.8	.25	.39	.62	.13
14	12	71	10	24	8.3	15	4.3	8.6	.20	.20	.48	.10
15	7.6	31	9.0	20	8.0	13	4.1	4.9	.20	.14	.56	.06
16	5.0	15	8.0	16	8.6	11	3.9	4.6	.18	.11	.83	.07
17	3.6	13	7.0	14	9.4	10	3.8	3.8	.16	.09	.93	.07
18	19	11	6.2	12	10	8.6	3.5	4.4	.19	.07	.74	.13
19	43	10	5.6	11	12	9.9	3.2	8.0	.19	.06	.51	.19
20	28	9.2	5.2	10	19	12	2.8	9.9	.18	.04	.26	.18
21	25	8.7	5.0	9.0	14	20	2.4	9.2	.12	.04	.16	.14
22	14	10	5.0	8.2	30	35	2.6	9.9	.12	.05	.14	.12
23	9.2	21	5.2	7.8	22	28	3.9	7.6	.10	.06	.13	.11
24	6.4	12	5.6	6.8	17	20	4.1	4.9	.09	.13	.13	.08
25	5.4	11	5.2	6.2	13	22	3.8	3.6	.08	.25	.11	.07
26	13	10	7.0	5.5	15	24	13	3.1	.09	.12	.09	.06
27	14	12	12	15	17	20	18	2.6	.11	.06	.07	.08
28	8.6	17	15	45	25	21	10	2.1	.14	.04	.09	.42
29	6.2	25	21	42	22	18	7.0	1.5	.11	.04	.11	.37
30	6.4	16	18	36	---	12	5.4	1.3	.10	.09	.16	.24
31	9.0	---	16	30	---	9.9	---	1.1	---	.32	.18	---
TOTAL	296.00	447.8	326.5	433.4	521.4	501.1	273.0	209.0	10.18	3.43	13.47	4.02
MEAN	9.55	14.9	10.5	14.0	18.0	16.2	9.10	6.74	.34	.11	.43	.13
MAX	43	71	31	45	45	35	54	24	.93	.39	2.2	.42
MIN	.74	3.8	5.0	5.5	8.0	8.6	2.4	1.1	.08	.04	.05	.05
CFSM	1.92	3.00	2.11	2.82	3.62	3.26	1.83	1.36	.07	.02	.09	.03
IN.	2.22	3.35	2.44	3.24	3.90	3.75	2.04	1.56	.08	.03	.10	.03

CAL YR 1975 TOTAL 2904.29 MEAN 7.96 MAX 98 MIN .02 CFSM 1.60 IN 21.73
WTR YR 1976 TOTAL 3039.30 MEAN 8.30 MAX 71 MIN .04 CFSM 1.67 IN 22.74

NOTE.--No gage-height record Nov. 18 to Dec. 11, Jan. 30 to Feb. 16.

01075000 PEMIGEWASSET RIVER AT WOODSTOCK, NH

LOCATION.--Lat 43°58'34", long 71°40'48", Grafton County, Hydrologic Unit 01070001, 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 mi^2 (500 km^2).

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).

REVISED RECORDS.--WSP 1701: 1942(M).

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

REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation caused by power-plant upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--37 years, 513 ft^3/s (14.53 m^3/s), 36.10 in/yr (917 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,000 ft^3/s (1,330 m^3/s) Oct. 24, 1959, gage height, 16.13 ft (4.916 m), from rating curve extended above 14,000 ft^3/s (396 m^3/s) on basis of contracted-opening measurement of peak flow; minimum daily, 42 ft^3/s (1.19 m^3/s) Feb. 11, 1948.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,100 ft^3/s (201 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 1	2000	*11,500	326	*9.52	2.902						

Minimum discharge, 126 ft^3/s (3.57 m^3/s) July 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	485	313	562	220	596	433	5110	777	592	803	515	189
2	418	299	587	205	1280	404	4960	3120	494	581	790	553
3	359	296	452	195	1010	386	2810	2110	424	424	400	291
4	316	363	361	185	733	377	1850	1820	405	370	287	216
5	284	322	306	180	617	559	1430	1130	355	313	240	199
6	267	277	374	175	500	1250	1260	996	322	271	219	186
7	259	258	389	170	400	700	1200	1190	308	247	216	166
8	233	351	286	165	320	535	1090	1260	300	243	251	150
9	218	535	306	160	340	456	929	929	263	296	345	141
10	208	488	474	155	350	438	857	784	240	229	2590	138
11	214	975	516	150	406	400	857	728	226	202	1960	944
12	792	597	346	145	355	378	703	2340	255	296	822	469
13	579	1680	289	145	315	360	632	1760	222	255	575	313
14	475	2140	304	145	297	333	656	1090	206	236	526	243
15	382	1350	334	160	269	301	796	1070	192	263	638	209
16	487	875	459	155	337	272	1920	886	179	212	1930	192
17	425	710	284	150	283	267	3630	796	444	199	871	186
18	1730	630	304	145	272	262	3740	850	296	182	621	216
19	1160	564	197	140	343	256	3290	2250	222	166	494	380
20	3170	506	160	140	351	452	2810	2120	255	154	419	267
21	1790	655	200	140	271	1230	1870	1550	400	144	360	229
22	1040	1420	270	135	586	2100	1500	1620	581	144	313	212
23	775	756	250	135	1110	891	1730	1240	360	129	275	199
24	643	606	210	135	560	715	1190	996	267	484	243	186
25	571	535	200	135	435	753	959	871	1230	360	222	169
26	615	474	240	135	413	899	951	784	1260	216	206	176
27	518	449	280	170	585	1140	864	752	627	182	196	2040
28	454	432	320	1200	650	3590	878	656	484	279	196	803
29	412	385	290	1500	478	1930	850	570	479	202	226	531
30	379	358	260	910	---	1520	850	515	405	300	233	419
31	338	---	240	656	---	1560	---	474	---	400	186	---
TOTAL	19996	19599	10050	8536	14462	25147	52172	38034	12293	8782	17365	10612
MEAN	645	653	324	275	499	811	1739	1227	410	283	560	354
MAX	3170	2140	587	1500	1280	3590	5110	3120	1260	803	2590	2040
MIN	208	258	160	135	269	256	632	474	179	129	186	138
CFSM	3.34	3.38	1.68	1.42	2.59	4.20	9.01	6.36	2.12	1.47	2.90	1.83
IN.	3.85	3.78	1.94	1.65	2.79	4.85	10.06	7.33	2.37	1.69	3.35	2.05

CAL YR 1975 TOTAL 191766 MEAN 525 MAX 3370 MIN 68 CFSM 2.72 IN 36.96
WTR YR 1976 TOTAL 237048 MEAN 648 MAX 5110 MIN 129 CFSM 3.36 IN 45.69

01075800 STEVENS BROOK NEAR WENTWORTH, NH

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

DRAINAGE AREA.--2.94 mi^2 (7.61 km^2).

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. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years, 4.70 ft^3/s (0.133 m^3/s), 21.71 in/yr (551 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft^3/s (31.7 m^3/s) June 30, 1973, gage height, 6.36 ft (1.939 m), from rating curve extended above 120 ft^3/s (3.40 m^3/s); minimum, 0.01 ft^3/s (<0.001 m^3/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.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 90 ft^3/s (2.55 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	0845	144	4.08	3.23	0.985	Apr. 1	1530	*222	6.29	*3.76	1.146
Mar. 28	0215	129	3.65	3.21	0.978						

Minimum discharge, 0.19 ft^3/s (0.005 m^3/s) July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.8	12	2.0	12	6.0	83	6.1	3.8	.92	4.2	.54
2	1.9	1.7	9.4	1.9	20	5.3	38	33	2.6	.98	3.3	.75
3	1.8	1.7	6.3	1.8	17	4.8	23	12	2.1	.75	1.1	.66
4	1.3	6.6	4.6	1.7	11	4.5	14	8.3	1.9	.72	.72	.61
5	.84	4.5	5.0	1.7	8.0	9.0	9.1	6.3	1.7	.61	.56	.61
6	.84	3.4	4.8	1.6	6.2	16	7.7	5.1	1.3	.56	.52	.56
7	.94	2.9	4.5	1.6	5.0	8.0	7.2	5.5	1.4	.52	.49	.54
8	.62	4.8	4.6	1.5	4.4	5.7	6.3	6.1	1.4	.49	.56	.54
9	.89	7.4	4.1	1.5	4.0	5.2	6.1	4.9	1.0	.56	.75	.56
10	.68	6.6	7.7	1.4	3.7	4.9	6.8	4.2	.89	.44	28	.59
11	1.1	11	7.8	1.4	3.5	4.6	6.3	3.7	.82	.42	12	1.0
12	7.5	9.4	5.0	1.4	3.3	4.3	5.5	11	.79	.61	4.7	1.5
13	5.7	40	4.1	1.4	3.1	4.0	5.3	9.1	.75	.56	2.5	1.1
14	5.0	45	3.6	4.3	2.9	3.8	5.5	6.3	.75	.54	1.7	.89
15	3.6	28	4.0	3.5	2.8	3.6	6.1	5.1	.69	.52	2.6	.79
16	3.3	10	3.2	3.0	2.7	3.4	12	4.2	.66	.47	14	.79
17	2.7	7.0	2.8	2.6	2.6	3.2	12	4.0	1.0	.49	4.3	.75
18	51	6.1	2.5	2.4	2.5	3.1	9.4	4.7	.79	.44	3.0	1.0
19	25	5.7	2.2	2.1	4.5	3.0	7.5	24	.69	.40	2.1	1.0
20	56	5.0	1.9	2.0	3.8	5.0	5.8	23	.66	.34	1.7	.89
21	19	8.1	1.7	1.9	3.3	35	4.7	13	.72	.44	1.4	.92
22	9.4	17	1.6	1.7	20	25	4.3	10	.69	.36	1.2	.85
23	5.9	9.2	1.5	1.6	10	18	4.7	6.5	.72	.32	1.0	.85
24	4.3	7.3	1.4	1.5	7.0	12	3.8	6.3	.64	.75	.92	.92
25	3.6	6.1	1.3	1.4	5.6	21	4.3	5.1	.85	.66	.85	.85
26	3.3	5.7	2.0	1.9	5.0	32	8.6	4.3	.98	.56	.64	1.1
27	3.0	5.2	3.4	35	6.6	41	7.5	3.6	.82	.47	.54	6.0
28	2.5	6.3	2.8	20	7.5	65	8.6	2.9	.72	.52	.49	3.4
29	2.3	4.8	2.4	10	8.0	23	8.3	2.4	.64	.40	.56	2.2
30	2.1	4.6	2.2	9.0	---	21	7.0	2.1	.66	.64	.52	1.8
31	1.9	---	2.1	8.0	---	23	---	2.0	---	1.1	.52	---
TOTAL	230.11	282.9	122.5	132.8	196.0	423.4	338.4	244.8	33.13	17.56	97.44	34.56
MEAN	7.42	9.43	3.95	4.28	6.76	13.7	11.3	7.90	1.10	.57	3.14	1.15
MAX	56	45	12	35	20	65	83	33	3.8	1.1	28	6.0
MIN	.62	1.7	1.3	1.4	2.5	3.0	3.8	2.0	.64	.32	.49	.54
CFSM	2.52	3.21	1.34	1.46	2.30	4.66	3.84	2.69	.37	.19	1.07	.39
IN.	2.91	3.58	1.55	1.68	2.48	5.36	4.28	3.10	.42	.22	1.23	.44

CAL YR 1975 TOTAL 1596.22 MEAN 4.37 MAX 56 MIN .01 CFSM 1.49 IN 20.19
WTR YR 1976 TOTAL 2153.60 MEAN 5.88 MAX 83 MIN .32 CFSM 2.00 IN 27.24

01076000 BAKER RIVER NEAR RUMNEY, NH

LOCATION.--Lat 43°47'46", long 71°50'42", Grafton County, Hydrologic Unit 01070001, 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 mi^2 (370 km^2).

PERIOD OF RECORD.--Discharge: October 1928 to current year. October 1928 monthly discharge only, published in WSP 1301.
Chemical analyses: Water yeams 1953-54 (partial-record station).

REVISED RECORDS.--WSP 726: Drainage area. WSP 781: 1934(M). WSP 1231: 1929-33(M), 1934.

GAGE.--Water-stage recorder. Concrete control Sept. 10, 1938 to June 12, 1976. Altitude of gage is 495 ft (151 m), from topographic map.

REMARKS.--Records poor. High flow slightly affected by retarding reservoirs since 1968. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--48 years, 254 ft^3/s (7.193 m^3/s), 24.12 in/yr (613 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,400 ft^3/s (606 m^3/s) June 15, 1942, gage height, 15.50 ft (4.724 m), from rating curve extended above 3,800 ft^3/s (108 m^3/s) on basis of slope-area measurements at gage heights 13.03 ft (3.972 m), 14.49 ft (4.417 m), and 15.50 ft (4.924 m); minimum, 6.5 ft^3/s (0.18 m^3/s) Dec. 4, 1947, caused by ice conditions upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since valley was settled about 1766, 25,900 ft^3/s (733 m^3/s) Nov. 3, 1927, gage height, 17.4 ft (5.30 m), from floodmarks, from rating curve extended above 3,800 ft^3/s (108 m^3/s) as described above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft^3/s (102 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1330	4,310	122	7.61	2.320	Apr. 1	2030	*5,900	167	*9.19	2.801

Minimum discharge, 46 ft^3/s (1.30 m^3/s) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	146	410	120	382	463	3080	334	267	127	208	68
2	107	138	472	115	530	397	2820	1090	222	125	283	165
3	88	133	377	105	663	348	1760	764	160	100	158	129
4	79	275	308	100	520	330	1330	645	140	87	102	99
5	73	275	392	98	418	397	1100	477	110	76	76	88
6	68	211	240	95	334	651	929	397	90	68	65	84
7	67	179	304	92	271	520	838	397	85	62	60	76
8	63	218	222	90	259	410	712	431	94	58	71	67
9	61	377	165	90	247	316	593	358	79	58	79	62
10	59	325	299	88	225	299	520	304	70	56	1140	60
11	60	540	440	88	218	271	450	267	68	53	751	142
12	339	414	463	87	192	255	380	582	76	69	397	144
13	330	1040	440	86	179	229	330	633	80	76	267	112
14	275	1210	218	94	160	215	350	463	76	69	195	88
15	211	872	211	100	138	201	480	418	74	64	168	79
16	192	616	267	92	163	185	740	344	68	58	616	74
17	165	481	330	88	151	195	950	299	109	56	353	68
18	751	401	182	84	146	163	850	299	102	56	229	84
19	777	339	93	82	188	151	780	824	97	53	170	153
20	2360	299	79	81	299	225	467	1100	79	50	144	135
21	1370	330	104	81	240	669	392	797	83	48	119	109
22	845	681	115	80	312	1340	325	744	112	51	104	96
23	587	486	115	84	669	914	372	582	109	47	88	88
24	445	401	100	86	555	576	312	463	88	82	79	83
25	344	334	100	83	445	639	283	392	121	102	71	76
26	312	283	110	80	397	831	472	330	168	71	67	74
27	267	263	201	250	491	1150	486	295	110	60	64	496
28	229	271	205	1250	651	2460	463	267	94	62	83	267
29	205	244	160	929	515	1510	445	211	80	57	76	182
30	185	222	138	657	---	1350	397	179	76	78	88	153
31	160	---	125	454	---	1300	---	158	---	131	74	---
TOTAL	11207	12004	7385	5909	9958	18960	23406	14844	3187	2210	6445	3601
MEAN	362	400	238	191	343	612	780	479	106	71.3	208	120
MAX	2360	1210	472	1250	669	2460	3080	1100	267	131	1140	496
MIN	59	133	79	80	138	151	283	158	68	47	60	60
CFSM	2.53	2.80	1.66	1.34	2.40	4.28	5.45	3.35	.74	.50	1.45	.84
IN.	2.92	3.12	1.92	1.54	2.59	4.93	6.09	3.86	.83	.57	1.68	.94

CAL YR 1975 TOTAL 95750 MEAN 262 MAX 2360 MIN 28 CFSM 1.83 IN 24.91
WTR YR 1976 TOTAL 119116 MEAN 325 MAX 3080 MIN 47 CFSM 2.27 IN 30.99

01076500 PEMIGEWASSET RIVER AT PLYMOUTH, NH

LOCATION.--Lat 43°45'33", long 71°41'10", Grafton County, Hydrologic Unit 01070001, on right bank 150 ft (46 m) downstream from bridge at Plymouth and 0.3 mi (0.5 km) downstream from Baker River.
DRAINAGE AREA.--622 mi^2 (1,611 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1903 to current year. Records for April 1886 to September 1903, published in WSP 124, are unreliable and should not be used.
REVISED RECORDS.--WSP 471: 1912-14. WSP 726: Drainage area. WSP 1231: 1904-11, 1913-14, 1917-18, 1919(M), 1920-25, 1926-27(M), 1929-31(M). WSP 1721: 1959(M). See also PERIOD OF RECORD.
GAGE.--Water-stage recorder. Datum of gage is 457.07 ft (139.315 m) 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.
REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation during period 1940-52 caused by powerplants upstream. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--73 years, 1,355 ft^3/s (38.37 m^3/s), 29.58 in/yr (751 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65,400 ft^3/s (1,850 m^3/s) Mar. 19, 1936, gage height, 29.0 ft (8.84 m), from floodmarks, from rating curve extended above 43,000 ft^3/s (1,220 m^3/s) on basis of computations of flow over dam at gage heights 23.0 ft (7.01 m), 27.4 ft (8.35 m), and 29.0 ft (8.84 m); minimum, 39 ft^3/s (1.10 m^3/s) Oct. 1, 3, 4, 1948; minimum daily, 45 ft^3/s (1.27 m^3/s) Sept. 20, 1923.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 12,600 ft^3/s (357 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1900	15,400	436	10.08	3.072	Apr. 2	0100	*28,600	810	*15.55	4.740
Mar. 28	1100	15,400	436	10.34	3.152						

Minimum discharge, 257 ft^3/s (7.28 m^3/s) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	817	1560	600	1900	2000	12100	2220	1650	1180	1250	367
2	850	775	2230	570	2500	1700	20600	7420	1580	1220	2450	806
3	729	741	1690	540	3500	1400	11000	5290	1280	846	1200	694
4	643	1010	1300	520	2600	1300	6810	4980	1130	705	780	486
5	576	1130	1000	500	2000	1450	5270	3270	1000	612	590	429
6	535	875	1200	480	1700	2700	4540	2720	888	536	496	393
7	514	769	1150	470	1350	2600	4280	2870	819	477	477	351
8	470	877	910	460	1150	2400	3850	3160	793	477	547	319
9	432	1690	1280	450	1250	1450	3330	2610	742	506	601	299
10	409	1380	1300	440	1250	1400	2980	2240	646	467	5010	299
11	416	2870	1980	430	1300	1300	2920	2020	590	393	6580	1340
12	1930	2070	1400	420	1200	970	2530	4280	568	547	2590	1080
13	1820	4910	1150	410	1150	1050	2280	5110	557	568	1680	723
14	1340	6300	1100	420	1050	1100	2280	3130	506	477	1270	542
15	1050	4860	974	450	900	1150	2570	2810	467	467	1320	450
16	984	2910	1250	420	950	820	3760	2440	439	429	5400	409
17	1000	2300	860	400	1000	800	6530	2170	601	376	2680	384
18	3220	1940	950	380	950	780	7390	2110	793	376	1750	400
19	4350	1690	720	370	1000	760	6390	4560	635	335	1230	605
20	7740	1580	500	370	1350	900	5430	6880	547	304	974	595
21	7730	1620	620	370	1400	2500	3890	4740	547	290	819	489
22	3660	3800	860	360	1200	5500	3150	4540	1040	277	694	439
23	2600	2580	780	3550	2400	4000	3530	3560	888	270	604	402
24	2060	2010	660	350	2150	2700	2890	2870	718	718	536	376
25	1720	1740	640	350	1950	3100	2480	2500	945	974	477	343
26	1850	1520	760	350	1700	4200	2920	2230	2450	536	429	335
27	1590	1370	900	450	1700	5200	2940	2080	1150	411	402	2970
28	1310	1370	1000	4700	2500	12200	2690	1880	860	448	420	2250
29	1140	1230	920	6000	2200	7900	2600	1630	755	420	429	1280
30	1030	1110	840	3600	---	6020	2440	1430	694	557	506	945
31	905	---	780	2300	---	5800	---	1280	---	974	411	---
TOTAL	55633	59844	33264	31480	47250	87150	146370	101030	26278	17173	44602	20800
MEAN	1795	1995	1073	1015	1629	2811	4879	3259	876	554	1439	693
MAX	7740	6300	2230	6000	3500	12200	20600	7420	2450	1220	6580	2970
MIN	409	741	500	350	900	760	2280	1280	439	270	402	299
CFSM	2.89	3.21	1.73	1.63	2.62	4.52	7.84	5.24	1.41	.89	2.31	1.11
IN.	3.33	3.58	1.99	1.88	2.83	5.21	8.75	6.04	1.57	1.03	2.67	1.24

CAL YR 1975 TOTAL 526049 MEAN 1441 MAX 10000 MIN 167 CFSM 2.32 IN 31.46
WTR YR 1976 TOTAL 670874 MEAN 1833 MAX 20600 MIN 270 CFSM 2.95 IN 40.12

01076500 PEMIGEWASSET RIVER AT PLYMOUTH, NH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953, 1967-74, June 1976.

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
JUN 24...	0900	764	51	6.0	28.0	23.5	2	1	7.1	10	130	B24

DATE	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	SUSPENDED SOLIDS (MG/L)	TOTAL RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)
JUN 24...	3.3	.7	14	0	11	22	8.2	5.9	4	38	.16	.00

DATE	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL ALUMINUM IN BOTTOM MATERIAL (UG/G)	TOTAL BARIUM (BA) (UG/L)	TOTAL BARIUM IN BOTTOM MATERIAL (UG/G)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BERYLLIUM IN BOTTOM MATERIAL (UG/G)	TOTAL BISMUTH (BI) (UG/L)	TOTAL BORON (B) (UG/L)
JUN 24...	.30	.30	.46	.02	260	3800	20	34	0	0	<2	10

DATE	TOTAL BORON IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL GALLIUM (GA) (UG/L)	TOTAL GERMANIUM (GE) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)
JUN 24...	2	2	5	<1	3	1	7	<0	<2	500	4400	3

DATE	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MOLYBDENUM (MO) (UG/L)	TOTAL MOLYBDENUM IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SILVER (AG) (UG/L)	TOTAL SILVER IN BOTTOM MATERIAL (UG/G)	TOTAL STRONTIUM (SR) (UG/L)	TOTAL STRONTIUM IN BOTTOM MATERIAL (UG/G)	TOTAL TIN (SN) (UG/L)
JUN 24...	8	80	120	1	<1	2	8	<0	<0	30	3	<2

DATE	TOTAL TITANIUM (TI) (UG/L)	TOTAL TITANIUM IN BOTTOM MATERIAL (UG/G)	TOTAL VANADIUM (V) (UG/L)	TOTAL VANADIUM IN BOTTOM MATERIAL (UG/G)	TOTAL ZIRCONIUM (ZR) (UG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)	TOTAL PCB (UG/L)	POLYCHLORINATED NAPHTHALENES (UG/L)
JUN 24...	7	330	<.6	8.0	<3	0	0	.000	.000	.0	.00

DATE	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL TOXAPHENE (UG/L)
JUN 24...	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0

B NON-IDEAL COLONY COUNT.

01077000 SQUAM RIVER AT ASHLAND, NH

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

DRAINAGE AREA.--57.6 mi^2 (149.2 km^2).

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. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--37 years, 88.3 ft^3/s (2.501 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,090 ft^3/s (30.9 m^3/s) July 4, 1973, gage height, 14.29 ft (4.356 m); minimum daily, 1.0 ft^3/s (0.029 m^3/s) July 4-7, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 635 ft^3/s (18.0 m^3/s) Apr. 2, gage height, 12.33 ft (3.758 m); minimum daily, 1.0 ft^3/s (0.028 m^3/s) July 4-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	123	126	122	120	201	221	59	123	63	61	63
2	54	123	125	123	122	201	508	60	122	63	61	63
3	54	124	124	122	122	201	620	86	122	22	60	63
4	54	124	124	122	122	164	614	127	122	1.0	60	63
5	54	122	124	123	122	118	610	127	122	1.0	60	63
6	54	122	124	128	122	118	604	127	121	1.0	60	63
7	66	122	124	124	122	118	600	128	121	1.0	60	63
8	74	122	124	122	122	118	596	128	121	1.2	60	63
9	74	122	124	121	121	118	589	128	121	1.2	80	63
10	74	123	124	121	164	118	582	128	120	1.2	109	63
11	74	123	124	121	205	118	576	127	89	1.2	109	63
12	74	123	123	122	204	118	303	130	62	1.4	109	63
13	74	124	123	121	204	118	111	171	62	1.2	77	63
14	74	126	123	121	203	118	111	209	61	42	64	62
15	74	124	123	121	203	118	111	208	61	80	64	62
16	74	124	123	121	202	118	111	207	62	61	64	62
17	74	124	123	120	202	118	111	216	62	61	64	62
18	75	124	122	120	202	118	111	232	62	61	64	61
19	74	124	122	121	204	118	111	240	62	60	64	61
20	105	124	122	120	203	118	94	295	61	60	64	61
21	124	125	122	120	202	118	76	331	61	60	64	61
22	124	126	122	120	203	118	77	323	61	60	64	61
23	124	125	122	120	203	118	77	310	61	60	64	61
24	124	124	122	120	202	118	77	246	61	61	64	61
25	124	124	122	120	201	118	77	194	62	60	64	61
26	124	124	123	120	201	119	77	152	61	60	64	61
27	124	125	124	120	201	121	77	125	62	60	64	61
28	123	124	123	122	201	124	78	124	62	60	63	61
29	123	124	123	120	201	123	69	123	62	60	63	61
30	123	124	122	120	---	123	58	123	63	61	63	61
31	123	---	122	120	---	124	---	122	---	60	63	---
TOTAL	2744	3712	3818	3758	5106	3979	8037	5306	2475	1246.4	2114	1860
MEAN	88.5	124	123	121	176	128	268	171	82.5	40.2	68.2	62.0
MAX	124	126	126	128	205	201	620	331	123	80	109	63
MIN	54	122	122	120	120	118	58	59	61	1.0	60	61

CAL YR 1975 TOTAL 32403.7 MEAN 88.8 MAX 152 MIN 7.4
WTR YR 1976 TOTAL 44155.4 MEAN 121 MAX 620 MIN 1.0

01078000 SMITH RIVER NEAR BRISTOL, NH

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

DRAINAGE AREA.--85.8 mi^2 (222.2 km^2).

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 449.80 ft (137.099 m) 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.

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

AVERAGE DISCHARGE.--58 years, 143 ft^3/s (4.050 m^3/s), 22.63 in/yr (575 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,100 ft^3/s (229 m^3/s) Mar. 19, 1936, gage height, 16.09 ft (4.904 m), from floodmarks, from rating curve extended above 2,700 ft^3/s (76.5 m^3/s) on basis of contracted-opening measurement of peak flow; minimum daily, 2.7 ft^3/s (0.076 m^3/s) Aug. 2, 1933.
Maximum stage since at least 1885, that of Mar. 19, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,150 ft^3/s (32.6 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 28	1000	1,280	36.2	5.82	1.774	July 12	0200	1,230	34.8	5.72	1.743
Apr. 1	1930	*2,240	63.4	*7.52	2.292						

Minimum discharge, 22 ft^3/s (0.62 m^3/s) July 11, Sept. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	114	235	93	285	180	1290	175	170	55	252	32
2	77	107	312	84	295	165	1940	460	175	56	347	38
3	64	104	239	82	310	150	1400	483	131	43	235	41
4	56	130	186	82	260	170	941	349	107	35	141	35
5	50	162	130	76	220	230	693	269	91	31	96	33
6	47	130	139	72	190	371	547	221	80	28	73	29
7	44	114	130	72	160	385	473	205	75	26	66	27
8	41	118	90	73	140	220	404	247	76	27	102	25
9	39	141	107	69	120	190	341	220	68	26	146	24
10	37	162	207	67	130	170	299	184	60	25	511	25
11	50	337	299	64	135	160	283	159	54	31	720	37
12	355	262	217	63	140	150	251	235	50	649	530	33
13	370	491	175	64	130	140	224	382	45	371	267	30
14	249	751	150	72	120	130	223	283	45	177	264	27
15	180	633	147	75	110	120	225	443	51	101	202	25
16	143	434	158	68	130	110	237	425	46	70	228	24
17	118	291	135	64	115	105	243	289	45	56	193	24
18	333	233	123	60	110	105	224	287	43	48	135	28
19	524	200	76	57	125	100	196	571	39	44	98	33
20	746	176	64	54	140	200	169	773	36	38	81	33
21	873	202	66	53	110	322	151	706	34	40	70	30
22	700	359	75	51	200	623	153	550	35	50	66	27
23	426	306	77	50	400	546	192	391	41	42	57	25
24	265	236	68	49	250	421	172	293	35	83	48	24
25	209	200	69	47	180	521	167	254	36	108	42	23
26	211	174	77	58	170	732	353	219	35	69	39	24
27	198	162	133	90	210	761	369	193	33	50	37	99
28	164	168	139	369	240	1170	278	165	30	48	36	117
29	146	168	116	539	250	1200	230	141	30	46	39	78
30	138	155	99	458	---	964	195	122	30	178	40	58
31	124	---	96	341	---	803	---	113	---	306	36	---
TOTAL	7073	7220	4334	3516	5375	11614	12863	9807	1826	2957	5197	1108
MEAN	228	241	140	113	185	375	429	316	60.9	95.4	168	36.9
MAX	873	751	312	539	400	1200	1940	773	175	649	720	117
MIN	37	104	64	47	110	100	151	113	30	25	36	23
CFSM	2.66	2.81	1.63	1.32	2.16	4.37	5.00	3.68	.71	1.11	1.96	.43
IN.	3.07	3.13	1.88	1.52	2.33	5.04	5.58	4.25	.79	1.28	2.25	.48

CAL YR 1975 TOTAL 58673 MEAN 161 MAX 1160 MIN 14 CFSM 1.88 IN 25.44
WTR YR 1976 TOTAL 72890 MEAN 199 MAX 1940 MIN 23 CFSM 2.32 IN 31.60

01078000 SMITH RIVER NEAR BRISTOL, NH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1957, June 1976.

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
JUN												
24...	1100	37	66	6.5	32.0	25.0	7	1	6.9	19	180	B36

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	SUSPENDED SOLIDS (MG/L)	TOTAL RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)
JUN												
24...	18	0	15	9.1	7.6	6.5	6	48	.16	.01	.29	.30

DATE	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL ALUMINUM IN BOTTOM MATERIAL (UG/G)	TOTAL BARIUM (BA) (UG/L)	TOTAL BARIUM IN BOTTOM MATERIAL (UG/G)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BERYLLIUM IN BOTTOM MATERIAL (UG/G)	TOTAL BISMUTH (BI) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL BORON IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM (CR) (UG/L)
JUN												
24...	.46	.02	180	2300	20	16	<0	0	<2	8	2	<1

DATE	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL GALLIUM (GA) (UG/L)	TOTAL GERMANIUM (GE) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)
JUN											
24...	2	<1	3	2	4	<1	<3	700	2700	2	4

DATE	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MOLYBDENUM (MO) (UG/L)	TOTAL MOLYBDENUM IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SILVER (AG) (UG/L)	TOTAL SILVER IN BOTTOM MATERIAL (UG/G)	TOTAL STRONTIUM (SR) (UG/L)	TOTAL STRONTIUM IN BOTTOM MATERIAL (UG/G)	TOTAL TIN (SN) (UG/L)
JUN											
24...	60	80	1	<1	3	4	<0	<0	60	2	<2

DATE	TOTAL TITANIUM (TI) (UG/L)	TOTAL TITANIUM IN BOTTOM MATERIAL (UG/G)	TOTAL VANADIUM (V) (UG/L)	TOTAL VANADIUM IN BOTTOM MATERIAL (UG/G)	TOTAL ZIRCONIUM (ZR) (UG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)	TOTAL PCB (UG/L)	POLYCHLORINATED NAPHTHALENES (UG/L)
JUN											
24...	10	160	<.7	4.0	<3	0	0	.000	.000	.0	.00

DATE	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL TOXAPHENE (UG/L)
JUN											
24...	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0

B NON-IDEAL COLONY COUNT.

01080000 LAKE WINNIPESAUKEE AT WEIRS BEACH, NH

LOCATION.--Lat 43°36'27", long 71°27'30", Belknap County, Hydrologic Unit 01070002, 1,300 ft (400 m) north of highway bridge at Weirs Beach.

DRAINAGE AREA.--363 mi^2 (940 km^2) 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 ft^3 (204,000,000 m^3) 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 (Reservoirs in Merrimack River basin), and other lakes. Contents given herein are computed from gage height at 2400 on last day of month, eliminating the effect of seiche and wind action.

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily gage height, 5.86 ft (1.786 m) May 22, 23, 1954; minimum daily, 0.63 ft (0.192 m) Dec. 11, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum daily gage height, 4.78 ft (1.457 m) May 21; minimum daily, 2.59 ft (0.789 m) Jan. 26.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.67	3.58	3.74	3.13	2.98	2.86	3.62	4.03	4.55	4.41	4.22	3.69
2	3.64	3.57	3.72	3.12	3.10	2.87	3.87	4.12	4.54	4.38	4.22	3.69
3	3.61	3.55	3.65	3.12	3.15	2.89	3.95	4.15	4.53	4.34	4.21	3.67
4	3.58	3.56	3.61	3.10	3.18	2.89	4.00	4.20	4.51	4.33	4.20	3.64
5	3.59	3.54	3.58	3.07	3.19	2.88	4.02	4.24	4.50	4.32	4.20	3.62
6	3.56	3.54	3.52	3.06	3.20	2.86	4.03	4.26	4.49	4.31	4.18	3.57
7	3.52	3.53	3.47	3.03	3.20	2.85	4.02	4.32	4.47	4.30	4.19	3.53
8	3.50	3.53	3.45	3.01	3.19	2.82	4.01	4.32	4.46	4.30	4.18	3.52
9	3.50	3.56	3.42	2.98	3.18	2.80	4.01	4.35	4.46	4.29	4.19	3.51
10	3.47	3.58	3.42	2.95	3.17	2.78	3.98	4.36	4.45	4.28	4.24	3.52
11	3.47	3.59	3.40	2.93	3.14	2.77	3.93	4.38	4.43	4.27	4.22	3.54
12	3.58	3.62	3.38	2.91	3.11	2.76	3.88	4.44	4.42	4.28	4.20	3.51
13	3.55	3.73	3.38	2.89	3.09	2.79	3.87	4.49	4.40	4.25	4.16	3.50
14	3.54	3.80	3.36	2.92	3.05	2.80	3.86	4.51	4.40	4.26	4.15	3.49
15	3.54	3.81	3.34	2.89	3.04	2.80	3.85	4.59	4.39	4.27	4.15	3.49
16	3.51	3.82	3.30	2.88	3.01	2.81	3.84	4.61	4.39	4.25	4.12	3.48
17	3.50	3.80	3.30	2.87	3.02	2.85	3.85	4.62	4.40	4.24	4.06	3.47
18	3.59	3.78	3.23	2.84	3.04	2.85	3.86	4.66	4.41	4.20	4.05	3.47
19	3.60	3.76	3.20	2.82	3.08	2.87	3.85	4.75	4.40	4.17	4.01	3.46
20	3.65	3.75	3.19	2.79	3.05	2.89	3.85	4.75	4.40	4.16	3.97	3.46
21	3.68	3.79	3.20	2.76	3.03	2.91	3.86	4.78	4.38	4.17	3.95	3.43
22	3.69	3.88	3.18	2.71	3.02	2.94	3.87	4.77	4.38	4.18	3.95	3.41
23	3.70	3.90	3.14	2.66	3.01	2.98	3.88	4.75	4.38	4.15	3.93	3.39
24	3.69	3.91	3.12	2.64	3.00	2.99	3.89	4.75	4.37	4.20	3.91	3.35
25	3.68	3.89	3.12	2.61	2.98	3.01	3.91	4.74	4.36	4.16	3.87	3.34
26	3.67	3.84	3.18	2.59	2.95	3.05	3.97	4.71	4.38	4.15	3.87	3.33
27	3.67	3.85	3.22	2.65	2.92	3.12	3.96	4.68	4.36	4.14	3.85	3.40
28	3.65	3.82	3.22	2.83	2.90	3.22	3.98	4.66	4.34	4.12	3.83	3.40
29	3.64	3.79	3.20	2.90	2.88	3.32	3.99	4.63	4.33	4.11	3.81	3.39
30	3.63	3.78	3.17	2.93	---	3.40	4.00	4.59	4.36	4.18	3.72	3.38
31	3.60	---	3.16	2.95	---	3.48	---	4.55	---	4.21	3.70	---
MEAN	3.60	3.72	3.34	2.89	3.06	2.94	3.92	4.51	4.42	4.24	4.05	3.49
MAX	3.70	3.91	3.74	3.13	3.20	3.48	4.03	4.78	4.55	4.41	4.24	3.69
MIN	3.47	3.53	3.12	2.59	2.88	2.76	3.62	4.03	4.33	4.11	3.70	3.33
(†)	17040	17360	16140	15790	15590	16860	17840	18940	18700	18280	17220	18580
(‡)	-59.7	+123	-455	-131	-79.8	+474	+378	+411	-92.6	-157	-396	+525

CAL YR 1975 MEAN 3.55 MAX 4.49 MIN 2.11 (‡) -14.6
WTR YR 1976 MEAN 3.68 MAX 4.78 MIN 2.59 (‡) +43.6

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

01080500 LAKE WINNIPESAUKEE OUTLET AT LAKEPORT, NH

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

DRAINAGE AREA.--363 mi^2 (940 km^2).

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 Winnipesaukee (station 01080000), Wentworth, Merrymeeting (Reservoirs in Merrimack River basin), and other lakes. Daily discharge computed from relation between discharge computed from flow over spillway of vane in measuring flume.

AVERAGE DISCHARGE.--43 years, 533 ft^3/s (15.09 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,890 ft^3/s (81.8 m^3/s) Mar. 31, 1936; no flow Sept. 29, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,580 ft^3/s (44.7 m^3/s) Dec. 2; minimum daily, 230 ft^3/s (6.51 m^3/s) Apr. 30 to May 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	590	1490	920	755	1450	580	230	615	235	235	265
2	295	590	1580	915	765	1430	1060	230	450	235	235	265
3	290	590	1570	910	770	1220	1550	230	450	235	235	265
4	285	585	1550	900	845	1000	1550	230	450	235	235	265
5	285	595	1530	900	960	1220	1550	230	450	235	235	265
6	280	600	1520	900	960	1430	1550	230	450	235	235	265
7	280	595	1510	945	960	1420	1550	230	305	235	235	265
8	395	585	1260	1000	960	1400	1550	240	250	235	235	265
9	590	580	1040	1000	960	1220	1550	240	250	235	400	265
10	590	585	975	1000	1070	825	1550	240	250	235	725	265
11	595	580	970	1000	1170	830	1550	240	250	235	830	265
12	600	585	970	1000	1170	700	1360	240	245	235	840	265
13	600	835	960	1000	1160	540	1030	360	245	235	840	265
14	600	1080	960	1000	1150	545	1030	455	245	235	850	265
15	600	1080	960	1010	1150	550	1030	460	240	235	850	265
16	600	1080	960	1000	1150	550	785	460	240	235	860	265
17	600	1080	950	1000	1160	550	495	460	235	235	860	260
18	600	1080	935	1000	1160	555	495	460	235	235	855	260
19	600	1080	925	1000	1160	555	500	740	235	235	850	260
20	605	1080	925	1010	1300	555	500	915	235	235	535	260
21	610	1080	920	1020	1510	555	500	1000	235	235	275	260
22	610	1100	915	1020	1500	555	500	1050	235	235	275	260
23	610	1100	905	1030	1500	560	500	1050	235	235	275	260
24	610	1280	905	1080	1500	565	490	1050	235	235	275	260
25	610	1480	905	1080	1500	565	490	1050	235	235	275	260
26	600	1460	915	920	1490	565	485	1050	235	235	275	260
27	600	1470	920	780	1480	565	485	1050	235	235	460	260
28	600	1460	920	750	1480	565	485	1140	235	235	590	260
29	600	1450	920	750	1470	570	350	1250	235	235	590	260
30	600	1450	920	750	---	575	230	1250	235	235	425	260
31	600	---	920	755	---	575	---	1250	---	235	265	---
TOTAL	16240	28785	33605	29345	34165	24760	27330	19310	8675	7285	15155	7880
MEAN	524	960	1084	947	1178	799	911	623	289	235	489	263
MAX	610	1480	1580	1080	1510	1450	1550	1250	615	235	860	265
MIN	280	580	905	750	755	540	230	230	235	235	235	260

CAL YR 1975 TOTAL 220055 MEAN 603 MAX 1580 MIN 230
WTR YR 1976 TOTAL 252535 MEAN 690 MAX 1580 MIN 230

01081000 WINNIPESAUKEE RIVER AT TILTON, NH

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

DRAINAGE AREA.--471 mi^2 (1,220 km^2).

PERIOD OF RECORD.--Discharge: January 1937 to current year.
Chemical analyses: Water year 1953 (partial-record station).

REVISED RECORDS.--WSP 1901: 1960.

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

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

AVERAGE DISCHARGE.--39 years, 699 ft^3/s (19.80 m^3/s).

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,260 ft^3/s (64.0 m^3/s) Apr. 2, gage height, 6.16 ft (1.878 m); minimum daily, 198 ft^3/s (5.61 m^3/s) Sept. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	527	858	1870	1230	1310	1880	1630	461	1580	373	371	241
2	498	811	1880	1210	1360	1880	2180	586	998	352	396	198
3	470	787	1860	1210	1450	1880	2040	628	788	337	355	200
4	443	784	1820	1210	1400	1780	2050	628	739	353	330	249
5	421	783	1790	1190	1340	1680	2060	598	604	345	310	260
6	405	769	1780	1180	1310	1750	2060	559	572	335	298	255
7	396	754	1770	1170	1300	1780	2050	564	568	329	307	334
8	393	758	1740	1180	1300	1770	2030	572	550	337	312	559
9	570	777	1680	1200	1290	1750	2010	554	463	305	371	677
10	623	794	1650	1220	1280	1660	1970	524	277	293	691	668
11	688	882	1600	1230	1300	1500	1920	498	254	300	916	678
12	971	860	1500	1260	1340	1370	1880	568	271	469	908	661
13	1030	1070	1410	1260	1370	1260	1770	708	265	454	917	634
14	930	1490	1370	1300	1390	1150	1630	757	282	353	950	617
15	833	1580	1330	1330	1400	1040	1520	896	289	322	968	566
16	768	1510	1320	1340	1410	973	1430	907	288	302	1020	507
17	709	1480	1280	1340	1460	927	1300	789	312	293	1050	458
18	845	1460	1250	1340	1480	858	1140	786	299	285	1010	423
19	1020	1450	1220	1300	1540	809	994	1050	284	277	979	399
20	1100	1430	1190	1280	1570	802	803	1440	278	270	831	372
21	1330	1490	1190	1270	1610	942	655	1450	276	278	444	345
22	1270	1900	1220	1270	1700	1130	520	1430	273	286	394	328
23	1260	1830	1220	1300	1820	1060	515	1420	273	277	378	309
24	1160	1710	1200	1260	1840	1030	513	1400	270	311	356	295
25	1090	1740	1170	1260	1830	1070	536	1400	271	321	334	282
26	1040	1770	1230	1270	1820	1170	655	1390	274	294	323	279
27	983	1830	1290	1290	1860	1260	698	1390	269	285	361	334
28	933	1930	1290	1500	1950	1560	662	1510	267	281	519	365
29	990	1930	1260	1670	1910	1640	573	1660	288	276	538	340
30	980	1890	1240	1580	---	1510	477	1640	316	353	498	319
31	934	---	1240	1430	---	1440	---	1620	---	386	286	---
TOTAL	25610	39107	44860	40080	43940	42311	40271	30383	12738	10032	17721	12152
MEAN	826	1304	1447	1293	1515	1365	1342	980	425	324	572	405
MAX	1330	1930	1880	1670	1950	1880	2180	1660	1580	469	1050	678
MIN	393	754	1170	1170	1280	802	477	461	254	270	286	198

CAL YR 1975 TOTAL 299229 MEAN 820 MAX 1930 MIN 232
WTR YR 1976 TOTAL 359205 MEAN 981 MAX 2180 MIN 198

01081500 MERRIMACK RIVER AT FRANKLIN JUNCTION, NH

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

DRAINAGE AREA.--1,507 mi^2 (3,903 km^2).

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).

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

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

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

AVERAGE DISCHARGE.--71 years (water years 1906-76) 2,767 ft^3/s (78.36 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 83,000 ft^3/s (2,350 m^3/s) Mar. 19, 1936, gage height, 36.4 ft (11.09 m), from floodmarks, from rating curve extended above 30,000 ft^3/s (850 m^3/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 ft^3/s (4.79 m^3/s) Aug. 28, 1965. Maximum discharge since construction of Franklin Falls Reservoir in 1942, 22,400 ft^3/s (634 m^3/s) Apr. 4, 1951, gage height, 16.34 ft (4.980 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,100 ft^3/s (626 m^3/s) Apr. 2, gage height, 16.16 ft (4.926 m); minimum daily, 595 ft^3/s (16.9 m^3/s) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2770	2360	4380	2560	3600	5210	11900	3520	3610	1320	1840	861
2	2690	2450	4550	2650	4600	5120	20500	5160	2250	2150	2410	861
3	2550	2370	4470	2310	6000	4900	19800	9100	1970	1620	2700	1380
4	2040	2210	4330	2300	4800	4700	18700	7720	1720	1200	1910	925
5	1810	2240	3880	2530	3600	4490	14400	6160	1620	1050	1110	1070
6	1840	2630	3620	2640	3700	4840	11000	4710	1840	983	1100	1300
7	1860	2520	3430	2400	3400	6010	9610	4120	1880	1010	877	1640
8	1470	2580	3420	2090	3300	5510	8980	4370	1980	1010	1020	1880
9	1130	2780	3300	2250	3000	4560	8180	4400	1500	1030	1530	1170
10	1110	3170	3600	2520	2700	4270	7720	3880	1370	942	3670	1150
11	1800	4270	4340	2210	3000	4060	7370	3550	1370	807	8960	1570
12	3570	4900	4190	2330	3060	3940	6820	3550	1220	2000	6840	2220
13	3550	5880	3880	2190	2920	3870	5320	6430	1150	1700	3450	1970
14	3590	10100	3280	2360	2850	3220	5240	6260	1130	1190	2740	1540
15	3250	10200	3080	2380	2970	2920	5090	5560	1040	1020	2510	1420
16	2630	7710	3350	2560	2940	3360	5490	5020	983	1020	4840	1260
17	2330	5850	3150	2100	3000	2700	8160	4320	983	807	5050	1250
18	3590	4280	2960	2400	2960	2670	9500	3900	983	837	3160	1930
19	6280	4280	2830	2300	3170	2630	9220	4740	869	901	2830	1810
20	7580	4170	2580	2200	3340	2750	7920	8830	1090	885	2430	1560
21	12100	4410	2600	2250	3150	3310	6660	9590	983	877	1860	1380
22	9530	6690	2510	2150	3380	5540	5510	8470	1160	869	1370	1160
23	6740	7250	2440	2250	4170	8180	5050	7600	1520	595	1290	1140
24	5440	4830	2420	2150	5530	6500	4930	6470	1440	754	1110	1110
25	4480	4360	2570	2100	4940	6030	4420	5630	1520	1480	1100	814
26	3760	4310	2590	2150	4930	6460	4570	5000	1830	1170	992	992
27	3860	4360	2420	2200	5010	7950	5060	4580	2270	942	1010	1560
28	3690	4500	2770	5000	5750	12400	4770	4340	1380	769	967	2650
29	3290	4450	3080	9000	6220	15500	4330	4190	1200	901	983	2600
30	2810	4350	2560	10000	---	12800	3880	3900	1220	1470	942	2210
31	2380	---	2700	6000	---	11100	---	3710	---	1980	885	---
TOTAL	115520	136460	101280	92530	111990	177500	250100	168780	45081	35289	73486	44383
MEAN	3726	4549	3267	2985	3862	5726	8337	5445	1503	1138	2371	1479
MAX	12100	10200	4550	10000	6220	15500	20500	9590	3610	2150	8960	2650
MIN	1110	2210	2420	2090	2700	2630	3880	3520	869	595	877	814

CAL YR 1975 TOTAL 1114545 MEAN 3054 MAX 12200 MIN 626
WTR YR 1976 TOTAL 1352399 MEAN 3695 MAX 20500 MIN 595

01082000 CONTOOCOOK RIVER AT PETERBOROUGH, NH

LOCATION.--Lat 42°51'45", long 71°57'35", Hillsborough County, Hydrologic Unit 01070003, on left bank 1,100 ft (350 m) downsteam from milldam, 1 mi (1.6 km) south of Peterborough, and 1.5 mi (2.4 km) upstream from Nubanusit Brook.

DRAINAGE AREA.--68.1 mi^2 (176.4 km^2).

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 upstream; regulation greater prior to 1965. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--31 years, 117 ft^3/s (3.313 m^3/s), 23.33 in/yr (593 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft^3/s (74.8 m^3/s) Nov. 26, 1950, gage height, 6.35 ft (1.935 m), from rating curve extended above 1,700 ft^3/s (48.1 m^3/s); maximum gage height, 6.82 ft (2.079 m), from peak-stage indicator, about Jan. 29, 1976 (ice jam); minimum daily discharge, 0.8 ft^3/s (0.023 m^3/s) Sept. 15, 16, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1938 reached a stage of about 15 ft (4.6 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s (19.8 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1400	710	20.1	3.64	1.11	Apr. 1	2030	*1,010	28.6	4.20	1.28
aJan. 29	-	(ice jam)		*†6.82	2.08						

† From peak-stage indicator.
a About.

Minimum daily discharge, 12 ft^3/s (0.34 m^3/s) Sept. 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	115	219	110	380	320	561	120	69	50	30	20
2	197	100	205	100	350	287	786	229	70	48	27	20
3	158	95	182	98	400	277	580	229	66	38	23	19
4	132	90	160	93	330	259	422	213	61	32	20	18
5	114	86	140	90	300	280	327	172	56	28	19	19
6	103	83	134	88	290	398	265	143	53	25	18	17
7	90	88	126	86	270	338	232	127	54	23	74	16
8	81	110	114	84	220	262	202	135	51	22	95	16
9	75	130	112	82	190	221	179	120	46	20	109	15
10	70	132	244	80	170	186	160	109	43	19	262	15
11	84	170	256	78	160	172	151	99	39	18	202	16
12	349	163	202	78	150	160	137	137	35	59	135	15
13	346	406	167	80	145	186	129	141	32	51	95	14
14	278	555	153	90	140	215	123	122	30	41	76	14
15	219	418	153	100	186	194	118	118	29	34	69	13
16	175	301	147	105	135	167	111	104	28	29	67	13
17	145	235	132	100	156	184	105	100	34	26	59	16
18	311	200	122	94	158	204	99	125	33	23	49	17
19	394	172	110	88	202	165	92	224	30	21	33	16
20	584	158	100	85	218	194	86	256	29	19	31	16
21	525	213	82	83	186	367	80	229	28	20	32	14
22	480	364	80	79	443	469	86	202	27	20	29	13
23	400	304	78	76	527	349	105	167	27	19	25	13
24	350	244	76	74	418	290	94	141	25	22	23	12
25	270	210	75	74	310	310	102	122	25	20	21	12
26	230	187	90	80	290	338	204	111	24	18	19	13
27	210	233	110	100	342	349	189	102	22	17	19	25
28	180	297	130	150	387	523	165	92	21	17	20	23
29	160	253	145	170	345	460	143	83	20	17	26	20
30	145	221	135	480	---	371	125	76	21	22	29	17
31	130	---	120	430	---	314	---	73	---	21	23	---
TOTAL	7241	6333	4299	3605	7798	8809	6158	4421	1128	839	1759	487
MEAN	234	211	139	116	269	284	205	143	37.6	27.1	56.7	16.2
MAX	584	555	256	480	527	523	786	256	70	59	262	25
MIN	70	83	75	74	135	160	80	73	20	17	18	12
CFSM	3.44	3.10	2.04	1.70	3.95	4.17	3.01	2.10	.55	.40	.83	.24
IN.	3.96	3.46	2.35	1.97	4.26	4.81	3.36	2.41	.62	.46	.96	.27

CAL YR 1975 TOTAL 55969 MEAN 153 MAX 1120 MIN 13 CFSM 2.25 IN 30.57
WTR YR 1976 TOTAL 52877 MEAN 144 MAX 786 MIN 12 CFSM 2.11 IN 28.88

NOTE.--No gage-height record Dec. 27 to Feb. 2.

01083000 NUBANUSIT BROOK NEAR PETERBOROUGH, NH

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

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

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

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

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

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

AVERAGE DISCHARGE.--42 years, 83.3 ft^3/s (2.359 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,130 ft^3/s (32.0 m^3/s) Apr. 11, 1931, gage height, 5.59 ft (1.704 m), site and datum then in use, from rating curve extended above 380 ft^3/s (10.8 m^3/s); minimum daily, 0.5 ft^3/s (0.014 m^3/s) Aug. 1, 1926. Maximum discharge since construction of Edward MacDowell Reservoir in 1950, 699 ft^3/s (19.8 m^3/s) Apr. 12, 1960, gage height, 4.54 ft (1.384 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 593 ft^3/s (16.8 m^3/s) Oct. 22, gage height, 4.11 ft (1.253 m); minimum daily, 4.1 ft^3/s (0.12 m^3/s) July 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	534	76	145	110	254	285	259	84	37	20	13	9.0
2	411	63	136	150	260	259	347	95	53	30	16	9.3
3	275	53	120	80	260	209	525	144	61	61	18	9.4
4	282	53	112	80	286	196	538	191	44	49	17	9.4
5	218	53	100	80	344	217	464	188	33	14	12	9.4
6	72	53	94	80	375	278	348	111	28	6.1	12	9.0
7	165	48	95	80	374	291	225	80	25	6.1	19	8.7
8	162	47	79	80	313	276	175	83	25	7.1	24	8.6
9	102	47	70	80	150	230	147	83	25	4.5	29	8.3
10	114	58	100	80	170	175	131	83	25	4.3	67	8.6
11	118	100	136	80	153	151	131	82	25	20	130	8.8
12	194	109	178	80	115	130	131	87	25	38	143	18
13	220	151	159	92	80	125	126	102	24	99	94	25
14	305	245	124	53	85	130	115	108	20	71	60	24
15	160	301	116	140	85	132	115	106	17	45	79	24
16	235	286	116	215	82	133	114	88	13	23	78	24
17	201	215	115	199	85	133	100	69	11	21	47	18
18	136	138	104	184	107	133	86	70	10	21	43	10
19	146	104	79	122	121	133	67	112	9.7	14	62	13
20	238	104	69	88	142	135	61	173	9.7	8.9	32	16
21	431	110	70	85	155	171	46	179	9.7	8.9	22	16
22	540	154	71	79	175	226	48	148	9.8	8.8	18	16
23	425	226	90	79	259	305	49	131	13	8.7	18	16
24	291	221	102	83	343	341	67	94	11	24	16	16
25	210	167	102	85	314	359	77	78	16	19	8.9	14
26	169	140	75	82	232	356	123	79	19	11	8.7	13
27	153	119	74	116	212	322	140	79	18	11	8.9	14
28	140	142	136	78	267	299	107	72	18	6.1	9.3	13
29	114	170	150	80	290	375	85	57	18	4.1	9.2	13
30	103	166	125	244	---	348	85	53	19	12	9.4	13
31	76	---	109	318	---	271	---	37	---	12	9.2	---
TOTAL	6940	3919	3351	3482	6088	7124	5032	3146	671.9	688.6	1132.6	414.5
MEAN	224	131	108	112	210	230	168	101	22.4	22.2	36.5	13.8
MAX	540	301	178	318	375	375	538	191	61	99	143	25
MIN	72	47	69	53	80	125	46	37	9.7	4.1	8.7	8.3

CAL YR 1975 TOTAL 39756.0 MEAN 109 MAX 545 MIN 10
WTR YR 1976 TOTAL 41989.6 MEAN 115 MAX 540 MIN 4.1

01085000 CONTOOCOOK RIVER NEAR HENNIKER, NH

LOCATION.--Lat 43°09'10", long 71°51'24", Merrimack County, Hydrologic Unit 01070003, 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 mi^2 (953 km^2).

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

REVISED RECORDS.--WSP 1701: 1944(M).

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.

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

AVERAGE DISCHARGE.--37 years, 634 ft^3/s (17.95 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,460 ft^3/s (268 m^3/s) June 26, 1944, gage height, 13.13 ft (4.002 m); minimum daily, 19 ft^3/s (0.54 m^3/s) Oct. 29, 1940, July 17, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1768, 22,200 ft^3/s (629 m^3/s) Sept. 21, 1938, gage height, 21.3 ft (6.49 m), from floodmarks, from rating curve extended above 7,500 ft^3/s (212 m^3/s) on basis of computations of flow over dams at gage heights 12.72 ft (3.877 m) and 21.3 ft (6.49 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,570 ft^3/s (129 m^3/s) Apr. 2, gage height, 10.43 ft (3.179 m); maximum gage height, 11.85 ft (3.612 m), from peak-stage indicator, about Jan. 29 (ice jam); minimum daily discharge, 42 ft^3/s (1.19 m^3/s) Sept. 23-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1730	638	1380	742	2050	2090	2540	716	172	235	95	90
2	1510	502	1280	700	1940	1880	4460	1140	212	236	150	91
3	1210	599	1200	660	2260	1530	3890	1330	348	195	104	140
4	916	619	1060	640	2110	1490	3220	1240	303	117	79	88
5	675	619	931	620	1870	1620	2840	1190	304	131	70	63
6	691	629	871	600	1650	2200	2340	1060	246	163	66	46
7	560	598	816	580	1660	2200	1890	1060	194	144	63	48
8	462	597	790	570	1500	1900	1530	751	245	77	80	48
9	482	593	739	560	1230	1550	1320	902	269	73	415	45
10	390	727	1050	550	1060	1380	1000	739	154	70	550	43
11	330	971	1740	540	942	1240	884	643	106	83	890	43
12	1240	1020	1480	530	929	1120	925	763	102	101	781	44
13	1940	1580	1230	530	863	1130	980	1070	100	208	538	45
14	1720	2360	1080	590	813	1190	823	938	103	272	359	44
15	1390	2410	1000	690	739	1110	694	962	105	388	300	45
16	1240	2130	975	720	770	1210	594	883	102	233	250	45
17	936	1680	941	700	846	1090	568	756	109	105	210	46
18	1260	1360	871	660	928	970	542	855	105	96	185	50
19	2120	1150	773	610	1000	954	522	1010	115	153	160	50
20	2360	1060	679	580	1220	1050	461	1520	98	151	154	96
21	2810	1120	561	560	1220	1590	404	1540	93	150	121	60
22	2750	2010	550	540	1380	2440	381	1450	90	135	106	44
23	2370	1950	540	520	2230	2350	495	1300	90	159	135	42
24	2020	1660	530	500	2330	2100	499	1150	91	109	107	42
25	1530	1450	520	490	2160	2110	469	1040	96	118	90	42
26	1330	1270	660	530	1920	2270	739	896	100	124	83	44
27	1220	1190	800	680	1900	2300	1120	730	104	84	83	119
28	1010	1460	900	1000	2180	2860	1010	602	134	73	122	172
29	936	1520	986	1060	2170	3000	779	475	98	70	93	88
30	869	1390	1010	2810	---	2580	762	327	223	78	84	58
31	807	---	845	2470	---	2270	---	233	---	84	82	---
TOTAL	40814	36862	28788	23532	43870	54774	38681	29271	4611	4415	6605	1921
MEAN	1317	1229	929	759	1513	1767	1289	944	154	142	213	64.0
MAX	2810	2410	1740	2810	2330	3000	4460	1540	348	388	890	172
MIN	330	502	520	490	739	954	381	233	90	70	63	42

CAL YR 1975 TOTAL 294053 MEAN 806 MAX 3590 MIN 32
WTR YR 1976 TOTAL 314144 MEAN 858 MAX 4460 MIN 42

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

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

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

DRAINAGE AREA.--427 mi^2 (1,106 km^2).

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 (Reservoirs in Merrimack River basin), and other reservoirs upstream. Diversion from Hopkinton Lake to Everett Lake on Piscataquog River during periods of high flow in March 1968 and April 1969. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years (water years 1963-76), 694 ft^3/s (19.65 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,260 ft^3/s (149 m^3/s) Apr. 24, 1969, gage height, 8.66 ft (2.640 m); minimum daily, 15 ft^3/s (0.42 m^3/s) July 22, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,750 ft^3/s (106 m^3/s) Apr. 3, gage height, 6.91 ft (2.106 m); minimum daily, 32 ft^3/s (0.91 m^3/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1660	763	1480	969	2200	2250	2550	805	249	323	145	127
2	1640	618	1390	892	2300	2160	3580	1090	300	237	188	174
3	1280	636	1330	854	2400	1800	3720	1290	387	261	229	164
4	1010	711	1140	811	2300	1720	3630	1270	347	168	174	178
5	793	668	1050	943	2200	1710	3360	1240	318	145	151	178
6	687	694	936	969	2000	2120	2710	1210	287	171	148	136
7	655	662	917	936	1800	2210	2090	1140	270	192	148	35
8	473	668	917	792	1600	2100	1730	892	265	130	112	102
9	506	674	873	640	1450	1710	1460	892	300	99	199	136
10	445	674	1150	580	1350	1550	1170	873	261	99	649	62
11	402	1010	1740	520	1250	1280	1060	717	86	102	1010	130
12	1220	1080	1710	490	1150	1220	962	769	145	161	898	32
13	2060	1670	1450	470	1070	1210	1050	1100	115	196	618	118
14	1900	2440	1240	500	1060	1290	962	994	148	287	468	96
15	1430	2650	1100	600	1050	1180	781	1010	99	376	361	86
16	1470	2280	1090	740	1050	1270	717	969	110	309	323	82
17	1060	1870	1070	860	1070	1070	668	873	151	199	309	73
18	1330	1470	994	900	1150	1020	624	836	155	185	300	107
19	2270	1280	873	780	1260	1030	612	1030	133	99	291	49
20	2550	1110	830	720	1400	1080	546	1520	130	237	245	121
21	3030	1130	687	660	1550	1540	490	1600	133	174	207	145
22	2930	2050	534	620	1700	2350	457	1500	130	196	192	142
23	2570	2140	799	570	2000	2550	552	1370	130	181	196	79
24	2180	1850	892	540	2300	2240	575	1170	130	203	222	73
25	1690	1510	924	510	2770	2170	546	1070	130	112	185	51
26	1410	1430	898	480	2520	2270	775	911	139	178	171	71
27	1300	1300	994	540	2280	2520	1080	830	82	164	115	160
28	1110	1520	1070	660	2360	2870	1140	674	151	155	145	245
29	982	1610	1130	1500	2330	3150	917	473	168	102	196	200
30	949	1500	1050	2600	---	2950	817	387	142	130	196	44
31	885	---	1010	2300	---	2600	---	270	---	142	171	---
TOTAL	43877	39668	33268	25946	50920	58190	41331	30775	5591	5713	8962	3396
MEAN	1415	1322	1073	837	1756	1877	1378	993	186	184	289	113
MAX	3030	2650	1740	2600	2770	3150	3720	1600	387	376	1010	245
MIN	402	618	534	470	1050	1020	457	270	82	99	112	32

CAL YR 1975 TOTAL 318790 MEAN 873 MAX 3520 MIN 55
WTR YR 1976 TOTAL 347637 MEAN 950 MAX 3720 MIN 32

NOTE.--No gage-height record Jan. 22 to Feb. 22.

01085800 WEST BRANCH WARNER RIVER NEAR BRADFORD, NH

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

DRAINAGE AREA.--5.75 mi^2 (14.89 km^2).

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, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 11.4 ft^3/s (0.323 m^3/s) 26.92 in/yr (684 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 603 ft^3/s (17.1 m^3/s) Apr. 1, 1976, gage height, 8.49 ft (2.588 m), from rating curve extended above 210 ft^3/s (5.95 m^3/s); minimum, about 0.06 ft^3/s (0.002 m^3/s) about Sept. 20, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 110 ft^3/s (3.12 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 12	0230	190	5.38	6.40	1.951	Mar. 28	0345	285	8.07	7.00	2.134
Oct. 20	0930	346	9.80	7.33	2.234	Apr. 1	1545	†*603	17.1	*8.49	2.588
Nov. 13	0700	127	3.60	5.93	1.807	May 2	0315	161	4.56	6.19	1.887
Nov. 21	2000	143	4.05	6.06	1.847	May 19	1445	122	3.46	5.89	1.795
Dec. 10	1315	112	3.17	5.81	1.771	Aug. 10	1130	293	8.30	7.33	2.234
Mar. 21	1930	199	5.64	6.46	1.969						

† From rating curve extended above 210 ft^3/s (5.95 m^3/s).

Minimum discharge, 0.33 ft^3/s (0.009 m^3/s) Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	7.6	43	7.6	40	74	184	17	4.4	5.4	9.0	.60
2	6.2	7.6	23	7.1	65	50	100	83	3.9	2.0	5.5	.56
3	5.0	6.8	16	6.8	37	42	51	36	3.3	1.3	2.0	.52
4	4.1	7.6	12	6.4	20	36	35	25	3.0	1.0	1.2	.59
5	3.5	7.6	10	6.0	15	60	24	17	2.6	.82	.95	.58
6	3.1	6.4	11	5.8	13	40	20	14	2.4	.78	.71	.60
7	2.8	6.4	9.5	5.5	12	30	18	17	3.3	.78	2.4	.60
8	2.5	9.0	8.1	5.3	11	23	17	21	2.7	1.1	3.9	.54
9	2.3	12	8.3	5.2	10	20	16	14	2.4	.78	4.6	.45
10	2.2	22	72	4.9	9.6	15	15	11	1.9	.58	101	.50
11	13	35	40	4.7	10	13	13	9.5	1.7	.62	24	2.3
12	102	19	20	4.6	9.5	12	12	36	1.5	6.0	7.2	.97
13	35	88	15	4.5	9.6	15	11	21	1.5	1.9	3.8	.71
14	24	75	14	14	10	15	10	14	1.3	1.1	3.2	.66
15	16	32	17	9.0	9.0	13	9.4	46	1.4	1.0	2.6	.54
16	13	20	15	7.0	11	11	9.0	18	1.2	.86	3.4	.57
17	9.5	16	12	6.1	11	13	8.6	14	1.3	.75	2.3	.64
18	170	13	10	5.5	10	10	7.4	13	1.3	.66	1.7	1.2
19	149	12	7.4	5.0	22	9.2	7.1	64	1.1	.66	1.4	.99
20	180	11	6.0	4.7	18	27	6.6	57	1.1	.63	1.1	.87
21	51	53	5.6	4.3	13	110	6.5	30	1.1	.65	.97	.76
22	26	59	5.2	4.1	60	81	15	21	1.0	.57	.79	.61
23	18	23	4.8	3.9	54	40	15	15	.92	.53	.75	.62
24	15	17	4.6	3.7	45	44	10	12	.85	.97	.67	.62
25	17	15	4.4	3.6	40	71	15	11	.86	.81	.60	.51
26	22	13	10	3.4	36	87	49	9.9	1.7	.60	.63	2.5
27	15	13	21	3.3	60	92	26	8.6	.94	.66	.60	5.3
28	12	14	12	80	70	166	19	6.9	.70	.85	.70	2.3
29	11	12	9.7	64	80	63	15	5.4	.63	.66	1.0	1.3
30	10	11	9.0	52	---	47	12	5.0	1.5	5.7	.80	1.0
31	8.6	---	8.1	45	---	38	---	5.0	---	3.1	.70	---
TOTAL	956.5	644.0	463.7	393.0	810.7	1367.2	756.6	677.3	53.50	43.82	190.17	30.51
MEAN	30.9	21.5	15.0	12.7	28.0	44.1	25.2	21.8	1.78	1.41	6.13	1.02
MAX	180	88	72	80	80	166	184	83	4.4	6.0	101	5.3
MIN	2.2	6.4	4.4	3.3	9.0	9.2	6.5	5.0	.63	.53	.60	.45
CFSM	5.37	3.74	2.61	2.21	4.87	7.67	4.38	3.79	.31	.25	1.07	.18
IN.	6.19	4.17	3.00	2.54	5.24	8.84	4.89	4.38	.35	.28	1.23	.20

CAL YR 1975 TOTAL 5422.37 MEAN 14.9 MAX 203 MIN .34 CFSM 2.59 IN 35.07
WTR YR 1976 TOTAL 6387.00 MEAN 17.5 MAX 184 MIN .45 CFSM 3.04 IN 41.31

01086000 WARNER RIVER AT DAVISVILLE, NH

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

DRAINAGE AREA.--146 mi^2 (378 km^2).

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).

REVISED RECORDS.--WSP 1901: 1960.

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

REMARKS.--Records good. Prior to 1948, slight diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--37 years, 236 ft^3/s (6.684 m^3/s), 21.95 in/yr (558 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,510 ft^3/s (128 m^3/s) Mar. 27, 1953, gage height, 9.88 ft (3.011 m); minimum, 2.6 ft^3/s (0.074 m^3/s) Aug. 17, 18, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1938 reached a stage of 12.8 ft (3.901 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34.0 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 28	2300	1,800	51.0	7.39	2.252	Apr. 2	0400	*2,880	81.6	*8.51	2.594

Minimum discharge, 12 ft^3/s (0.34 m^3/s) Sept. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	198	411	263	561	736	1310	309	167	42	75	19
2	147	181	471	232	580	637	2680	550	155	52	109	17
3	118	169	433	220	725	613	2080	672	137	47	99	15
4	103	163	369	200	674	612	1510	576	121	41	72	14
5	85	156	313	190	592	621	1120	499	107	37	56	14
6	74	147	281	180	519	762	879	429	95	35	47	14
7	65	135	267	175	450	752	723	401	87	32	42	14
8	58	133	241	165	401	620	627	420	82	33	52	21
9	52	152	243	160	363	540	555	394	76	31	65	19
10	49	167	392	150	327	480	502	344	69	28	202	20
11	51	314	640	150	308	454	467	302	61	26	384	23
12	316	349	582	145	300	398	416	338	57	71	304	21
13	498	534	485	145	286	385	372	451	50	76	205	21
14	428	978	420	184	291	418	343	410	45	57	150	25
15	347	941	394	254	272	407	315	443	41	47	108	23
16	276	723	393	240	277	350	295	478	39	39	98	21
17	226	569	348	200	307	310	277	414	38	34	83	19
18	325	469	316	190	311	320	260	378	38	29	67	20
19	720	399	250	180	348	300	245	448	36	25	57	20
20	800	347	190	170	468	324	228	620	34	22	49	19
21	1030	346	165	160	452	523	209	621	30	21	43	18
22	843	858	160	150	469	962	205	561	28	20	38	16
23	658	792	180	145	699	830	354	494	27	18	34	14
24	512	604	170	140	699	726	337	425	25	21	30	13
25	420	495	165	141	652	790	296	367	24	21	27	12
26	393	431	165	137	615	954	437	331	22	20	25	12
27	366	392	270	173	658	1050	538	301	22	19	24	21
28	317	443	338	490	845	1520	477	269	22	18	22	35
29	279	452	313	900	783	1650	408	232	21	18	21	33
30	253	402	284	748	---	1370	349	199	25	25	20	32
31	223	---	274	634	---	1140	---	181	---	60	19	---
TOTAL	10213	12439	9923	7611	14232	21554	18814	12857	1781	1065	2627	585
MEAN	329	415	320	246	491	695	627	415	59.4	34.4	84.7	19.5
MAX	1030	978	640	900	845	1650	2680	672	167	76	384	35
MIN	49	133	160	137	272	300	205	181	21	18	19	12
CFSM	2.25	2.84	2.19	1.68	3.36	4.76	4.29	2.84	.41	.24	.58	.13
IN.	2.60	3.17	2.53	1.94	3.63	5.49	4.79	3.28	.45	.27	.67	.15

CAL YR 1975 TOTAL 100131 MEAN 274 MAX 1550 MIN 15 CFSM 1.88 IN 25.51
WTR YR 1976 TOTAL 113701 MEAN 311 MAX 2680 MIN 12 CFSM 2.13 IN 28.97

01087000 BLACKWATER RIVER NEAR WEBSTER, NH

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

DRAINAGE AREA.--129 mi^2 (334 km^2).

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).

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

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

REMARKS.--Records good except those for period of no gage-height record, which are fair. High flow regulated by Blackwater Reservoir since 1941 (Reservoirs in Merrimack River basin). Some regulation at low flow prior to 1933 by mill above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--51 years, 212 ft^3/s (6.004 m^3/s), 22.32 in/yr (567 mm/yr), adjusted for storage.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,880 ft^3/s (53.2 m^3/s) Apr. 5, gage height, 6.66 ft (2.030 m); minimum, 26 ft^3/s (0.74 m^3/s) Sept. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	200	300	178	500	590	901	266	202	70	329	46
2	200	196	360	167	444	536	1090	382	209	78	279	45
3	180	140	400	160	486	461	1320	579	209	74	291	44
4	140	140	400	158	502	419	1480	606	184	68	221	42
5	140	140	300	151	463	413	1650	483	154	60	153	41
6	136	140	280	143	391	480	1690	380	135	54	113	40
7	132	140	260	141	315	574	1040	322	124	50	95	37
8	132	140	240	141	267	571	634	313	119	52	90	35
9	128	140	240	137	240	463	566	328	115	48	95	33
10	83	140	268	133	223	383	513	304	107	45	182	31
11	83	200	400	130	218	348	474	265	98	43	467	34
12	136	285	473	127	219	312	437	274	90	71	724	35
13	285	360	390	128	213	300	408	361	84	229	553	34
14	450	740	311	138	212	305	383	421	80	262	319	32
15	348	800	240	160	208	310	365	402	77	156	257	31
16	228	800	200	176	204	298	348	488	74	110	246	30
17	188	580	170	174	215	258	308	512	74	86	230	29
18	104	400	150	158	228	250	291	423	73	72	208	32
19	336	360	135	144	246	245	273	441	69	63	164	33
20	665	300	129	136	302	259	241	588	67	56	133	32
21	940	280	143	130	340	350	217	862	67	52	114	32
22	870	420	149	122	348	580	204	789	64	49	105	31
23	650	560	153	118	404	785	282	599	60	46	93	30
24	460	540	151	117	491	713	314	491	57	51	82	27
25	360	400	148	116	610	639	276	417	56	56	74	26
26	300	360	150	117	520	731	322	377	55	62	67	27
27	300	300	182	129	467	870	442	340	54	62	62	38
28	280	300	222	262	520	1110	468	303	53	64	60	59
29	240	320	219	465	601	1370	373	273	52	64	57	95
30	200	320	197	572	---	1420	303	245	57	86	53	85
31	200	---	184	580	---	1060	---	219	---	216	49	---
TOTAL	9094	10141	7544	5708	10397	17403	17613	13053	2919	2555	5965	1166
MEAN	293	338	243	184	359	561	587	421	97.3	82.4	192	38.9
MAX	940	800	473	580	610	1420	1690	862	209	262	724	95
MIN	83	140	129	116	204	245	204	219	52	43	49	26
MEAN†	293	339	243	187	359	567	578	421	96.6	82.7	192	39
CFSM†	2.27	2.63	1.88	1.45	2.78	4.40	4.48	3.26	.75	.64	1.49	.30
IN.†	2.62	2.93	2.17	1.68	3.00	5.07	5.00	3.76	.84	.74	1.72	.34

CAL YR 1975 TOTAL 87188 MEAN 239 MAX 1520 MIN 23 MEAN† 239 CFSM† 1.85 IN† 25.14
WTR YR 1976 TOTAL 103558 MEAN 283 MAX 1690 MIN 26 MEAN† 283 CFSM† 2.19 IN† 29.85

† Adjusted for change in contents in Blackwater Reservoir.
NOTE.--No gage-height record Oct. 1 to Dec. 8.

01088000 CONTOOCOOK RIVER AT PENACOOK, NH

LOCATION.--Lat 43°17'12", long 71°35'56", Merrimack County, Hydrologic Unit 01070003, on right bank at Penacook, 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--766 mi^2 (1,984 km^2).

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).

REVISED RECORDS.--WSP 756: 1933(M), drainage area. WSP 1231: 1929, 1931. WSP 1901: 1960.

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

REMARKS.--Records good except those for winter period, 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 (Reservoirs in Merrimack River basin), and other reservoirs upstream. Diversion from Hopkinton Lake to Everett Lake on Piscataquog River at times during periods of high flow in March 1968 and April 1969. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--48 years, 1,258 ft^3/s (35.63 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,800 ft^3/s (1,330 m^3/s) Mar. 20, 1936, gage height, 14.26 ft (4.346 m), from floodmarks; minimum, 18 ft^3/s (0.51 m^3/s) Sept. 7, 1968; minimum daily, 57 ft^3/s (1.61 m^3/s) Oct. 12, 1964, Aug. 16, 1965. Maximum discharge since construction of Hopkinton and Everett Dams in 1962, 10,300 ft^3/s (292 m^3/s) Apr. 25, 1969, gage height, 6.29 ft (1.917 m).
Stage and discharge of flood of Mar. 20, 1936, are the greatest since at least 1725.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,380 ft^3/s (209 m^3/s) Apr. 2, gage height, 5.56 ft (1.695 m); maximum gage height, 5.62 ft (1.713 m) Jan. 29, backwater from ice; minimum discharge, 79 ft^3/s (2.24 m^3/s) Sept. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2270	1300	2490	1600	3870	3750	5020	1500	666	390	468	151
2	2060	1090	2530	1400	3690	3590	6980	2060	645	402	511	175
3	1680	1020	2510	1350	4140	3120	7320	2730	754	390	548	168
4	1350	1080	2250	1300	3700	2930	6890	2770	687	325	468	171
5	1110	1020	1990	1250	3300	2930	6420	2530	635	253	353	186
6	901	1040	1720	1200	2800	3460	5820	2290	563	253	287	154
7	888	1010	1610	1150	2500	3780	4770	2130	541	272	262	120
8	709	994	1470	1100	2300	3620	3570	1900	475	243	253	102
9	666	1010	1420	1100	2050	3120	3050	1740	518	193	282	105
10	635	1020	1880	1050	1900	2730	2630	1740	482	178	731	105
11	605	1650	2890	1050	1800	2380	2320	1420	348	164	1540	123
12	1400	1940	3050	1050	1730	2140	2060	1420	336	325	1940	117
13	2770	2690	2690	1000	1650	2090	2070	2040	319	371	1500	102
14	2910	4060	2290	1100	1550	2180	1940	2090	262	571	1020	107
15	2300	4620	2040	1200	1500	2090	1650	2060	298	548	743	105
16	2090	4260	1970	1300	1420	2110	1500	2140	229	511	677	100
17	1590	3480	1880	1700	1540	1860	1350	2040	282	365	605	95
18	1780	2830	1700	1300	1630	1900	1260	1860	298	267	563	100
19	3160	2420	1570	1200	1840	1820	1200	2180	272	213	504	100
20	3730	2130	1350	1150	2160	1740	1090	2870	248	272	441	95
21	4500	2070	1200	1100	2380	2400	994	3350	248	267	348	117
22	4540	3370	1100	1100	2300	3750	914	3310	234	239	314	141
23	4040	3900	1050	1050	3260	4330	1120	2910	225	234	282	129
24	3330	3460	1000	1050	3350	4040	1270	2510	221	248	282	90
25	2670	2890	1000	1000	3850	3850	1200	2200	213	225	253	81
26	2270	2570	980	1000	3640	4140	1540	1940	209	182	217	84
27	2040	2400	1300	1300	3420	4570	2160	1650	201	213	193	120
28	1900	2650	1600	2000	3690	5410	2340	1430	186	205	161	229
29	1720	2810	1800	2100	3870	6160	1970	1120	234	189	213	303
30	1630	2650	1900	2300	---	6100	1610	914	257	186	197	239
31	1470	---	1700	4590	---	5390	---	789	---	298	209	---
TOTAL	64714	69434	55930	43140	76830	103480	84028	63633	11086	8992	16365	4014
MEAN	2088	2314	1804	1392	2649	3338	2801	2053	370	290	528	134
MAX	4540	4620	3050	4590	4140	6160	7320	3350	754	571	1940	303
MIN	605	994	980	1000	1420	1740	914	789	186	164	161	81

CAL YR 1975 TOTAL 501865 MEAN 1375 MAX 5090 MIN 141
WTR YR 1976 TOTAL 601646 MEAN 1644 MAX 7320 MIN 81

01089000 SOUCOOK RIVER NEAR CONCORD, NH

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

DRAINAGE AREA.--76.8 mi^2 (198.9 km^2).

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).

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

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

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

AVERAGE DISCHARGE.--25 years, 111 ft^3/s (3.144 m^3/s), 19.63 in/yr (499 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,880 ft^3/s (81.6 m^3/s) Apr. 6, 1960, gage height, 13.34 ft (4.066 m); minimum, 1.5 ft^3/s (0.042 m^3/s) Aug. 7, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s (19.8 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 29	0730	770	21.8	8.90	2.713	Apr. 2	1100	*1,370	38.8	*10.53	3.210
Mar. 28	2300	946	26.8	9.46	2.883						

Minimum discharge, 11 ft^3/s (0.31 m^3/s) Sept. 2-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	98	210	136	327	274	559	110	87	68	68	12
2	62	92	192	123	366	243	1200	226	83	57	102	11
3	52	87	173	112	478	224	749	226	75	41	68	11
4	46	86	153	107	421	216	516	258	69	35	48	11
5	43	86	130	100	319	223	406	204	64	33	39	11
6	40	80	131	96	256	343	339	178	61	29	32	12
7	39	76	129	90	208	305	292	177	59	26	29	12
8	35	82	107	86	186	241	253	199	58	24	30	13
9	34	110	114	82	171	199	226	169	53	14	32	13
10	33	104	167	78	155	189	202	145	49	19	55	15
11	34	157	223	76	148	171	186	128	45	18	88	70
12	288	139	175	74	144	159	168	156	42	101	61	45
13	257	345	145	87	136	160	154	248	39	73	44	28
14	165	606	134	132	139	183	145	182	38	48	37	22
15	121	507	135	181	125	174	140	236	41	43	37	18
16	98	335	138	154	130	164	132	238	36	34	41	16
17	82	258	116	135	148	140	127	179	37	29	37	15
18	149	213	90	119	146	145	121	174	38	26	30	17
19	294	185	72	106	164	136	112	374	34	23	25	23
20	259	165	66	94	225	151	102	428	32	21	22	23
21	324	165	64	87	193	295	95	357	30	20	21	19
22	231	482	70	82	201	465	96	299	29	20	19	18
23	178	382	74	77	310	357	118	245	26	18	17	19
24	146	276	70	75	256	305	108	205	24	21	16	17
25	130	233	67	72	214	381	107	180	24	25	15	15
26	132	207	66	80	213	472	213	161	23	20	14	14
27	125	209	177	122	261	527	200	145	21	18	13	22
28	111	360	187	481	365	779	162	127	21	27	13	41
29	102	293	163	740	310	805	138	112	20	25	13	39
30	107	233	144	591	---	579	121	100	24	32	14	32
31	109	---	144	405	---	486	---	92	---	74	13	---
TOTAL	3901	6651	4026	4980	6715	9491	7487	6258	1282	1062	1093	634
MEAN	126	222	130	161	232	306	250	202	42.7	34.3	35.3	21.1
MAX	324	606	223	740	478	805	1200	428	87	101	102	70
MIN	33	76	64	72	125	136	95	92	20	14	13	11
CFSM	1.64	2.89	1.69	2.10	3.02	3.98	3.26	2.63	.56	.45	.46	.27
IN.	1.89	3.22	1.95	2.41	3.25	4.60	3.63	3.03	.62	.51	.53	.31

CAL YR 1975 TOTAL 44986.6 MEAN 123 MAX 1020 MIN 6.9 CFSM 1.60 IN 21.79
WTR YR 1976 TOTAL 53580.0 MEAN 146 MAX 1200 MIN 11 CFSM 1.90 IN 25.95

NOTE.--Backwater from rocks July 9 to Sept. 30.

01090100 MERRIMACK RIVER AT HOOKSETT, NH

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

DRAINAGE AREA.--2,810 mi^2 (7,278 km^2), approximately.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
OCT											
01...	1130	48	8.8	20.0	13.5	30	3	4.5	37	6200	1200
16...	1200	81	--	19.0	11.0	22	1	7.4	27	6900	1700
NOV											
04...	1100	45	6.4	17.0	12.0	8	1	10.3	24	6700	1300
19...	1200	45	7.4	12.5	4.5	15	2	6.6	17	4200	560
DEC											
02...	1100	54	7.4	8.0	5.0	2	1	11.8	20	3100	410
30...	1200	56	7.1	-2.0	.0	7	1	4.8	17	7000	1000
JAN											
13...	1100	67	5.8	2.0	1.0	10	1	13.2	19	7900	580
FEB											
03...	0900	59	6.8	-2.0	.0	13	1	12.2	10	13000	180
24...	1000	70	6.2	4.0	2.0	8	1	13.2	14	15000	1100
MAR											
18...	1000	143	7.4	10.0	1.5	6	1	13.2	10	1600	88
31...	1130	45	7.5	10.0	6.0	10	2	6.4	14	400	120
APR											
18...	1100	48	6.8	23.0	14.5	7	3	8.8	25	800	90
MAY											
03...	1145	55	7.3	22.0	12.0	14	3	5.2	9	4400	320
17...	1115	51	7.5	18.0	16.5	14	1	9.2	27	6300	240
26...	1115	52	7.5	16.0	12.0	6	1	5.7	23	3100	180
JUN											
09...	1030	70	7.5	27.0	22.5	5	1	8.0	11	3200	240
23...	1030	81	7.3	29.0	27.0	2	1	6.2	20	3300	8170
JUL											
12...	1130	74	7.0	24.0	27.0	2	2	4.8	16	2900	200
27...	1215	80	5.7	27.0	23.5	4	1	4.1	23	13000	B90
AUG											
16...	1130	54	7.3	22.0	24.5	21	4	5.4	23	7700	960
30...	1100	73	6.9	14.0	19.5	17	4	5.9	14	5700	540
SEP											
08...	1000	72	6.9	17.5	19.5	7	1	4.9	<10	4700	2300
21...	1100	66	5.8	18.0	20.5	5	1	4.5	10	5300	B200

B NON-IDEAL COLONY COUNT.

01090100 MERRIMACK RIVER AT HOOKSETT, NH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	HARDNESS (CA,MG) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	SUSPENDED SOLIDS (MG/L)	TOTAL RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT										
01...	--	--	--	--	--	--	--	9	31	.09
16...	--	7	--	6	--	6.2	8.2	9	57	.09
NOV										
04...	--	--	--	--	--	--	--	2	38	.12
19...	--	--	--	--	--	--	--	8	44	.08
DEC										
02...	--	--	--	--	--	--	--	3	44	.12
30...	--	--	--	--	--	--	--	0	50	.17
JAN										
13...	--	--	--	--	--	--	--	5	50	.17
FEB										
03...	1	--	--	--	--	--	--	6	47	.19
24...	--	--	--	--	--	6.3	11	9	74	.17
MAR										
18...	--	--	--	--	--	--	--	5	59	.17
31...	--	--	--	--	--	--	--	87	80	.24
APR										
18...	--	8	0	7	2.0	6.3	6.3	19	47	.19
MAY										
03...	--	--	--	--	--	--	--	16	67	.24
17...	--	--	--	--	--	--	--	6	45	.10
26...	--	--	--	--	--	--	--	3	45	.10
JUN										
09...	--	--	--	--	--	--	--	3	44	.17
23...	--	18	0	15	1.4	4.7	12	1	72	.15
JUL										
12...	--	--	--	--	--	--	--	1	51	.23
27...	--	--	--	--	--	--	--	6	62	.23
AUG										
16...	--	--	--	--	--	--	--	3	44	.08
30...	--	--	--	--	--	--	--	2	44	.13
SEP										
08...	--	--	--	--	--	--	--	5	46	.08
21...	--	12	0	10	30	5.5	8.8	0	40	.12

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)	TOTAL CHROMIUM (CR) (UG/L)
OCT										
01...	.03	.46	.49	.58	.08	--	0	.000	.000	10
16...	.04	.25	.29	.38	.04	--	0	.000	.000	20
NOV										
04...	.04	.25	.29	.41	.05	--	0	.000	.000	0
19...	.02	.24	.26	.34	.04	--	0	.000	.000	0
DEC										
02...	.02	.18	.20	.32	.03	--	0	.400	.000	0
30...	.01	.26	.27	.44	.03	--	2	.200	.000	0
JAN										
13...	.09	.23	.32	.49	.04	--	--	.000	.000	<10
FEB										
03...	.01	.20	.21	.40	.04	--	0	.000	.000	20
24...	.05	.22	.27	.44	.05	0	0	.000	.000	4
MAR										
18...	.04	.27	.31	.48	.04	--	0	.000	.000	<10
31...	.03	.20	.23	.47	.04	--	0	--	--	0
APR										
18...	.01	.22	.23	.42	.04	0	0	.000	.000	10
MAY										
03...	.03	.17	.20	.44	.04	--	0	.000	.000	20
17...	.01	.27	.28	.38	.04	--	0	.000	.000	10
26...	.04	.26	.30	.40	.03	--	0	--	--	10
JUN										
09...	.09	.34	.43	.60	.04	--	0	--	--	10
23...	.08	.32	.40	.55	.04	0	3	.000	.000	10
JUL										
12...	.01	.32	.33	.56	.03	--	0	.000	.000	10
27...	.01	.47	.48	.71	.06	--	0	18.5	3.67	10
AUG										
16...	.04	.49	.53	.61	.04	--	0	2.73	.000	<10
30...	.06	.22	.28	.41	.04	--	0	.000	.000	<10
SEP										
08...	.04	.04	.08	.16	.04	--	1	3.94	.000	<10
21...	.05	.18	.23	.35	.04	4	1	1.88	.692	10

01090100 MERRIMACK RIVER AT HOOKSETT, NH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL ALUMINUM (AL) (UG/L)	TOTAL BISMUTH (BI) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL GALLIUM (GA) (UG/L)	TOTAL GERMANIUM (GE) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)
OCT												
16...	110	<1	10	0	10	<1	<0	3	<0	<0	200	1
FEB												
24...	470	<1	10	<1	7	0	<1	2	<1	<1	150	3
APR												
18...	1400	<2	20	<1	20	1	<1	2	<1	<2	930	4
JUN												
23...	70	<2	10	<0	20	0	<1	3	<0	<2	440	2
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)	TOTAL TIN (SN) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL VANADIUM (V) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZIRCONIUM (ZR) (UG/L)	TOTAL PCB (UG/L)
OCT												
16...	1	30	0	1	<0	30	<0	1	<.3	7	<0	.0
FEB												
24...	0	50	<1	2	<1	20	<1	30	1.0	20	<2	.0
APR												
18...	0	60	1	3	<0	20	<1	100	2.0	0	<5	.0
JUN												
23...	0	50	<0	2	<0	40	<1	2	<1.0	20	<2	.0
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	.0

DATE	POLYCHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL TOXAPHENE (UG/L)
OCT												
16...	--	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0
FEB												
24...	--	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0
APR												
18...	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0
JUN												
23...	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0
SEP												
21...	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0

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

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

DRAINAGE AREA.--63.1 mi^2 (163.4 km^2).

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

AVERAGE DISCHARGE.--13 years, 93.2 ft^3/s (2.639 m^3/s), 20.06 in/yr (510 mm/yr), adjusted for storage and diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,530 ft^3/s (43.3 m^3/s) May 1, 1969, gage height, 8.73 ft (2.661 m); no flow for part of Aug. 27, Nov. 18, 1964, Oct. 22, 1968, caused by unusual regulation; minimum daily discharge, 0.39 ft^3/s (0.011 m^3/s) Sept. 6, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 850 ft^3/s (24.1 m^3/s) Oct. 22, gage height not determined; minimum daily, 3.6 ft^3/s (0.10 m^3/s) Sept. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	182	170	120	260	246	243	61	55	28	11	5.0
2	90	170	148	110	301	298	211	61	51	28	14	4.9
3	65	143	158	110	361	320	470	61	46	25	12	4.9
4	52	134	178	106	316	285	584	129	40	20	9.9	4.6
5	44	134	145	89	259	264	595	140	35	17	9.0	4.9
6	39	132	150	122	217	320	445	122	32	15	8.1	4.9
7	35	124	165	114	183	320	289	110	32	13	9.2	4.5
8	31	124	154	107	173	300	219	120	32	11	12	4.2
9	29	134	162	77	114	285	204	116	29	10	15	4.0
10	29	124	213	63	155	205	207	102	27	9.2	81	3.8
11	28	175	246	64	120	225	204	91	24	8.2	63	4.4
12	179	178	249	64	102	201	195	97	22	24	36	4.5
13	69	243	247	91	122	201	169	112	18	29	29	4.3
14	249	249	242	103	122	201	159	81	17	24	24	4.3
15	455	255	237	120	122	234	138	75	16	19	21	4.3
16	482	255	219	153	122	219	77	70	14	16	22	4.1
17	285	240	167	127	145	185	61	67	16	14	20	4.0
18	139	240	147	102	180	150	55	67	16	12	16	4.5
19	40	221	138	102	172	168	52	159	16	11	14	5.2
20	106	176	120	102	160	158	47	182	16	8.7	11	5.2
21	406	199	105	101	160	240	44	145	15	9.0	10	4.9
22	715	248	106	81	160	240	43	122	14	8.9	9.1	4.4
23	669	245	109	69	270	255	53	138	13	7.9	8.4	4.1
24	287	212	108	64	324	261	51	125	12	9.3	7.6	3.9
25	230	118	99	64	265	376	54	110	12	8.8	7.0	3.6
26	240	157	93	76	238	449	62	97	12	7.5	6.6	3.6
27	219	188	105	134	231	482	62	84	10	6.9	6.5	4.9
28	217	219	134	186	255	478	62	75	11	6.7	6.5	6.2
29	216	198	135	348	255	582	61	67	11	6.3	6.5	6.3
30	216	167	126	455	---	509	61	59	13	7.8	5.8	6.3
31	213	---	126	274	---	339	---	56	---	9.7	5.1	---
TOTAL	6220	5584	4901	3898	5864	8996	5177	3101	677	430.9	516.3	138.7
MEAN	201	186	158	126	202	290	173	100	22.6	13.9	16.7	4.62
MAX	715	255	249	455	361	582	595	182	55	29	81	6.3
MIN	28	118	93	63	102	150	43	56	10	6.3	5.1	3.6
MEAN†	199	186	158	125	204	290	172	99.4	21.3	13.9	16.4	4.62
CFSM†	3.15	2.95	2.50	1.98	3.23	4.60	2.73	1.58	.34	.22	.26	.07
IN.†	3.64	3.28	2.89	2.28	3.48	5.31	3.04	1.82	.38	.25	.30	.08

CAL YR 1975 TOTAL 41792.2 MEAN 114 MAX 808 MIN 4.3 MEAN† 115 CFSM† 1.82 IN† 24.65
WTR YR 1976 TOTAL 45503.9 MEAN 124 MAX 715 MIN 3.6 MEAN† 124 CFSM† 1.97 IN† 26.75

† Adjusted for change in contents in Everett Lake.
NOTE.--No gage-height record Oct. 12 to Nov. 19, Nov. 26 to Dec. 4, Jan. 21 to Feb. 1, Feb. 11 to Mar. 9, Mar. 11-24, Apr. 1-8.

01091000 SOUTH BRANCH PISCATAQUOG RIVER NEAR GOFFSTOWN, NH

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

DRAINAGE AREA.--104 mi^2 (269 km^2).

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, which are fair. Prior to 1954, some regulation at low flow by mill upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--36 years, 165 ft^3/s (4.673 m^3/s), 21.55 in/yr (547 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft^3/s (116 m^3/s) June 25, 1944, gage height, 9.47 ft (2.886 m); maximum gage height, 14.33 ft (4.368 m) Feb. 11, 1970 (ice jam); minimum discharge, 2.4 ft^3/s (0.068 m^3/s) Aug. 20-22, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 14	1400	1,000	28.3	6.07	1.850	Apr. 2	0130	*1,560	44.2	6.89	2.100
Jan. 29	1130	ice jam		*7.88	2.402						

Minimum discharge, 4.2 ft^3/s (0.12 m^3/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	135	300	230	540	504	691	144	72	108	22	11
2	117	128	260	210	620	419	1250	338	71	71	28	9.5
3	92	122	230	200	680	412	700	309	65	48	24	9.5
4	73	121	210	185	580	440	525	307	57	37	19	10
5	63	115	195	170	500	423	459	234	52	31	14	11
6	59	106	185	160	430	763	340	176	47	26	12	11
7	53	101	175	155	360	613	290	171	47	24	19	11
8	49	118	165	145	320	448	258	189	47	22	38	10
9	45	153	160	185	290	350	237	171	46	20	49	6.4
10	43	156	581	165	270	300	219	148	42	19	148	6.0
11	51	249	641	150	260	269	206	130	38	17	138	10
12	635	212	413	135	250	250	191	147	34	41	79	10
13	610	606	304	130	240	271	178	189	28	42	59	6.8
14	359	940	262	130	230	369	165	153	20	33	44	8.0
15	237	656	235	240	230	318	152	152	20	27	35	7.2
16	185	434	210	230	280	279	142	144	19	23	31	7.2
17	148	307	190	220	340	243	139	128	24	21	28	7.6
18	409	261	170	200	350	283	129	137	26	18	23	8.7
19	627	242	155	190	400	245	121	318	25	16	19	8.7
20	722	212	145	170	470	257	112	362	25	15	17	8.0
21	720	239	140	160	410	588	104	304	24	15	16	7.6
22	504	585	150	145	520	844	102	268	30	16	16	7.6
23	356	429	160	140	820	535	144	218	29	12	16	9.1
24	273	315	140	135	780	436	132	185	27	13	19	14
25	229	276	140	130	600	450	126	157	23	14	16	14
26	222	246	170	200	540	490	298	140	21	12	13	12
27	199	313	260	400	630	541	322	131	18	11	12	13
28	174	562	350	600	667	690	228	119	17	11	12	14
29	156	434	300	800	551	609	184	103	17	11	14	12
30	158	338	270	660	---	471	162	90	36	18	14	11
31	148	---	250	580	---	396	---	84	---	20	13	---
TOTAL	7866	9111	7516	7550	13158	13506	8306	5846	1047	812	1007	291.9
MEAN	254	304	242	244	454	436	277	189	34.9	26.2	32.5	9.73
MAX	722	940	641	800	820	844	1250	362	72	108	148	14
MIN	43	101	140	130	230	243	102	84	17	11	12	6.0
CFSM	2.44	2.92	2.33	2.35	4.37	4.19	2.66	1.82	.34	.25	.31	.09
IN.	2.81	3.26	2.69	2.70	4.71	4.83	2.97	2.09	.37	.29	.36	.10

CAL YR 1975 TOTAL 68087.0 MEAN 187 MAX 2240 MIN 11 CFSM 1.80 IN 24.35
WTR YR 1976 TOTAL 76016.9 MEAN 208 MAX 1250 MIN 6.0 CFSM 2.00 IN 27.19

01091500 PISCATAQUOG RIVER NEAR GOFFSTOWN, NH

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

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

PERIOD OF RECORD.--Discharge: October 1939 to 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 (Reservoirs in Merrimack River basin) and occasionally by Glen Lake since 1966. Prior to October 1966, flow regulated by powerplant at outlet of Glen Lake. Diversion from Hopkinton Lake on Contoocook River to Everett Lake during spring period of high flow in 1968 and 1969. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--37 years, 307 ft^3/s (8.694 m^3/s).

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,040 ft^3/s (57.8 m^3/s) Apr. 2, gage height, 7.19 ft (2.192 m); minimum, 12 ft^3/s (0.34 m^3/s) July 31, Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	438	351	564	380	731	898	1170	316	159	144	12	22
2	252	328	529	370	970	818	1700	579	151	129	13	21
3	196	355	491	350	1240	754	1350	605	137	93	13	21
4	160	399	464	340	970	748	1160	564	123	73	23	20
5	133	391	433	330	789	765	1180	486	111	60	31	21
6	121	383	412	320	640	1190	970	384	102	52	28	21
7	109	321	390	310	600	1070	698	365	100	49	38	19
8	96	167	370	328	500	892	559	392	98	48	55	18
9	88	172	360	384	430	720	529	369	93	46	71	17
10	85	283	900	350	392	625	505	335	88	43	240	17
11	100	473	1030	310	429	569	486	252	80	45	290	17
12	876	455	765	280	376	514	468	239	67	44	159	16
13	906	930	645	258	384	544	425	365	63	53	117	16
14	678	1370	595	258	412	672	396	309	53	67	90	16
15	804	1080	520	468	384	630	365	295	51	58	76	16
16	798	840	450	464	417	584	313	278	49	52	69	17
17	560	678	380	451	514	505	272	252	48	49	62	22
18	678	610	350	420	539	500	252	249	45	48	52	23
19	858	569	310	380	610	480	236	500	47	45	43	21
20	948	491	281	350	704	480	230	620	49	43	38	20
21	1120	495	278	320	625	924	227	549	51	41	35	21
22	1140	937	313	310	824	1280	224	473	52	39	33	20
23	1180	795	328	290	1260	944	221	425	54	38	30	20
24	774	709	272	280	1090	836	224	376	52	38	32	20
25	530	610	275	270	873	937	224	331	51	37	30	20
26	510	620	316	255	812	1110	408	295	46	37	25	20
27	464	661	473	255	950	1170	569	268	44	37	24	20
28	606	620	524	990	1130	1320	473	242	43	37	24	20
29	427	720	464	1380	1000	1260	392	212	43	35	29	22
30	332	595	417	1300	---	1180	346	188	46	28	30	20
31	332	---	400	1040	---	898	---	172	---	12	21	---
TOTAL	16299	17408	14299	13791	20595	25817	16572	11285	2196	1620	1833	584
MEAN	526	580	461	445	710	833	552	364	73.2	52.3	59.1	19.5
MAX	1180	1370	1030	1380	1260	1320	1700	620	159	144	290	23
MIN	85	167	272	255	376	480	221	172	43	12	12	16

CAL YR 1975 TOTAL 135150 MEAN 370 MAX 3090 MIN 28
WTR YR 1976 TOTAL 142299 MEAN 389 MAX 1700 MIN 12

01092000 MERRIMACK RIVER NEAR GOFFS FALLS, BELOW MANCHESTER, NH

LOCATION.--Lat 42°56'54", long 71°27'52", Hillsborough County, Hydrologic Unit 01070002, on right bank 600 ft (200 m) upstream from bridge on Interstate Highway 193, 0.8 mi (1.3 km) downstream from Bowman Brook, 1.3 mi (2.1 km) north of Goffs Falls, and 2.3 mi (3.7 km) downstream from Piscataquog River.

DRAINAGE AREA.--3,092 mi^2 (8,008 km^2).

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).

REVISED RECORDS.--WSP 1231: 1937. WSP 1271: 1937(M, m).

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

REMARKS.--Records good. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Newfound, Winnipesaukee, Winnisquam, and other lakes and reservoirs upstream (Reservoirs in Merrimack River basin).

AVERAGE DISCHARGE.--40 years, 5,255 ft^3/s (148.8 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 102,500 ft^3/s (2,900 m^3/s) Sept. 23, 1938, gage height, 25.87 ft (7.885 m), from rating curve extended above 48,000 ft^3/s (1,360 m^3/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 ft^3/s (2.78 m^3/s) Oct. 11, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1722, 150,000 ft^3/s (4,250 m^3/s) Mar. 20, 1936, gage height, 35.19 ft (10.726 m), from floodmarks, from rating curve extended above 48,000 ft^3/s (1,360 m^3/s) by method explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 22,000 ft^3/s (623 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 29	2330	27,100	767	10.08	3.07	Apr. 3	0630	*36,000	1,020	*11.91	3.63

Minimum daily discharge, 906 ft^3/s (25.7 m^3/s) July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7310	5320	9400	5800	7620	13300	20600	6620	5380	2420	3190	1610
2	6010	5060	9190	5060	6900	12300	28800	7540	4890	2480	3330	1340
3	5490	4870	9150	5480	10900	11400	35200	12100	3540	2700	3890	1090
4	4510	4570	8750	4950	12700	10900	32700	13500	3500	2610	3390	1550
5	3940	4470	8040	4810	12200	10600	28900	11100	3200	1620	2680	1470
6	3470	4520	7410	4600	10100	11900	23000	9170	2930	1880	1920	1650
7	3350	4720	6800	4980	9240	13000	18800	8120	3280	1380	1970	2150
8	3090	4540	6420	4670	8730	13100	16300	7930	2910	1460	1690	1910
9	2390	4670	6330	4240	7980	11400	14100	7720	3070	1630	2790	2070
10	2140	5270	7020	4260	6800	10000	13000	7360	2470	1370	3330	1950
11	2480	6510	9550	4180	6500	9180	12100	6800	2300	1450	7200	1830
12	5340	8330	10100	3910	6200	8310	11400	5990	2060	2070	11300	2130
13	8720	10400	9250	4020	6200	8300	10200	7450	1790	3170	8280	2200
14	9020	16800	8350	4410	6160	8370	9140	10200	1830	2260	4770	2710
15	8420	19600	7180	5230	6000	7720	8680	9660	1630	2020	4310	1610
16	7400	17400	7100	5380	6090	7400	8390	9300	1820	2100	4450	1780
17	6170	13900	6870	5160	6400	7220	8860	8570	1440	1650	6560	1640
18	5930	10200	6590	5450	6610	6350	11000	7840	1700	1800	5700	1530
19	9790	9190	5920	5610	6910	6620	11800	9070	1610	1180	4170	2860
20	13500	8410	4440	4870	7870	6410	11000	12100	1280	906	3640	1930
21	17300	8300	4630	4070	8170	7730	9450	15700	1650	1370	2790	1540
22	19400	11600	4210	4050	8340	12000	8350	15100	1610	1670	2350	1690
23	16100	14900	5510	3650	10300	15200	7100	13500	1960	1510	2090	1390
24	12500	13100	6420	3690	11500	15400	7430	11900	2120	1370	1940	1270
25	10400	10500	5680	3550	12000	14200	7240	10300	1670	1360	1660	1230
26	8670	9540	4810	3540	11900	14700	7480	9130	1850	1460	1470	915
27	7780	9420	5550	4000	12100	16200	9120	8180	2680	1950	1840	1950
28	7640	10300	5970	6360	13300	19700	9230	7310	2080	1500	1620	2680
29	7280	10600	6330	10800	13900	25700	8380	6880	1820	1490	1450	3090
30	6510	9930	6380	10900	---	25800	7430	6330	1930	1800	1430	2860
31	5800	---	6130	9410	---	22200	---	5780	---	1990	1380	---
TOTAL	237850	276940	215480	161090	259620	382610	415180	288250	72000	55626	108580	55625
MEAN	7673	9231	6951	5196	8952	12340	13840	9298	2400	1794	3503	1854
MAX	19400	19600	10100	10900	13900	25800	35200	15700	5380	3170	11300	3090
MIN	2140	4470	4210	3540	6000	6350	7100	5780	1280	906	1380	915

CAL YR 1975 TOTAL 2140165 MEAN 5863 MAX 22300 MIN 688
WTR YR 1976 TOTAL 2528851 MEAN 6909 MAX 35200 MIN 906

01093800 STONY BROOK TRIBUTARY NEAR TEMPLE, NH

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

DRAINAGE AREA.--3.60 mi^2 (9.32 km^2).

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 periods of no gage-height record, which are fair. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years, 6.80 ft^3/s (0.193 m^3/s), 25.65 in/yr (652 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 222 ft^3/s (6.29 m^3/s) Sept. 27, 1975, gage height, 6.51 ft (1.984 m), from rating curve extended above 90 ft^3/s (2.55 m^3/s); maximum gage height, 7.81 ft (2.380 m) Feb. 3, 1970, Dec. 21, 1973, backwater from ice; no flow for part of Sept. 26, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 110 ft^3/s (3.12 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 21	1030	ice jam		*6.07	1.850	Apr. 1	1645	*126	3.57	5.85	1.783

No flow for part of Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	6.8	14	4.2	30	17	46	6.4	4.0	4.0	1.3	.49
2	8.8	6.2	11	4.0	36	13	30	19	3.2	2.1	1.2	.49
3	5.4	5.9	8.8	3.8	30	13	18	12	2.9	1.4	.69	.42
4	4.0	5.7	7.4	3.6	22	12	15	10	2.7	.90	.33	.42
5	3.4	5.5	7.7	3.4	17	33	13	8.2	2.5	.69	.28	.42
6	3.0	5.2	6.7	3.3	14	38	12	7.2	2.2	.60	.24	.42
7	2.7	7.1	6.0	3.3	12	17	11	6.9	2.2	.38	3.0	.35
8	2.5	6.7	6.9	3.2	10	14	10	8.2	2.2	.38	2.7	.35
9	2.3	7.2	5.7	3.2	9.3	14	9.1	6.9	1.9	.38	2.6	.35
10	2.1	8.5	33	3.1	8.6	12	8.5	6.2	1.7	.28	18	.42
11	2.0	10	16	3.1	8.0	9.4	8.2	5.7	1.3	.24	5.2	.83
12	29	9.4	10	3.0	7.7	11	7.7	8.2	1.3	4.0	1.8	.70
13	21	36	8.8	3.0	8.0	13	6.7	6.9	1.3	1.3	1.0	.56
14	16	33	8.5	4.0	7.2	12	6.9	6.0	1.1	.90	.90	.49
15	12	15	8.5	6.7	11	10	6.9	5.7	1.1	.79	.76	.35
16	10	11	7.7	6.3	8.2	8.2	6.7	5.1	1.1	.52	.97	.35
17	8.0	9.4	6.7	5.9	8.5	14	6.0	4.9	1.7	.28	.70	.35
18	7.2	8.2	6.4	5.5	7.4	10	5.7	8.5	1.3	.33	.56	.56
19	20	7.4	7.0	5.0	14	10	5.5	19	.99	.33	.28	.63
20	34	6.7	6.2	4.7	12	18	5.1	17	.90	.24	.28	.56
21	30	14	6.0	4.3	9.1	33	4.3	12	.79	.24	.21	.49
22	22	18	5.9	4.0	49	21	5.1	9.7	.69	.24	.21	.49
23	17	11	5.4	3.6	31	14	5.5	8.2	.69	.24	.14	.83
24	13	9.1	5.0	3.4	25	13	4.5	7.2	.99	.45	.14	.28
25	11	8.0	4.0	3.2	15	14	5.7	6.2	.60	.33	.21	.07
26	10	7.4	10	3.0	18	14	14	6.0	.60	.24	.28	.21
27	9.5	11	20	15	28	13	9.4	5.7	.52	.20	.28	1.1
28	9.0	14	10	42	31	20	8.0	5.3	.52	.20	.28	.76
29	8.0	10	6.0	36	24	14	7.2	4.7	.38	.13	.90	.56
30	7.3	9.4	5.0	32	---	12	5.7	4.5	1.9	.79	.97	.49
31	7.0	---	4.5	27	---	11	---	4.3	---	.90	.63	---
TOTAL	346.7	322.8	274.8	255.8	511.0	477.6	307.4	251.8	45.27	24.00	47.04	14.79
MEAN	11.2	10.8	8.86	8.25	17.6	15.4	10.2	8.12	1.51	.77	1.52	.49
MAX	34	36	33	42	49	38	46	19	4.0	4.0	18	1.1
MIN	2.0	5.2	4.0	3.0	7.2	8.2	4.3	4.3	.38	.13	.14	.07
CFSM	3.11	3.00	2.46	2.29	4.89	4.28	2.83	2.26	.42	.21	.42	.14
IN.	3.58	3.33	2.84	2.64	5.28	4.93	3.18	2.60	.47	.25	.49	.15

CAL YR 1975 TOTAL 3163.53 MEAN 8.67 MAX 80 MIN .48 CFSM 2.41 IN 32.68
WTR YR 1976 TOTAL 2879.00 MEAN 7.87 MAX 49 MIN .07 CFSM 2.19 IN 29.74

NOTE.--No gage-height record Oct. 2 to Nov. 7, Jan. 5 to Feb. 3.

01094000 SOUHEGAN RIVER AT MERRIMACK, NH

LOCATION.-Lat 42°51'27", long 71°30'24", Hillsborough County, Hydrologic Unit 01070002, 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 mi^2 (443 km^2).
PERIOD OF RECORD.--Discharge: July 1909 to September 1976 (discontinued).
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).
REVISED RECORDS.--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).
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.
REMARKS.--Records good except those for winter period, which are fair. Slight diurnal fluctuation at times caused by mill upstream. 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, June to September 1976. High flow slightly affected by retarding reservoirs since 1963. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--67 years, 285 ft^3/s (8.07 m^3/s), 22.63 in/yr (575 mm/yr), adjusted for diversion.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,900 ft^3/s (479 m^3/s) Mar. 19, 1936, gage height, 16.2 ft (4.94 m), from rating curve extended above 7,300 ft^3/s (207 m^3/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 ft^3/s (0.11 m^3/s) Aug. 17, Sept. 8, Oct. 1, 1965.
Stage and discharge of the flood of March 19, 1936, are the greatest since 1830.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,250 ft^3/s (63.7 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 23	0500	*1,960	55.5	*6.11	1.862						

Minimum, 18 ft^3/s (0.51 m^3/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	635	319	622	360	951	1000	723	295	146	243	43	42
2	506	299	597	330	964	939	1730	595	138	227	56	42
3	386	288	535	310	1130	836	1210	710	130	144	61	30
4	294	273	473	290	986	817	929	655	129	110	47	36
5	248	264	416	280	788	765	787	523	115	70	40	31
6	223	240	388	260	657	1340	661	433	105	64	36	25
7	197	226	386	278	531	1170	569	379	112	70	32	27
8	175	233	355	327	470	922	501	362	96	41	144	33
9	164	315	329	290	430	741	458	349	96	42	184	23
10	154	315	751	260	410	645	415	317	88	40	327	32
11	154	426	1070	240	420	575	397	279	80	30	496	35
12	777	421	807	235	440	533	378	272	70	122	339	33
13	1010	1020	637	254	419	541	348	312	64	170	224	37
14	755	1650	540	341	450	719	329	291	62	134	156	40
15	600	1320	511	560	407	655	314	249	61	92	129	25
16	470	954	475	522	458	578	298	236	56	74	117	32
17	377	749	426	441	620	504	275	226	51	61	104	23
18	551	657	391	362	626	460	267	219	56	48	92	32
19	1130	555	329	307	684	440	264	304	54	48	80	30
20	1190	489	257	280	880	491	237	446	48	46	69	22
21	1330	465	238	260	726	915	216	450	47	39	58	32
22	987	976	277	250	981	1270	210	421	69	36	46	22
23	787	874	312	240	1770	980	243	349	51	29	42	27
24	649	697	280	235	1190	819	240	297	41	54	44	21
25	547	601	260	230	1070	767	229	252	42	46	37	19
26	513	540	300	250	950	757	469	231	37	35	32	18
27	475	544	498	302	1000	718	598	218	34	35	37	21
28	423	949	616	1040	1220	783	473	191	27	34	32	34
29	384	809	526	1780	1080	796	397	171	38	33	42	35
30	370	675	439	1470	---	683	337	159	30	31	39	34
31	357	---	400	1110	---	592	---	148	---	37	51	---
TOTAL	16818	18143	14441	13694	22708	23751	14502	10339	2173	2285	3236	893
MEAN	543	605	466	442	783	766	483	334	72.4	73.7	104	29.8
MAX	1330	1650	1070	1780	1770	1340	1730	710	146	243	496	42
MIN	154	226	238	230	407	440	210	148	27	29	32	18
MEAN†	543	605	466	442	783	766	483	334	75.5	78.0	108	34.2
CFSM†	3.17	3.54	2.72	2.58	4.58	4.48	2.82	1.95	.44	.46	.63	.20
IN.†	3.66	3.95	3.14	2.98	4.94	5.17	3.15	2.25	.49	.53	.73	.22

CAL YR 1975 TOTAL 137894 MEAN 378 MAX 2730 MIN 24 MEAN† 379 CFSM† 2.22 IN† 30.06
WTR YR 1976 TOTAL 142983 MEAN 391 MAX 1780 MIN 18 MEAN† 392 CFSM† 2.29 IN† 31.20

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

01096508 MERRIMACK RIVER AT NASHUA, NH

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

DRAINAGE AREA.--3,480 mi^2 (9,013 km^2), approximately.

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

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)
OCT										
01...	0900	130	6.3	18.0	13.0	35	2	5.5	36	9100
16...	0930	77	--	17.0	11.5	25	2	6.1	30	17000
NOV										
04...	0900	59	6.2	23.0	11.5	12	1	9.2	28	32000
19...	1025	34	6.1	5.5	4.0	17	2	6.5	18	48000
DEC										
02...	1000	64	7.4	7.0	6.5	7	1	12.2	15	8100
30...	0900	69	7.2	-3.0	1.0	8	1	5.4	17	16000
JAN										
13...	0930	87	6.0	.0	1.0	10	1	14.2	17	65000
FEB										
03...	1030	93	6.4	-7.0	.0	18	2	14.0	20	60000
24...	0900	84	6.4	3.0	2.0	7	1	14.8	23	50000
MAR										
18...	0830	80	7.5	9.0	2.0	6	1	14.2	18	3300
31...	1000	50	5.1	11.0	7.0	12	4	6.5	16	950
APR										
18...	0900	59	5.7	25.0	14.0	7	1	8.6	16	2300
MAY										
03...	1000	70	6.5	24.0	12.5	18	2	4.8	14	900
17...	0930	58	7.4	13.0	16.0	16	2	8.8	29	7200
26...	0930	55	7.2	14.0	12.0	7	2	5.4	20	18000
JUN										
09...	1030	75	7.4	25.0	20.0	7	1	7.6	16	7300
23...	0830	110	6.2	27.0	25.0	1	1	6.9	18	31000
JUL										
12...	1030	89	7.0	23.0	25.0	3	3	5.4	14	13000
27...	1030	92	6.1	25.5	23.5	3	0	3.9	18	3600
AUG										
16...	0900	72	5.4	19.0	22.0	22	5	4.9	24	11000
30...	0900	79	5.7	14.0	19.0	15	2	7.6	17	9300
SEP										
08...	0900	99	6.4	17.5	18.5	7	1	4.6	10	6500
21...	0900	94	5.8	18.0	20.5	5	1	4.6	12	3900

01096508 MERRIMACK RIVER AT NASHUA, NH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	FECAL COLIFORM (COL. PER 100 ML)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	SUSPENDED SOLIDS (MG/L)	TOTAL RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT										
01...	1200	--	--	--	--	--	--	3	46	.05
16...	7300	9	--	7	--	7.0	9.6	35	69	.10
NOV										
04...	3500	--	--	--	--	--	--	5	55	.27
19...	1800	--	--	--	--	--	--	4	45	.11
DEC										
02...	2700	--	--	--	--	--	--	3	48	.19
30...	2500	--	--	--	--	--	--	5	50	.19
JAN										
13...	3900	--	--	--	--	--	--	6	53	.21
FEB										
03...	3500	--	--	--	--	--	--	2	55	.22
24...	4500	--	--	--	--	5.6	9.3	16	74	.20
MAR										
18...	360	--	--	--	--	--	--	5	60	.21
31...	130	--	--	--	--	--	--	29	88	.19
APR										
18...	220	4	0	3	--	6.3	7.2	23	55	.20
MAY										
03...	160	--	--	--	--	--	--	9	63	--
17...	500	--	--	--	--	--	--	12	49	.13
26...	760	--	--	--	--	--	--	5	42	.13
JUN										
09...	640	--	--	--	--	--	--	3	53	.22
23...	1500	17	0	14	17	11	18	1	48	.29
JUL										
12...	1700	--	--	--	--	--	--	10	81	.31
27...	940	--	--	--	--	--	--	2	51	.19
AUG										
16...	2800	--	--	--	--	--	--	6	47	.12
30...	1300	--	--	--	--	--	--	3	55	.27
SEP										
08...	370	--	--	--	--	--	--	4	59	.22
21...	1600	15	0	12	--	7.1	14	0	53	.24

DATE	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)	TOTAL CHROMIUM (CR) (UG/L)
OCT										
01...	.01	.00	.00	.05	.04	--	0	.000	.000	10
16...	.10	.42	.52	.62	.06	0	0	.000	.000	1
NOV										
04...	.18	.46	.64	.91	.27	--	0	.000	.000	0
19...	.04	.38	.42	.53	.06	--	1	--	--	0
DEC										
02...	.05	.27	.32	.51	.05	--	1	.000	.000	0
30...	.03	.34	.37	.56	.06	--	2	.800	.000	0
JAN										
13...	.13	.43	.56	.77	.07	--	--	.000	.000	<10
FEB										
03...	.04	.25	.29	.51	.05	--	0	.000	.000	20
24...	.07	.12	.19	.39	.08	0	1	.000	.000	10
MAR										
18...	.06	.39	.45	.66	.06	--	0	--	--	<10
31...	.04	.61	.65	.84	.05	--	0	--	--	0
APR										
18...	.02	.31	.33	.53	.07	0	0	.000	.000	20
MAY										
03...	--	--	--	--	.05	--	0	.000	.000	<10
17...	.03	.37	.40	.53	.06	--	0	.000	.000	10
26...	.06	.34	.40	.53	.05	--	0	--	--	10
JUN										
09...	.15	.28	.43	.65	.10	--	0	--	--	10
23...	.33	.37	.70	.99	.11	0	0	.000	.000	7
JUL										
12...	.05	.23	.28	.59	.10	--	1	.000	.000	10
27...	.00	.23	.23	.42	.02	--	0	15.6	10.6	10
AUG										
16...	.08	.35	.43	.55	.06	--	0	3.64	1.85	<10
30...	.16	.29	.45	.72	.09	--	0	.000	.000	10
SEP										
08...	.18	.12	.30	.52	.09	--	0	3.27	.888	<10
21...	.20	.40	.60	.84	.11	5	--	.000	.000	10

01096508 MERRIMACK RIVER AT NASHUA, NH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL ALUMINUM (AL) (UG/L)	TOTAL BISMUTH (BI) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL GALLIUM (GA) (UG/L)	TOTAL GERMANIUM (GE) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)
OCT												
16...	100	<1	10	<0	10	<1	<0	3	<0	<0	170	1
FEB												
24...	460	<1	10	<1	6	1	<1	1	<1	<1	140	2
APR												
18...	1000	<2	20	<1	20	1	<1	2	<1	<2	770	4
JUN												
23...	50	<2	10	<1	20	0	<2	4	<1	<2	30	2
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MOLYBDENUM (MO) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)	TOTAL TIN (SN) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL VANADIUM (V) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ZIRCONIUM (ZR) (UG/L)	TOTAL PCB (UG/L)
OCT												
16...	1	20	0	2	<0	30	<0	1	<.3	8	<0	.0
FEB												
24...	0	50	<1	1	<1	20	<1	30	1.0	10	<2	.0
APR												
18...	0	60	1	3	<0	30	<1	70	1.0	20	<5	.0
JUN												
23...	0	40	<1	3	<0	50	<2	2	<2.0	60	<0	.0
SEP												
21...	--	--	--	--	--	--	--	--	--	--	--	.0

DATE	POLYCHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL TOXAPHENE (UG/L)
OCT												
16...	--	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0
FEB												
24...	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0
APR												
18...	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0
JUN												
23...	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0
SEP												
21...	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	0

Reservoirs in Merrimack River basin

01077500 NEWFOUND LAKE on Newfound River, 1.7 mi (2.7 km) north of Bristol, NH, used for recreation and for storage of water for power, has usable capacity of 1,690,000,000 ft^3 (47,900,000 m^3). Records furnished by New Hampshire Water Resources Board.

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

01079000 MERRYMEETING LAKE on Merrymeeting River, 2.5 mi (4.0 km) northeast of Alton, NH, used for recreation and for storage of water for power, has usable capacity of 368,000,000 ft^3 (10,400,000 m^3). Records furnished by New Hampshire Fish and Game Department.

01080000 LAKE WINNIPESAUKEE on Winnipesaukee River (see p. 35).

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

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

01086500 BLACKWATER RESERVOIR on Blackwater River, at Swett's Mills, 1 mi (2 km) south of Webster, NH, completed in 1941, used for floood control, has usable capacity of 2,004,000,000 ft^3 (56,750,000 m^3). Records furnished by Corps of Engineers.

01090700 EVERETT LAKE on Piscataquog River, 1.3 mi (2.1 km) southeast of East Weare, NH, completed in 1962, used for flood control and recreation, has usable capacity of 3,768,000,000 ft^3 (106,700,000 m^3). 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, NH, completed in 1939, used for storage of water for municipal supply and for power, has usable capacity of 182,000,000 ft^3 (5,150,000 m^3). Records furnished by Manchester Water Works.

01093500 MASSABESIC LAKE on Cohas Brook, 2.5 mi (4.0 km) southeast of Manchester, NH, used for storage of water for municipal supply, has usable capacity of 724,000,000 ft^3 (20,500,000 m^3). Records furnished by Manchester Water Works.

MONTHEND USABLE CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	Newfound Lake	Franklin Falls Reservoir	Merrymeeting Lake	Edward MacDowell Reservoir	Hopkinton Lake
Sept. 30, 1975	1,065	145.9	274	112.8	36.8
Oct. 31	1,035	122.0	236	5.5	27.5
Nov. 30	953	148.1	249	15.1	32.2
Dec. 31	665	117.6	241	16.7	43.4
Jan. 31, 1976	645	214.3	252	133.8	65.5
Feb. 28	1,072	219.5	241	26.7	87.1
Mar. 31	1,160	400.8	252	20.8	71.0
Apr. 30	878	169.9	309	6.7	69.1
May 31	1,376	145.9	349	6.1	27.9
June 30	1,356	122.0	339	13.0	18.9
July 31	1,359	126.3	330	2.4	7.4
Aug. 31	1,325	117.6	322	5.5	10.2
Sept. 30	965	145.9	295	8.6	10.0

	Blackwater Reservoir	Everett Lake	Tower Hill Pond	Massabesic Lake
Sept. 30, 1975	3.4	57.2	175	449
Oct. 31	1.7	53.2	165	575
Nov. 30	3.0	53.1	93	697
Dec. 31	1.3	52.1	53	568
Jan. 31, 1976	10.2	49.8	53	570
Feb. 28	11.1	53.2	53	567
Mar. 31	26.2	53.8	86	582
Apr. 30	2.8	51.5	147	505
May 31	1.7	49.8	174	457
June 30	0.3	46.4	173	467
July 31	0.9	46.4	174	408
Aug. 31	0.3	45.8	173	356
Sept. 30	0.6	45.8	172	292

01127880 BIG BROOK NEAR PITTSBURG, NH

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

DRAINAGE AREA.--6.36 mi^2 (16.47 km^2).

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. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--12 years (water years 1965-76), 15.7 ft^3/s (0.445 m^3/s), 32.52 in/yr (851 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441 ft^3/s (12.5 m^3/s) May 3, 1967, gage height, 3.61 ft (1.100 m), from rating curve extended above 110 ft^3/s (3.12 m^3/s); maximum gage height, 5.02 ft (1.530 m) Dec. 27, 1969, ice jam; minimum discharge, about 0.90 ft^3/s (0.025 m^3/s) about Aug. 20, 21, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft^3/s (5.10 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1230	288	8.16	3.88	1.183	Apr. 2	-	*350	9.91	-	-
Mar. 28	-	300	8.50	-	-						

Minimum discharge, 2.4 ft^3/s (0.068 m^3/s) June 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	8.2	11	4.8	13	5.3	200	24	15	5.0	32	13
2	23	9.7	11	4.6	40	5.2	300	31	13	10	31	19
3	20	9.5	9.8	4.3	27	5.1	130	36	10	8.0	16	12
4	17	11	16	4.4	17	5.4	70	43	8.8	6.8	11	9.4
5	14	9.3	23	4.3	12	8.5	52	35	7.6	6.0	8.4	8.5
6	12	7.5	15	4.2	8.0	35	50	24	6.4	5.0	12	8.9
7	11	7.3	13	4.1	5.8	16	49	27	7.2	4.1	9.9	7.9
8	9.2	7.9	11	4.1	4.2	13	42	28	7.8	13	8.5	6.2
9	8.2	9.5	10	4.0	3.4	12	36	25	10	7.3	12	5.3
10	7.7	8.3	8.8	4.0	3.1	11	33	23	6.0	4.9	71	5.0
11	7.1	13	8.1	4.0	2.9	10	34	21	4.9	4.2	73	12
12	22	10	21	4.0	2.9	9.2	28	33	5.6	8.0	28	8.9
13	20	19	14	4.1	2.8	8.8	23	50	4.1	11	24	6.9
14	16	33	13	5.0	2.7	8.4	25	36	3.7	13	27	5.5
15	14	28	13	4.3	2.7	8.0	44	31	3.2	9.6	38	4.9
16	37	20	16	4.0	3.5	7.5	70	28	2.9	7.0	97	6.0
17	32	17	48	3.8	3.4	17	120	23	5.2	9.4	45	8.6
18	48	16	33	3.7	3.3	33	110	28	3.4	7.7	28	10
19	42	16	17	3.8	3.2	24	98	38	2.7	6.1	20	23
20	168	14	20	3.8	3.1	19	90	54	2.8	4.9	16	20
21	86	22	13	3.8	3.0	50	83	46	4.6	4.3	13	15
22	42	42	10	3.0	15	140	71	38	9.2	3.6	11	12
23	28	24	8.2	2.5	25	110	61	32	7.6	3.1	9.0	11
24	21	20	7.6	3.2	20	60	45	28	4.8	5.1	7.3	9.7
25	18	14	7.0	3.5	10	84	34	25	12	5.0	6.1	8.3
26	16	9.7	6.4	7.5	10	110	30	22	17	3.6	5.5	8.2
27	13	8.3	6.0	20	7.8	150	29	20	10	11	12	67
28	12	8.2	5.6	50	6.4	230	29	18	7.0	16	15	37
29	11	7.2	5.4	40	5.8	150	29	16	6.0	8.2	15	23
30	10	6.7	5.2	27	---	94	27	15	5.6	8.2	12	17
31	8.9	---	5.0	20	---	130	---	14	---	7.3	10	---
TOTAL	817.1	436.3	411.1	263.8	267.0	1569.4	2042	912	214.1	226.4	723.7	409.2
MEAN	26.4	14.5	13.3	8.51	9.21	50.6	68.1	29.4	7.14	7.30	23.3	13.6
MAX	168	42	48	50	40	230	300	54	17	16	97	67
MIN	7.1	6.7	5.0	2.5	2.7	5.1	23	14	2.7	3.1	5.5	4.9
CFSM	4.15	2.28	2.09	1.34	1.45	7.96	10.7	4.62	1.12	1.15	3.66	2.14
IN.	4.78	2.55	2.40	1.54	1.56	9.18	11.94	5.33	1.25	1.32	4.23	2.39

CAL YR 1975 TOTAL 5917.50 MEAN 16.2 MAX 168 MIN .90 CFSM 2.55 IN 34.61
WTR YR 1976 TOTAL 8292.10 MEAN 22.7 MAX 300 MIN 2.5 CFSM 3.57 IN 48.49

NOTE.--No gage-height record Mar. 12 to Apr. 20, Apr. 27 to June 2.

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

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

DRAINAGE AREA.--83.0 mi^2 (215.0 km^2).

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

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

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

REMARKS.--Records good. Flow completely regulated by First Connecticut and Second Connecticut Lakes (Reservoirs in Connecticut River basin). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--59 years, 197 ft^3/s (5.579 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft^3/s (204 m^3/s) June 16, 1943, gage height, 6.25 ft (1.905 m), from rating curve extended above 1,900 ft^3/s (53.8 m^3/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 ft^3/s (0.088 m^3/s) Mar. 17, 18, 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,390 ft^3/s (39.4 m^3/s) Sept. 6, gage height, 4.06 ft (1.237 m); minimum daily, 7.2 ft^3/s (0.20 m^3/s) Mar. 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	625	1160	176	101	413	424	9.4	12	216	68	68	312
2	793	1140	148	101	411	434	8.4	11	217	89	148	311
3	962	1120	148	101	413	429	8.0	12	216	100	213	310
4	953	1100	149	101	411	425	8.0	13	173	100	212	309
5	943	1080	148	101	411	418	8.1	15	113	101	211	309
6	896	347	148	101	410	328	8.0	18	113	101	212	472
7	869	94	148	101	406	235	8.0	19	113	272	212	791
8	608	119	148	101	401	237	8.0	20	113	620	210	786
9	436	129	148	101	397	238	8.0	23	113	581	210	804
10	437	131	148	101	418	236	8.0	24	113	519	470	795
11	434	174	148	101	424	237	8.2	17	113	259	970	810
12	433	189	148	101	421	237	8.6	16	113	257	970	788
13	432	189	148	101	418	237	8.3	337	113	260	870	797
14	432	279	148	101	417	237	8.4	738	113	154	805	789
15	429	317	148	101	413	236	8.7	879	113	110	805	815
16	427	317	148	101	407	237	9.1	963	113	110	805	799
17	329	319	148	101	406	237	9.5	956	113	110	700	805
18	214	320	148	101	404	237	9.8	950	84	110	600	792
19	214	320	148	101	422	237	10	662	66	110	350	766
20	104	267	148	101	430	235	10	534	67	89	205	822
21	12	228	148	101	427	236	11	536	67	81	205	792
22	12	229	148	101	422	102	11	538	68	81	205	796
23	203	230	148	336	423	13	11	537	68	70	205	794
24	209	230	148	435	421	7.2	11	542	68	66	205	647
25	209	230	148	431	413	7.2	12	542	68	66	210	312
26	210	231	148	427	407	7.3	12	605	68	66	212	311
27	652	230	148	423	404	7.5	11	554	68	66	235	311
28	1170	231	148	421	403	8.3	12	389	68	66	255	305
29	1230	231	139	420	400	7.3	12	368	68	66	255	308
30	1200	231	105	418	---	7.3	12	367	68	66	292	223
31	1180	---	99	418	---	7.6	---	260	---	66	312	---
TOTAL	17257	11412	4516	5951	11973	6181.7	287.5	11457	3187	4880	11837	17981
MEAN	557	380	146	192	413	199	9.58	370	106	157	382	599
MAX	1230	1160	176	435	430	434	12	963	217	620	970	822
MIN	12	94	99	101	397	7.2	8.0	11	66	66	68	223

CAL YR 1975 TOTAL 76299.5 MEAN 209 MAX 1230 MIN 5.6
WTR YR 1976 TOTAL 106920.2 MEAN 292 MAX 1230 MIN 7.2

01129200 CONNECTICUT RIVER BELOW INDIAN STREAM, NEAR PITTSBURG, NH

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

DRAINAGE AREA.--254 mi^2 (658 km^2).

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

REVISED RECORDS.--WRD MA, NH, RI, VT, 1973: 1958, 1960(M), 1969(M).

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

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

AVERAGE DISCHARGE.--20 years, 574 ft^3/s (16.26 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,080 ft^3/s (116 m^3/s) Nov. 29, 1959, gage height, 7.07 ft (2.155 m), from rating curve extended above 2,600 ft^3/s (73.6 m^3/s); minimum daily, 30 ft^3/s (0.850 m^3/s) Aug. 6, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,480 ft^3/s (70.2 m^3/s) Apr. 2, gage height, 5.54 ft (1.689 m); minimum daily, 77 ft^3/s (2.18 m^3/s) June 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	1660	506	851	451	1070	1490	276	1060	589	592	1150
2	1480	1670	528	854	461	1190	2230	287	789	435	727	1250
3	1490	1660	477	838	469	1240	1240	298	739	373	421	1170
4	1440	1680	434	833	601	1270	800	369	716	417	427	1110
5	1410	1470	424	851	762	1310	560	302	698	360	384	1090
6	1390	593	454	865	945	1130	461	273	680	330	394	1090
7	1370	412	441	872	1040	944	455	294	316	383	406	831
8	1250	412	416	883	1020	1370	414	305	78	554	367	601
9	1140	430	425	882	1010	1490	358	274	96	612	370	565
10	1050	428	428	830	997	1440	346	241	77	580	970	546
11	808	489	424	823	989	1420	360	220	94	553	1700	605
12	942	475	391	837	992	1380	284	455	358	609	731	621
13	778	552	380	851	997	1340	300	782	355	499	1020	596
14	593	789	391	852	972	1370	275	398	347	713	1330	570
15	803	803	495	866	961	1350	341	625	339	655	1310	556
16	963	617	705	720	958	1340	826	449	336	739	1970	554
17	1050	575	645	635	983	1320	1620	329	343	574	1040	555
18	1330	853	636	635	995	1320	1740	306	339	571	1290	553
19	1390	1060	592	641	994	872	1780	519	332	569	1480	579
20	1480	759	568	675	992	547	1450	622	338	558	1400	640
21	1250	556	575	648	997	694	911	431	353	542	1360	609
22	1090	949	573	616	989	795	720	412	364	535	1320	603
23	1260	696	569	800	1060	715	648	444	366	525	1290	592
24	885	669	559	904	1120	547	494	1170	445	532	1290	586
25	843	842	562	901	1120	447	378	1590	701	562	1300	580
26	820	807	548	900	1110	523	337	1590	823	459	1300	576
27	1160	792	541	936	1100	715	322	1380	799	367	1240	801
28	1680	673	541	877	1070	1370	348	1260	682	495	1260	818
29	1680	428	695	708	1060	1200	329	1200	623	387	1210	708
30	1680	422	859	480	---	800	313	1170	606	370	1260	541
31	1670	---	854	468	---	858	---	1150	---	389	1180	---
TOTAL	37575	24221	16636	24332	27215	33377	22130	19421	14192	15836	32339	21646
MEAN	1212	807	537	785	938	1077	738	626	473	511	1043	722
MAX	1680	1680	859	936	1120	1490	2230	1590	1060	739	1970	1250
MIN	593	412	380	468	451	447	275	220	77	330	367	541

CAL YR 1975 TOTAL 205882 MEAN 564 MAX 1770 MIN 31
WTR YR 1976 TOTAL 288920 MEAN 789 MAX 2230 MIN 77

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 mi^2 (220 km^2).

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

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

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

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

AVERAGE DISCHARGE.--28 years, 170 ft^3/s (4.814 m^3/s), 27.16 in/yr (690 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft^3/s (127 m^3/s) June 30, 1973, gage height, 13.07 ft (3.984 m); minimum daily, 4 ft^3/s (0.11 m^3/s) Sept. 10, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1943 reached a discharge of 21,000 ft^3/s (595 m^3/s) by slope-area method at site 0.5 mi (0.8 km) downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,060 ft^3/s (86.7 m^3/s) Apr. 1, gage height, 10.99 ft (3.350 m); minimum daily, 24 ft^3/s (0.68 m^3/s) Jan. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	89	232	26	300	79	1840	122	254	65	292	83
2	231	95	190	25	290	78	2040	140	137	76	324	154
3	195	92	146	25	308	74	1100	143	92	299	140	88
4	154	76	101	24	240	74	701	204	75	183	87	65
5	131	116	76	25	190	79	493	179	65	92	68	58
6	107	84	110	27	160	122	406	143	54	66	79	60
7	91	76	169	28	140	117	408	173	53	49	82	56
8	80	71	121	31	121	110	344	186	68	173	67	47
9	73	131	85	36	106	104	287	149	103	184	69	41
10	68	92	93	40	96	96	284	122	60	86	787	37
11	63	250	131	38	95	90	304	102	54	63	1290	192
12	268	140	84	37	87	82	197	554	56	124	324	113
13	232	336	58	37	86	62	191	772	47	175	198	72
14	171	680	60	36	86	52	200	250	41	245	293	52
15	155	430	239	35	88	44	287	257	37	157	638	43
16	475	262	169	35	88	42	806	234	36	96	1910	41
17	331	237	83	34	89	45	1140	206	38	70	561	47
18	761	259	70	34	91	45	1090	418	30	63	305	49
19	510	232	52	33	92	44	828	1060	29	57	197	70
20	1310	198	60	33	94	100	595	554	28	47	141	74
21	841	230	56	32	95	520	369	358	29	39	107	61
22	418	331	54	32	98	1160	291	443	38	34	85	60
23	276	276	45	32	100	702	264	567	40	29	70	53
24	219	204	52	33	95	465	220	598	33	35	59	49
25	180	177	50	38	92	531	172	326	152	60	50	43
26	167	133	56	56	89	742	169	283	244	43	45	39
27	129	118	43	207	87	1130	203	198	179	76	81	347
28	104	110	46	589	85	2160	236	161	96	383	176	217
29	101	99	52	505	82	1000	184	127	74	112	131	131
30	113	102	34	448	---	778	150	106	73	110	117	97
31	95	---	26	348	---	1050	---	92	---	100	85	---
TOTAL	8251	5726	2843	2959	3670	11777	15799	9227	2315	3391	8858	2539
MEAN	266	191	91.7	95.5	127	380	527	298	77.2	109	286	84.6
MAX	1310	680	239	589	308	2160	2040	1060	254	383	1910	347
MIN	63	71	26	24	82	42	150	92	28	29	45	37
CFSM	3.13	2.25	1.08	1.12	1.49	4.47	6.20	3.51	.91	1.28	3.36	1.00
IN.	3.61	2.51	1.24	1.29	1.61	5.15	6.91	4.04	1.01	1.48	3.88	1.11

CAL YR 1975 TOTAL 60028.0 MEAN 164 MAX 2110 MIN 6.2 CFSM 1.93 IN 26.27
WTR YR 1976 TOTAL 77355.0 MEAN 211 MAX 2160 MIN 24 CFSM 2.48 IN 33.85

01129500 CONNECTICUT RIVER AT NORTH STRATFORD, NH

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

DRAINAGE AREA.--799 mi^2 (2,069 km^2).

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).

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

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

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes and Lake Francis (Reservoirs in Connecticut River basin) 36 mi (58 km) upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--46 years, 1,580 ft^3/s (44.75 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,700 ft^3/s (813 m^3/s) June 16, 1943, gage height, 14.67 ft (4.471 m) from rating curve extended above 15,000 ft^3/s (425 m^3/s); maximum gage height, 16.66 ft (5.078 m) Mar. 13, 1936, ice jam; minimum daily discharge, 108 ft^3/s (3.06 m^3/s) Sept. 29, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,700 ft^3/s (416 m^3/s) Apr. 2, gage height, 10.40 ft (3.170 m); minimum daily, 555 ft^3/s (15.7 m^3/s) June 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2530	2270	1500	1100	2100	2400	9320	1610	2370	1190	1950	1890
2	2480	2300	2000	1050	2500	2200	14300	2160	1830	1020	2950	2170
3	2490	2320	1800	1000	2300	2200	10100	2190	1500	815	1530	1940
4	2260	2300	1500	950	2200	2200	6410	2520	1410	1060	1120	1680
5	2140	2200	1200	900	2100	3300	4470	1950	1270	840	886	1610
6	2030	1400	1400	860	2000	4200	3620	1620	1180	684	830	1600
7	1940	1300	1200	840	1900	3100	3470	1830	1150	625	876	1520
8	1850	1500	1100	820	1800	2950	3070	1980	786	706	799	1050
9	1620	1000	1050	810	1750	2800	2590	1650	687	1330	784	942
10	1570	1050	1050	800	1700	2700	2360	1390	666	1050	2790	893
11	1340	1500	1300	780	1650	2500	2510	1230	555	868	6870	1770
12	2270	1700	1210	760	1600	2350	1940	2850	707	1120	3790	1710
13	2570	2000	998	740	1600	2340	1770	4270	819	1230	2120	1290
14	1710	2800	1230	740	1550	2330	1830	2430	748	1540	2310	1080
15	1690	3500	1330	840	1500	2270	2300	2460	709	1440	2980	968
16	2230	3000	1800	800	1500	2080	4670	2200	629	1180	7460	909
17	2540	2100	1300	750	1500	1940	8620	1660	691	988	5410	887
18	3660	2300	1200	710	1450	2090	10000	1830	753	951	2940	932
19	4600	2200	1100	700	1450	1910	9340	4580	637	872	2580	1940
20	6160	2000	1000	670	1400	1520	7540	5250	639	811	2250	1500
21	7030	1700	1050	650	2000	3180	5100	3380	1050	762	2020	1280
22	3940	3000	1000	640	2500	6080	3770	2880	931	721	1870	1170
23	3270	3100	900	630	3300	4460	3510	2550	883	692	1760	1160
24	2460	2500	1000	620	3100	3520	2860	3110	748	854	1670	1080
25	2070	2100	1100	610	2900	3450	2180	3430	859	1040	1640	985
26	1920	1900	1200	600	2800	4170	1960	3240	1570	866	1610	942
27	1800	1700	1400	700	3100	5250	2080	2730	1710	1560	2520	2780
28	2360	1500	1800	3000	2700	10100	2180	2360	1470	2630	2190	2670
29	2410	1250	1600	2600	2600	9090	1990	2110	1130	1480	3210	1840
30	2420	1300	1400	2400	---	6330	1820	1960	1200	1060	2830	1490
31	2340	---	1200	2200	---	6260	---	1870	---	992	2180	---
TOTAL	81700	60790	39918	31270	60550	111270	137680	77280	31287	32977	76725	43678
MEAN	2635	2026	1288	1009	2088	3589	4589	2493	1043	1064	2475	1456
MAX	7030	3500	2000	3000	3300	10100	14300	5250	2370	2630	7460	2780
MIN	1340	1000	900	600	1400	1520	1770	1230	555	625	784	887

CAL YR 1975 TOTAL 558755 MEAN 1531 MAX 10800 MIN 111
WTR YR 1976 TOTAL 785125 MEAN 2145 MAX 14300 MIN 555

NOTE.--No gage-height record Nov. 4 to Dec. 11.

01130000 UPPER AMMONOOSUC RIVER NEAR GROVETON, NH

LOCATION.--Lat 44°37'30", long 71°28'10", Coos County, Hydrologic Unit 01080101, on left bank 75 ft (23 m) upstream from highway bridge, 0.2 mi (0.3 km) downstream from Nash Stream, and 2.8 mi (4.5 km) northeast of Groveton.
DRAINAGE AREA.--232 mi^2 (601 km^2).
PERIOD OF RECORD.--Discharge: August 1940 to current year.
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 and periods of no gage-height record, which are fair. Prior to May 21, 1969, some regulation by pond 9 mi (14 km) upstream on Nash Stream. Small diversion upstream for municipal supply of Berlin. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--36 years, 474 ft^3/s (13.42 m^3/s), 27.75 in/yr (705 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,100 ft^3/s (683 m^3/s) May 20, 1969, gage height, 12.01 ft (3.661 m) in gage well, 12.85 ft (3.917 m), from floodmarks, from rating curve extended above 5,600 ft^3/s (159 m^3/s) on basis of contracted-opening measurement of peak flow, caused by failure of dam on Nash Stream; minimum, 32 ft^3/s (0.91 m^3/s) Sept. 14, 1948.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of about 10.6 ft (3.23 m), from information by local residents.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,900 ft^3/s (82.1 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 21	1100	3,270	92.6	5.97	1.820	Mar. 29	-	3,600	102	-	-
Jan. 28 or 29	-	ice jam		*Unknown		Apr. 2	Unknown	*4,360	123	‡6.72	2.048
Mar. 22	0945	2,900	82.1	6.03	1.838	Apr. 18	-	3,200	90.6	-	-

‡ From peak-stage indicator.

Minimum discharge, 62 ft^3/s (1.76 m^3/s) July 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	298	215	396	190	370	370	1200	617	433	312	355	225
2	247	202	537	180	450	320	4200	914	403	312	488	306
3	217	191	407	170	560	300	3300	989	362	248	362	268
4	190	202	312	160	450	290	2000	1240	349	224	289	214
5	168	208	230	155	370	700	1300	796	318	188	238	188
6	158	169	350	150	320	1500	1000	632	295	159	220	188
7	158	149	270	145	290	600	820	665	284	139	214	173
8	145	159	250	140	280	420	740	796	295	142	209	143
9	135	321	230	135	260	360	680	673	273	234	234	147
10	129	287	270	130	270	360	620	572	243	188	681	131
11	126	511	330	125	300	300	560	523	229	139	1220	220
12	353	428	300	120	270	270	550	1100	253	173	594	268
13	613	597	250	120	250	330	490	1560	234	214	403	220
14	446	875	230	130	230	290	440	967	203	253	375	159
15	334	931	220	160	220	250	450	863	183	238	403	135
16	639	639	450	140	280	230	1100	715	159	173	1190	120
17	674	537	300	130	220	220	1900	601	243	142	698	117
18	939	450	230	125	200	220	3000	625	258	131	440	124
19	1270	417	210	120	260	220	2700	1240	193	113	355	135
20	1920	376	200	115	220	498	2500	1630	164	95	312	127
21	2980	396	230	114	210	1010	1740	1200	295	85	278	117
22	1400	788	300	113	500	2620	1310	1180	375	73	248	110
23	822	611	240	112	860	2200	1360	925	289	65	214	107
24	625	474	200	111	450	1300	1140	787	224	224	178	101
25	550	407	180	110	360	840	834	673	248	300	164	88
26	462	357	200	110	430	1100	787	586	403	198	143	85
27	396	330	250	230	500	1600	759	541	362	440	289	464
28	348	312	230	520	520	2300	815	488	306	796	273	389
29	303	287	220	920	540	3400	768	448	258	403	283	284
30	279	256	210	560	---	1800	689	410	258	330	324	229
31	241	---	200	450	---	1130	---	389	---	324	253	---
TOTAL	17565	12082	8432	6190	10440	27348	39752	25345	8392	7055	11927	5582
MEAN	567	403	272	200	360	882	1325	818	280	228	385	186
MAX	2980	931	537	920	860	3400	4200	1630	433	796	1220	464
MIN	126	149	180	110	200	220	440	389	159	65	143	85
CFSM	2.44	1.74	1.17	.86	1.55	3.80	5.71	3.53	1.21	.98	1.66	.80
IN.	2.82	1.94	1.35	.99	1.67	4.39	6.37	4.06	1.35	1.13	1.91	.90

CAL YR 1975	TOTAL 158286	MEAN 434	MAX 3190	MIN 57	CFSM 1.87	IN 25.38		
WTR YR 1976	TOTAL 180110	MEAN 492	MAX 4200	MIN 65	CFSM 2.12	IN 28.88		

† Diversion, in cubic feet per second, for municipal supply of Berlin; records furnished by city of Berlin.
NOTE.--No gage-height record Jan. 28 to Mar. 9, Mar. 24 to Apr. 2, Apr. 4-19.

01131500 CONNECTICUT RIVER NEAR DALTON, NH

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

DRAINAGE AREA.--1,514 mi^2 (3,921 km^2).

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).

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

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

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis (Reservoirs in Connecticut River basin), and other reservoirs. These reservoirs have a combined usable capacity of about 8,300,000,000 ft^3 (240,000,000 m^3). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--49 years, 2,907 ft^3/s (82.33 m^3/s), adjusted to drainage area at present site.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,600 ft^3/s (640 m^3/s) Apr. 1, gage height, 18.59 ft (5.666 m); minimum daily, 977 ft^3/s (27.7 m^3/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3900	3130	2340	1600	3600	4000	21500	3870	3350	2150	2060	2960
2	3360	3090	3530	1700	3300	3700	19200	3870	3770	2140	4000	3030
3	3220	3100	3430	1550	3200	3500	21800	5030	2910	1930	3960	3230
4	3080	3110	2890	1550	3500	3400	19300	5750	2480	1750	2640	2760
5	2890	3260	2200	1500	3300	3300	13300	5350	2320	1710	1930	2410
6	2670	3140	1720	1350	3100	5030	9360	4190	2170	1690	1820	2230
7	2500	2520	2080	1350	3000	6380	7850	3820	2030	1670	1530	2110
8	2420	1940	2080	1250	2900	5450	7150	4440	1990	1260	1600	2140
9	2320	1860	1830	1450	2900	4300	6250	4360	1680	1380	1610	1600
10	2030	1900	1860	1700	2800	4100	5560	3620	1380	1720	1960	1440
11	2010	2550	2280	1300	2700	4000	5350	3070	1350	1600	6400	1560
12	2020	3320	2300	1350	2600	3500	4930	3790	1250	1360	7770	2380
13	3320	3530	1880	1300	2500	3300	4130	7730	1340	1730	5030	2520
14	3410	5330	1690	1350	2400	2800	3930	7170	1360	1840	3730	2060
15	2670	6940	1710	1400	2300	2700	4340	5400	1250	2100	3760	1810
16	2860	5580	2250	1500	2200	2500	5830	5130	1240	2060	6740	1760
17	3940	4160	2520	1550	2300	2100	9620	4340	1180	1830	9400	1510
18	4370	3670	2000	1300	2400	2000	13100	3760	1280	1850	7000	1270
19	6940	3580	1700	1000	2500	2100	15400	5230	1290	1300	4640	1590
20	8800	3730	1500	1100	2500	2000	15400	8780	1220	1280	3830	2410
21	12900	3390	1100	1000	2700	3140	13100	8580	1280	1160	3310	2160
22	11700	5220	1300	1150	2700	7220	9340	7260	2320	1110	2930	1810
23	7510	6570	1250	1150	3500	9300	7660	6230	2170	1210	2650	1830
24	5610	4830	1050	1350	5000	8220	6910	5430	1980	1390	2470	1850
25	4340	3790	1250	1150	4800	7300	5620	5610	1880	1880	2300	1010
26	3730	3500	1350	1400	4500	7440	4780	5400	2720	1830	2280	977
27	3420	3020	1400	1780	4200	8760	4720	4980	3360	1690	2210	2260
28	3100	2850	1700	1960	4400	13100	4790	4380	3100	3940	3200	4390
29	3410	2760	1600	5080	4500	16600	4760	3800	2530	4000	3000	3650
30	3390	2420	1200	7100	---	16900	4310	3440	2090	2630	4130	2960
31	3300	---	1500	4200	---	20400	---	3160	---	2140	3620	---
TOTAL	131140	107790	58490	55470	92300	188540	279290	156970	60270	57330	113510	65677
MEAN	4230	3593	1887	1789	3183	6082	9310	5064	2009	1849	3662	2189
MAX	12900	6940	3530	7100	5000	20400	21800	8780	3770	4000	9400	4390
MIN	2010	1860	1050	1000	2200	2000	3930	3070	1180	1110	1530	977

CAL YR 1975 TOTAL 973292 MEAN 2667 MAX 15800 MIN 136
WTR YR 1976 TOTAL 1366777 MEAN 3734 MAX 21800 MIN 977

01133000 EAST BRANCH PASSUMPSIC RIVER NEAR EAST HAVEN, VT

LOCATION.--Lat 44°38'02", long 71°53'53", Caledonia County, Hydrologic Unit 01080102, on right bank in Burke, 0.5 mi (0.8 km) upstream from Flower Brook, 2.1 mi (3.4 km) south of East Haven, and 8.4 mi (13.5 km) upstream from mouth.
DRAINAGE AREA.--53.8 mi^2 (139.3 km^2).
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).
REVISED RECORDS.--WSP 1141: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 945.88 ft (288.304 m) above mean sea level (levels by Corps of Engineers).
REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--34 years, 105 ft^3/s (2.974 m^3/s), 26.50 in/yr (673 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,450 ft^3/s (126 m^3/s) June 30, 1973, gage height, 9.45 ft (2.880 m), from floodmarks in gage well, from rating curve extended above 1,300 ft^3/s (36.8 m^3/s) on basis of slope-area measurement of peak flow; minimum, 13 ft^3/s (0.37 m^3/s) Sept. 1-5, 1953, Aug. 21, 22, 1975.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in November 1927 reached a stage of about 12.6 ft (3.84 m), from information by local resident.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s (22.7 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	-	1,200	34.0	Unknown		Apr. 1	2100	*1,760	49.8	*7.62	2.32
Mar. 28	-	875	24.8	Unknown							

Minimum discharge, 27 ft^3/s (0.76 m^3/s) July 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	78	200	86	115	95	1100	200	140	85	181	91
2	90	76	300	80	130	82	950	350	120	84	156	114
3	80	78	160	78	160	78	524	450	100	70	90	77
4	70	82	140	74	140	90	420	470	90	90	68	66
5	60	88	150	70	100	96	370	300	80	90	56	82
6	55	78	130	68	90	120	340	230	70	60	65	76
7	50	76	120	64	86	105	320	250	66	50	58	62
8	45	80	90	63	84	75	290	260	100	66	58	53
9	42	130	85	62	80	72	280	210	80	127	71	49
10	40	110	110	60	78	83	270	180	56	66	340	47
11	45	250	160	58	75	80	280	160	48	52	313	202
12	200	200	110	56	73	76	240	250	52	71	150	105
13	180	350	80	54	72	74	210	300	45	69	109	75
14	130	400	80	70	70	80	220	220	43	82	114	62
15	100	430	90	80	69	75	250	190	38	65	228	55
16	190	230	120	78	66	70	362	180	34	50	230	52
17	220	180	110	70	64	68	438	170	50	67	145	49
18	300	170	95	65	62	68	700	300	54	55	103	62
19	500	180	85	62	61	70	640	500	40	44	80	134
20	550	160	90	58	60	130	540	550	32	38	69	82
21	1000	200	110	56	60	190	450	500	50	35	61	73
22	500	500	140	54	150	300	350	450	88	31	55	65
23	250	400	130	52	350	600	300	350	60	29	50	68
24	200	220	110	50	250	470	250	290	42	128	44	59
25	160	160	100	48	200	400	220	250	54	86	42	53
26	150	130	110	52	140	320	230	200	150	53	40	52
27	130	120	115	80	150	370	250	180	110	387	128	216
28	110	120	115	220	160	500	260	160	80	273	87	169
29	100	110	110	190	105	800	250	140	60	121	242	112
30	90	100	100	170	---	600	230	120	50	99	171	90
31	80	---	95	150	---	550	---	110	---	80	102	---
TOTAL	5832	5486	3740	2478	3300	6787	11534	8470	2082	2703	3706	2652
MEAN	188	183	121	79.9	114	219	384	273	69.4	87.2	120	88.4
MAX	1000	500	300	220	350	800	1100	550	150	387	340	316
MIN	40	76	80	48	60	68	210	110	32	29	40	47
CFSM	3.49	3.40	2.25	1.49	2.12	4.07	7.14	5.07	1.29	1.62	2.23	1.64
IN.	4.03	3.79	2.59	1.71	2.28	4.69	7.98	5.86	1.44	1.87	2.56	1.83

CAL YR 1975 TOTAL 39850 MEAN 109 MAX 1000 MIN 13 CFSM 2.03 IN 27.55
WTR YR 1976 TOTAL 58770 MEAN 161 MAX 1100 MIN 29 CFSM 2.99 IN 40.64

NOTE.--No gage-height record Oct. 1-31, Nov. 11 to Feb. 20, Feb. 23 to Mar. 7, Mar. 10 to Apr. 1, Apr. 4 to July 7.

01134500 MOOSE RIVER AT VICTORY, VT

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

DRAINAGE AREA.--75.2 mi^2 (121.0 km^2).

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).

REVISED RECORDS.--WSP 1381: Drainage area.

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

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

AVERAGE DISCHARGE.--29 years, 141 ft^3/s (3.993 m^3/s), 25.46 in/yr (647 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,340 ft^3/s (123 m^3/s) July 1, 1973, gage height, 12.04 ft (3.670 m); minimum, 2.6 ft^3/s (0.10 m^3/s) Aug. 21, 22, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 21	0700	1,090	30.9	7.79	2.374	Apr. 2	1000	*2,670	75.6	*10.22	3.115
Mar. 23	1000	1,150	32.6	7.83	2.387	Apr. 18	0400	1,430	40.5	8.43	2.569
Mar. 28	2300	1,860	52.7	9.12	2.780						

Minimum discharge, 15 ft^3/s (0.42 m^3/s) July 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	83	200	56	130	170	1070	203	139	61	117	51
2	92	81	280	52	140	160	2330	369	112	60	200	105
3	81	79	175	49	160	150	1300	437	86	45	95	75
4	70	83	142	46	150	145	814	509	90	78	62	52
5	62	83	151	44	140	180	621	325	76	59	46	46
6	55	70	137	43	130	282	531	238	63	40	41	59
7	53	65	124	41	120	313	520	247	64	30	44	42
8	48	67	91	40	110	256	473	274	104	27	47	34
9	44	98	84	39	105	206	380	219	70	139	51	29
10	40	87	100	38	100	184	333	180	53	77	171	26
11	41	226	174	36	105	162	366	158	47	45	462	240
12	188	172	123	35	105	139	286	250	51	41	193	195
13	176	256	80	35	100	135	243	400	47	49	97	101
14	126	386	77	45	95	139	254	300	41	56	123	70
15	105	400	82	52	90	128	340	270	37	54	145	54
16	185	231	88	49	95	113	558	230	33	39	584	45
17	198	178	72	45	85	117	1140	200	49	35	489	40
18	248	171	62	42	76	118	1280	350	55	43	190	66
19	478	183	54	39	82	110	1080	600	36	32	109	305
20	446	158	62	37	84	115	845	700	31	25	81	192
21	944	175	72	35	75	254	618	560	56	22	65	121
22	476	550	94	34	95	757	434	500	89	19	54	94
23	297	456	80	33	250	1050	361	400	59	16	47	78
24	201	231	70	32	190	760	313	300	41	158	39	65
25	164	180	66	31	150	487	236	240	53	196	34	56
26	158	142	70	34	155	426	228	200	168	73	30	53
27	139	119	78	70	170	520	254	175	108	151	79	321
28	118	121	74	200	190	1100	272	158	78	394	100	423
29	106	110	70	190	180	1470	272	131	53	150	84	183
30	101	101	64	170	---	898	241	114	45	93	94	125
31	90	---	60	160	---	822	---	107	---	88	61	---
TOTAL	5646	5342	3156	1852	3657	11866	17993	9344	2034	2395	4034	3346
MEAN	182	178	102	59.7	126	383	600	301	67.8	77.3	130	112
MAX	944	550	280	200	250	1470	2330	700	168	394	584	423
MIN	40	65	54	31	75	110	228	107	31	16	30	26
CFSM	2.42	2.37	1.36	.79	1.68	5.09	7.98	4.00	.90	1.03	1.73	1.49
IN.	2.79	2.64	1.56	.92	1.81	5.87	8.90	4.62	1.01	1.18	2.00	1.66

CAL YR 1975 TOTAL 42214.0 MEAN 116 MAX 944 MIN 2.8 CFSM 1.54 IN 20.88
WTR YR 1976 TOTAL 70665.0 MEAN 193 MAX 2330 MIN 16 CFSM 2.57 IN 34.96

NOTE.--No gage-height record Feb. 3 to Mar. 2.

01135000 MOOSE RIVER AT ST. JOHNSBURY, VT

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

DRAINAGE AREA.--128 mi^2 (332 km^2).

PERIOD OF RECORD.--Discharge: August 1928 to current year.
Chemical analyses: Water year 1955 (partial-record station).

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

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

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

AVERAGE DISCHARGE.--48 years, 221 ft^3/s (6.259 m^3/s), 23.45 in/yr (596 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,820 ft^3/s (165 m^3/s) May 5, 1972, gage height, 4.23 ft (1.289 m); maximum gage height, 8.3 ft (2.53 m) Apr. 30, 1929, from graph based on gage readings, site and datum then in use; minimum discharge, 6.2 ft^3/s (0.18 m^3/s) Sept. 17, 18, 1948, Aug. 27, 28, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft^3/s (48.1 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 28	0700	ice jam		*5.00	1.524	Apr. 1	1830	*3,000	85.0	4.27	1.301

Minimum discharge, 26 ft^3/s (0.74 m^3/s) July 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	134	326	110	250	310	1350	311	277	117	159	75
2	143	129	445	100	260	290	2190	518	220	110	281	138
3	121	128	296	95	290	280	1440	713	164	83	164	123
4	103	131	199	88	270	260	1000	786	149	101	102	80
5	91	129	149	84	250	245	866	565	134	102	75	67
6	82	114	184	80	230	344	845	393	110	68	62	72
7	76	106	176	78	210	380	825	406	115	52	67	62
8	72	108	122	76	200	316	748	447	167	55	75	50
9	66	137	123	74	190	301	657	368	128	181	78	42
10	62	143	242	70	190	267	565	291	92	141	240	40
11	66	296	280	68	200	220	594	254	80	78	602	254
12	277	272	207	66	190	210	476	447	81	68	341	299
13	292	405	130	64	180	207	406	736	75	74	179	161
14	205	623	150	72	175	184	426	509	64	83	226	107
15	164	603	160	80	170	170	536	447	55	85	292	83
16	252	391	170	78	175	159	767	419	48	65	887	69
17	312	295	120	72	160	152	1020	322	80	60	768	60
18	467	275	110	70	140	140	1290	574	90	78	332	83
19	645	280	100	68	160	135	1290	1000	65	59	193	300
20	680	250	110	66	150	164	1000	1020	51	44	142	298
21	686	327	125	64	135	338	909	1000	86	37	113	173
22	692	666	150	62	200	767	668	931	152	32	91	139
23	501	631	140	60	400	748	546	701	110	27	76	111
24	339	394	130	58	320	646	483	509	73	350	63	93
25	270	294	125	56	275	546	380	419	170	327	55	80
26	253	234	135	60	280	574	406	344	286	141	48	75
27	228	203	140	90	320	635	447	316	224	159	61	405
28	197	204	150	350	350	679	440	267	149	492	156	565
29	174	186	140	320	330	887	433	228	104	258	101	281
30	163	179	130	290	---	668	374	194	88	154	138	188
31	148	---	120	270	---	635	---	175	---	143	90	---
TOTAL	8008	8267	5284	3239	6650	11857	23377	15610	3687	3824	6257	4573
MEAN	258	276	170	104	229	382	779	504	123	123	202	152
MAX	692	666	445	350	400	887	2190	1020	286	492	887	565
MIN	62	106	100	56	135	135	374	175	48	27	48	40
CFSM	2.02	2.16	1.33	.81	1.79	2.98	6.09	3.94	.96	.96	1.58	1.19
IN.	2.33	2.40	1.54	.94	1.93	3.45	6.79	4.54	1.07	1.11	1.82	1.33

CAL YR 1975 TOTAL 66828 MEAN 183 MAX 1010 MIN 10 CFSM 1.43 IN 19.42
WTR YR 1976 TOTAL 100633 MEAN 275 MAX 2190 MIN 27 CFSM 2.15 IN 29.25

01135500 PASSUMPSIC RIVER AT PASSUMPSIC, VT

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

DRAINAGE AREA.--436 mi^2 (1.129 km^2).

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.

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

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

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

AVERAGE DISCHARGE.--48 years, 731 ft^3/s (20.70 m^3/s), 22.77 in/yr (578 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,200 ft^3/s (515 m^3/s) July 1, 1973, gage height, 23.49 ft (7.160 m), from rating curve extended above 14,000 ft^3/s (396 m^3/s) on basis of computation of flow over dam at gage height 21.23 ft (6.471 m); minimum daily, 13 ft^3/s (0.37 m^3/s) Sept. 12, 1948.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft^3/s (142 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 28	-	6,300	178	ice jam		Apr. 18	0400	5,750	163	10.05	3.063
Apr. 2	0330	*11,900	337	*16.90	5.151						

Minimum daily discharge, 61 ft^3/s (1.73 m^3/s) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	624	496	1290	305	620	900	6640	1170	928	806	625	431
2	515	495	1360	315	800	800	10500	1960	746	599	973	621
3	476	499	936	300	1000	700	6690	1930	626	472	585	513
4	402	515	710	295	900	630	4150	2150	613	536	439	389
5	383	520	470	300	780	750	3200	1530	538	479	382	352
6	373	465	721	300	700	1300	2910	1220	483	355	296	393
7	343	418	620	300	650	1200	2840	1380	499	313	341	360
8	330	428	490	290	600	950	2520	1530	694	335	366	314
9	315	523	470	290	570	700	2150	1220	557	857	391	288
10	305	559	856	275	540	650	1950	1040	448	535	1450	264
11	296	1100	1050	270	520	600	2100	919	404	392	2710	948
12	862	866	650	270	490	500	1640	1680	423	347	1150	850
13	809	1270	570	265	470	540	1480	2160	433	372	708	548
14	666	2010	534	280	460	560	1600	1370	357	419	859	431
15	569	1600	675	295	430	540	1980	1310	337	420	1010	360
16	787	1090	810	310	450	450	3050	1170	312	336	1970	328
17	853	909	590	295	460	450	4790	978	325	368	1390	308
18	1450	889	490	285	470	450	5340	1730	418	400	847	326
19	1720	919	490	280	470	440	4630	3510	339	329	601	601
20	3050	795	300	275	540	500	3760	3520	282	271	502	652
21	3000	1040	400	270	600	1200	2810	2440	1050	247	442	465
22	1830	2430	450	265	740	2500	2210	2340	882	235	381	437
23	1190	1570	460	260	1100	1800	1970	1780	535	181	360	347
24	919	1070	400	255	1000	1200	1760	1470	438	929	320	351
25	787	892	350	250	800	1800	1430	1280	705	882	294	316
26	784	742	360	245	700	2200	1570	1120	1170	484	277	303
27	744	674	380	540	850	2700	1750	1050	891	787	366	1250
28	643	715	400	1900	1000	5500	1730	910	693	1990	609	1270
29	594	673	370	1300	900	3000	1570	806	505	875	613	756
30	572	645	340	1000	---	2500	1350	734	498	633	884	573
31	537	---	310	750	---	2200	---	684	---	535	528	---
TOTAL	26728	26817	18302	12830	19610	40210	92070	48091	17129	16719	22669	15345
MEAN	862	894	590	414	676	1297	3069	1551	571	539	731	512
MAX	3050	2430	1360	1900	1100	5500	10500	3520	1170	1990	2710	1270
MIN	296	418	300	245	430	440	1350	684	282	181	277	264
CFSM	1.98	2.05	1.35	.95	1.55	2.97	7.04	3.56	1.31	1.24	1.68	1.17
IN.	2.28	2.29	1.56	1.09	1.67	3.43	7.86	4.10	1.46	1.43	1.93	1.31

CAL YR 1975 TOTAL 251911 MEAN 690 MAX 5790 MIN 64 CFSM 1.58 IN 21.49
WTR YR 1976 TOTAL 356520 MEAN 974 MAX 10500 MIN 181 CFSM 2.23 IN 30.42

01137500 AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, NH

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

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

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

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

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

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

AVERAGE DISCHARGE.--37 years, 207 ft^3/s (5.862 m^3/s), 32.09 in/yr (815 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,700 ft^3/s (76.5 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 1	2030	*4.160	118	*7.74	2.359						

Minimum discharge, 60 ft^3/s (1.70 m^3/s) July 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	116	327	110	210	225	1780	297	277	299	238	102
2	132	114	266	105	240	180	1500	1070	214	223	371	374
3	117	112	195	100	320	162	700	736	185	186	179	160
4	106	119	147	95	266	164	477	643	175	179	132	114
5	97	112	126	92	212	518	373	404	153	150	112	98
6	92	101	176	90	179	846	322	380	139	129	107	89
7	88	97	190	85	164	365	301	477	134	116	108	84
8	82	104	128	84	157	242	270	456	139	110	118	77
9	78	141	136	82	150	200	239	325	119	130	119	73
10	75	120	199	80	150	204	225	277	109	107	936	72
11	74	220	239	79	169	181	226	261	118	94	784	470
12	158	156	137	78	150	153	180	1180	173	107	328	227
13	187	371	120	77	143	175	185	795	124	107	234	154
14	162	901	150	90	131	179	185	462	106	119	242	121
15	135	488	192	110	122	153	207	480	96	123	277	105
16	196	290	252	90	160	120	481	365	88	100	1060	98
17	168	234	132	85	123	123	934	322	302	90	405	94
18	484	218	148	80	112	126	996	326	174	90	273	100
19	370	201	85	78	141	124	889	1110	123	82	214	153
20	1050	182	80	75	130	241	745	814	106	73	181	121
21	597	234	146	74	116	1130	508	583	223	77	157	106
22	335	516	150	73	472	1040	456	607	304	71	138	102
23	250	283	130	72	479	398	544	499	167	63	123	95
24	211	224	110	71	249	332	394	421	126	216	111	88
25	188	198	100	70	204	398	309	366	874	168	102	83
26	185	173	120	70	200	474	302	313	709	105	94	82
27	165	163	135	140	305	546	306	298	337	111	90	306
28	149	161	150	400	302	1430	355	269	257	172	88	207
29	138	144	135	500	214	593	355	231	279	106	99	152
30	135	141	125	400	---	453	338	209	276	119	102	128
31	123	---	120	270	---	515	---	197	---	121	89	---
TOTAL	6481	6634	4846	3905	5970	11990	15082	15173	6606	3943	7611	4235
MEAN	209	221	156	126	206	387	503	489	220	127	246	141
MAX	1050	901	327	500	479	1430	1780	1180	874	299	1060	470
MIN	74	97	80	70	112	120	180	197	88	63	88	72
CFSM	2.39	2.52	1.78	1.44	2.35	4.42	5.74	5.58	2.51	1.45	2.81	1.61
IN.	2.75	2.82	2.06	1.66	2.54	5.09	6.40	6.44	2.81	1.67	3.23	1.80

CAL YR 1975 TOTAL 72392 MEAN 198 MAX 1130 MIN 35 CFSM 2.26 IN 30.74
WTR YR 1976 TOTAL 92476 MEAN 253 MAX 1780 MIN 63 CFSM 2.89 IN 39.27

01138000 AMMONOOSUC RIVER NEAR BATH, NH

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

DRAINAGE AREA.--395 mi^2 (1,023 km^2).

PERIOD OF RECORD.--Discharge: September 1935 to current year.
Chemical analyses: Water year 1953 (partial-record station).

REVISED RECORDS.--WSP 871: Drainage area.

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

REMARKS.--Records good except those for winter period, which are fair. Occasional diurnal fluctuaton at low flow caused by small powerplants upstream, greater fluctuation prior to 1968. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years, 657 ft^3/s (18.61 m^3/s), 22.59 in/yr (574 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,900 ft^3/s (790 m^3/s) Mar. 18, 1936, gage height, 15.40 ft (4.694 m), from rating curve extended above 13,000 ft^3/s (368 m^3/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 ft^3/s (0.99 m^3/s) Sept. 15, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,500 ft^3/s (184 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1645	6,890	195	8.93	2.722	Mar. 28	0830	7,130	202	9.07	2.765
Jan. 19	0215	ice jam		*12.37	3.770	Apr. 1	2330	+*11,800	334	11.47	3.496

† From rating curve extended above 2,100 ft^3/s (59.5 m^3/s) on basis of slope-area measurement at gage height 17.55 ft (5.349 m).

Minimum daily discharge, 118 ft^3/s (3.34 m^3/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	467	380	846	410	900	900	5540	967	928	857	445	168
2	400	370	1160	370	1000	700	6650	2650	814	732	978	664
3	351	361	773	350	1250	680	3240	2150	631	579	532	440
4	313	367	583	340	1050	700	2230	2390	614	549	500	278
5	279	390	410	320	800	1000	1720	1430	545	463	290	214
6	255	348	553	310	620	2500	1460	1130	478	394	284	179
7	249	326	558	300	580	1200	1200	1260	442	348	287	158
8	228	326	450	290	570	984	1050	1410	449	313	316	140
9	207	486	528	285	580	683	980	1130	414	357	284	125
10	194	456	737	275	560	650	920	939	364	320	1590	118
11	194	669	996	270	580	600	830	830	361	267	2200	640
12	478	592	579	260	520	470	760	2500	486	304	800	520
13	623	1220	417	250	490	540	760	2990	424	320	495	350
14	587	3090	537	280	450	580	760	1590	357	320	538	260
15	493	2390	650	310	390	520	820	1370	323	364	1090	210
16	467	1290	851	295	530	400	1900	1170	285	316	3040	190
17	541	967	456	280	500	380	2600	984	693	294	1470	185
18	1400	857	520	270	450	380	3100	1100	627	316	919	190
19	1580	778	273	250	500	420	2700	2470	421	264	667	290
20	4230	698	202	240	560	700	2300	2790	345	219	541	280
21	2960	727	342	240	500	3000	1800	1890	435	194	456	240
22	1490	1790	410	230	700	3700	1550	2060	944	194	393	210
23	1010	1190	370	225	1600	1800	1700	1620	575	161	333	200
24	773	873	320	220	1800	1350	1400	1310	424	600	273	185
25	654	742	340	210	840	1500	1100	1130	1290	688	230	170
26	605	640	400	210	780	1900	1000	990	2520	384	180	160
27	553	583	470	560	1000	2760	1000	961	1110	326	164	500
28	497	623	520	1500	1200	5830	1150	857	846	524	161	400
29	463	566	500	1900	1050	3080	1150	727	841	400	195	300
30	438	516	470	1500	---	2290	1100	654	851	400	260	260
31	407	---	450	1100	---	2290	---	614	---	442	190	---
TOTAL	23386	24611	16671	13850	22350	44487	54470	46063	19837	12209	20101	8224
MEAN	754	820	538	447	771	1435	1816	1486	661	394	648	274
MAX	4230	3090	1160	1900	1800	5830	6650	2990	2520	857	3040	664
MIN	194	326	202	210	390	380	760	614	285	161	161	118
CFSM	1.91	2.08	1.36	1.13	1.95	3.63	4.60	3.76	1.67	1.00	1.64	.69
IN.	2.20	2.32	1.57	1.30	2.10	4.19	5.13	4.34	1.87	1.15	1.89	.77

CAL YR 1975 TOTAL 233851 MEAN 641 MAX 4760 MIN 65 CFSM 1.62 IN 22.02
WTR YR 1976 TOTAL 306259 MEAN 837 MAX 6650 MIN 118 CFSM 2.12 IN 28.84

01138500 CONNECTICUT RIVER AT WELLS RIVER, VT

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

DRAINAGE AREA.--2,644 mi^2 (6,848 km^2).

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 (Reservoirs in Connecticut River basin), and other reservoirs, combined usable capacity, about 14,800,000,000 ft^3 (419,000,000 m^3).

AVERAGE DISCHARGE.--27 years, 4,687 ft^3/s (132.7 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,100 ft^3/s (1,620 m^3/s) July 1, 1973, gage height, 17.35 ft (5.288 m), from peak-stage indicator; minimum daily, 152 ft^3/s (4.30 m^3/s) Aug. 28, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 23,000 ft^3/s (651 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	2000	23,500	666	8.31	2.533	Apr. 2	0530	*43,900	1,240	*13.91	4.240
Mar. 28	1030	29,100	824	9.64	2.938						

Minimum daily discharge, 800 ft^3/s (22.7 m^3/s) Jan. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7040	2310	7860	950	6200	8500	28700	7120	6830	4790	3540	5120
2	5470	2750	7280	1300	6800	7500	41900	10700	6250	3860	4920	6130
3	5100	4600	6400	1700	7800	6600	34000	12400	6500	2330	4430	5220
4	3590	4640	5990	1300	7200	6800	25300	11800	3280	2070	4330	3810
5	2250	4950	3530	2500	6600	6200	19200	11000	2300	2800	4670	2640
6	4350	3440	2330	3200	5800	6600	14900	6910	1290	3090	4480	2080
7	4450	1780	6050	3300	5400	7300	14400	7620	4170	3370	3380	3360
8	4720	2590	4160	2500	3700	7900	10600	7540	3550	3190	1550	4370
9	4970	6150	6670	3300	4500	9690	9160	5950	3970	3480	4200	4510
10	4260	4900	5050	2000	7000	7850	8830	6260	4330	3540	6440	3160
11	1780	6470	3160	1100	6000	7700	8200	6830	3700	2730	12300	3580
12	3120	9200	2170	2500	5200	7080	8270	8180	1350	3900	12600	3160
13	4900	13900	2750	3800	4500	7200	8660	12800	1590	2120	7680	4170
14	5620	10300	5180	3000	3500	6460	7400	12600	3110	2400	6570	3400
15	4920	8960	5500	1900	3200	6930	8140	12400	2780	3560	6230	2950
16	5560	7570	4500	2400	3700	6910	10900	8960	3080	4180	11100	3190
17	5800	7490	3500	1050	4500	6860	16500	6410	3140	2830	13500	2640
18	8880	7640	3200	2500	5400	6880	20600	9100	3140	1630	11800	2680
19	11800	7250	1930	3500	4900	6830	20500	13000	1850	2830	9620	1280
20	17200	8420	3140	2500	5000	7230	19800	15800	1040	2750	6280	3360
21	19900	10400	2070	1700	3500	10200	18400	15100	3270	2980	5980	4750
22	16800	8690	3400	2000	2300	15500	14800	12900	5170	2600	3620	2950
23	13100	8150	2500	4000	5000	14100	12000	11700	5130	1650	4820	3290
24	10500	7180	1800	1250	6400	14200	12100	10600	5050	2150	5500	2630
25	7250	6800	1000	800	4400	13500	9890	9130	5730	3260	3520	1450
26	6050	6940	2000	2200	8800	14200	10600	8100	6970	3460	2340	2210
27	5650	5560	2300	5000	9200	16200	9710	7560	3130	4050	2510	4850
28	6600	2800	2000	8200	9300	26900	8450	7330	5000	6020	2770	4960
29	6180	2930	1700	8000	8500	22900	9070	6370	5140	5850	1610	5780
30	5420	7750	2200	7600	---	20400	7710	4520	5010	4810	3300	4270
31	5180	---	2500	6600	---	21500	---	4340	---	4920	5060	---
TOTAL	218410	192510	113820	93650	164300	334620	448690	291030	116850	103200	180650	107950
MEAN	7045	6417	3672	3021	5666	10790	14960	9388	3895	3329	5827	3598
MAX	19900	13900	7860	8200	9300	26900	41900	15800	6970	6020	13500	6130
MIN	1780	1780	1000	800	2300	6200	7400	4340	1040	1630	1550	1280

CAL YR 1975 TOTAL 1742283 MEAN 4773 MAX 24900 MIN 511
WTR YR 1976 TOTAL 2365680 MEAN 6464 MAX 41900 MIN 800

01139000 WELLS RIVER AT WELLS RIVER, VT

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

DRAINAGE AREA.--98.4 mi^2 (254.9 km^2).

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).

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

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

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

AVERAGE DISCHARGE.--36 years, 141 ft^3/s (3.993 m^3/s), 19.46 in/yr (494 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,970 ft^3/s (169 m^3/s) June 30, 1973, gage height, 9.82 ft (2.993 m), from rating curve extended above 1,400 ft^3/s (39.6 m^3/s) on basis of computation of peak flow over dam; minimum, 5.1 ft^3/s (0.14 m^3/s) Oct. 6, 1948; minimum daily, 8.3 ft^3/s (0.24 m^3/s) Sept. 5, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 980 ft^3/s (27.8 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1530	1,050	29.7	4.54	1.384	Apr. 1	2300	*†3,040	86.1	*7.12	2.170
Mar. 28	1100	1,740	49.3	5.58	1.701	Aug. 10	2030	1,330	37.7	4.98	1.518

† From rating curve extended as explained above.

Minimum discharge, 34 ft^3/s (0.96 m^3/s) Oct. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	109	251	64	150	215	1670	246	303	231	113	47
2	107	107	257	62	160	190	2030	596	220	171	123	162
3	98	111	209	60	170	170	1260	484	174	155	88	97
4	80	135	167	59	150	160	868	466	180	145	72	75
5	60	128	143	58	140	210	677	351	149	130	60	68
6	49	109	163	56	130	372	605	291	131	108	57	61
7	45	107	165	55	125	264	576	309	127	89	60	52
8	40	111	145	54	120	216	513	301	146	110	94	46
9	38	137	161	53	115	196	451	252	126	105	85	42
10	36	137	224	52	110	193	418	223	113	99	615	40
11	42	199	248	52	110	170	438	201	121	89	678	160
12	274	157	167	51	105	158	387	385	200	91	287	123
13	167	271	145	53	105	160	344	395	139	92	188	94
14	153	466	151	56	105	175	368	293	116	89	208	76
15	111	345	171	60	100	160	422	278	103	86	370	63
16	100	251	196	58	100	138	564	226	91	74	374	57
17	88	221	132	56	100	150	714	199	158	77	211	58
18	339	209	115	54	105	152	689	277	124	79	151	64
19	274	199	117	52	182	142	553	643	98	66	124	78
20	685	182	100	51	232	180	449	684	92	57	107	65
21	509	227	96	53	216	439	369	495	311	53	96	58
22	332	459	92	57	257	747	321	435	284	49	83	52
23	254	299	88	55	517	468	305	358	159	43	70	50
24	211	237	84	53	402	399	275	295	118	212	59	45
25	187	206	82	52	232	465	257	259	265	136	53	42
26	189	176	78	60	206	563	378	235	317	89	47	43
27	167	169	75	400	271	729	412	219	228	87	45	265
28	149	178	72	240	335	1540	389	191	180	131	63	162
29	137	165	70	190	302	996	340	171	151	84	55	116
30	132	157	68	160	---	810	283	155	143	121	47	95
31	117	---	66	140	---	855	---	148	---	110	45	---
TOTAL	5292	5964	4298	2576	5352	11782	17325	10061	5067	3258	4728	2456
MEAN	171	199	139	83.1	185	380	578	325	169	105	153	81.9
MAX	685	466	257	400	517	1540	2030	684	317	231	678	265
MIN	36	107	66	51	100	138	257	148	91	43	45	40
CFSM	1.74	2.02	1.41	.84	1.88	3.86	5.87	3.30	1.72	1.07	1.55	.83
IN.	2.00	2.25	1.62	.97	2.02	4.45	6.55	3.80	1.92	1.23	1.79	.93

CAL YR 1975 TOTAL 54140 MEAN 148 MAX 1020 MIN 14 CFSM 1.50 IN 20.47
WTR YR 1976 TOTAL 78159 MEAN 214 MAX 2030 MIN 36 CFSM 2.17 IN 29.55

01139800 EAST ORANGE BRANCH AT EAST ORANGE, VT

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

DRAINAGE AREA.--8.95 mi^2 (23.18 km^2).

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

REVISED RECORDS.--WRD MA, NH, RI, VT, 1972: 1960-64(P), 1969-71(P).

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

REMARKS.--Records good except those for winter period, which are fair and those for periods of no gage-height record, which are poor. Occasional diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--18 years, 15.4 ft^3/s (0.436 m^3/s), 23.37 in/yr (594 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 672 ft^3/s (19.0 m^3/s) June 30, 1973, gage height, 5.55 ft (1.692 m), from rating curve extended above 130 ft^3/s (3.68 m^3/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 ft^3/s (0.003 m^3/s) Sept. 9, 19, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 140 ft^3/s (3.96 m^3/s) and maximums(*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	Unknown	a220	6.23	†3.58	1.091	Mar. 28	-	200	5.66	-	-
Nov. 21	1800	a156	4.42	3.19	.972	Apr. 1	Unknown	a362	10.3	‡4.34	1.323
Jan. 27	0430	ice jam		*5.16	1.573	Aug. 10	1015	a*483	13.7	4.85	1.478

† From peak-stage indicator.
‡ From floodmarks.
a From rating curve extended above 52 ft^3/s (1.47 m^3/s) as explained above.

Minimum discharge, 4.0 ft^3/s (0.11 m^3/s) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	26	46	13	18	24	260	38	42	26	19	18
2	12	24	31	12	23	24	180	55	24	17	11	21
3	11	26	29	11	21	26	140	48	24	17	7.3	15
4	9.8	29	27	10	19	24	100	39	26	16	6.1	14
5	9.3	23	25	9.7	17	39	87	34	20	13	5.4	13
6	8.7	22	30	9.3	16	37	76	33	18	11	6.1	12
7	8.3	21	34	8.9	14	29	68	39	19	11	7.9	11
8	7.8	27	75	8.6	13	24	62	34	18	11	12	11
9	7.5	24	100	8.2	12	22	60	31	15	10	9.6	10
10	7.3	29	49	8.0	12	20	57	30	17	8.2	112	23
11	20	27	29	7.8	11	18	55	28	19	8.9	32	22
12	60	24	39	7.6	11	16	47	52	22	17	26	16
13	39	43	64	7.5	10	15	50	34	15	11	29	14
14	31	46	58	8.0	11	13	51	30	13	13	29	12
15	24	29	29	8.8	13	12	56	30	11	10	44	11
16	22	26	24	8.2	13	11	71	27	14	8.3	29	11
17	19	27	21	7.8	11	12	75	26	32	9.6	28	12
18	88	29	19	7.4	10	13	70	40	15	7.3	26	12
19	58	27	17	7.1	12	25	64	60	12	6.4	24	11
20	170	24	16	6.9	11	55	59	47	28	5.6	23	10
21	90	47	16	6.6	16	76	54	39	33	7.0	21	11
22	60	40	18	6.4	61	64	50	39	28	5.4	20	11
23	48	32	16	6.4	35	46	48	37	17	4.7	19	11
24	40	30	14	6.1	26	52	42	35	13	42	18	10
25	36	29	13	6.2	22	70	46	33	34	11	17	9.4
26	45	28	14	20	22	95	51	35	21	7.6	16	25
27	37	29	15	34	32	130	51	33	19	13	27	41
28	33	29	17	30	28	150	50	29	14	10	24	19
29	30	28	15	28	29	92	40	26	13	7.0	19	16
30	29	28	14	24	---	74	35	24	17	18	16	15
31	27	---	13	20	---	150	---	24	---	10	15	---
TOTAL	1100.7	873	927	363.5	549	1458	2155	1109	613	373.0	698.4	447.4
MEAN	35.5	29.1	29.9	11.7	18.9	47.0	71.8	35.8	20.4	12.0	22.5	14.9
MAX	170	47	100	34	61	150	260	60	42	42	112	41
MIN	7.3	21	13	6.1	10	11	35	24	11	4.7	5.4	9.4
CFSM	3.97	3.25	3.34	1.31	2.11	5.25	8.02	4.00	2.28	1.34	2.51	1.66
IN.	4.57	3.63	3.85	1.51	2.28	6.06	8.96	4.61	2.55	1.55	2.90	1.86

CAL YR 1975 TOTAL 7303.58 MEAN 20.0 MAX 170 MIN .78 CFSM 2.23 IN 30.35
WTR YR 1976 TOTAL 10667.00 MEAN 29.1 MAX 260 MIN 4.7 CFSM 3.25 IN 44.33

NOTE.--No gage-height record Oct. 1-28, Dec. 20 to Jan. 5, Mar. 9 to Apr. 9, Sept. 13-30.

01141500 OMPOMPANOOSUC RIVER AT UNION VILLAGE, VT

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

DRAINAGE AREA.--130 mi^2 (337 km^2).

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

AVERAGE DISCHARGE.--36 years, 195 ft^3/s (5.522 m^3/s), 20.37 in/yr (517 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft^3/s (136 m^3/s) June 3, 1947, gage height, 9.65 ft (2.941 m), from rating curve extended above 2,400 ft^3/s (68.0 m^3/s) on basis of slope-area measurement of peak flow; minimum, 1.7 ft^3/s (0.048 m^3/s) Oct. 14, 1949; minimum daily, 2.0 ft^3/s (0.057 m^3/s) Oct. 20, 1949. Maximum discharge since construction of Union Village Reservoir in 1949, 2,350 ft^3/s (66.6 m^3/s) Apr. 20, 1950, gage height, 7.62 ft (2.323 m); maximum gage height, 7.68 ft (2.341 m) Apr. 7, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1869, about 14.5 ft (4.420 m) in November 1927, from information by local resident (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,060 ft^3/s (58.3 m^3/s) Apr. 7, gage height, 7.68 ft (2.341 m); minimum, 42 ft^3/s (1.19 m^3/s) Feb. 27; minimum daily, 45 ft^3/s (1.27 m^3/s) Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	188	405	150	605	275	753	265	314	310	106	53
2	117	180	350	140	605	335	682	786	215	189	104	103
3	105	184	262	160	579	323	1120	536	184	167	70	72
4	96	331	222	170	386	257	1600	472	182	147	56	60
5	90	249	170	160	347	308	1820	376	155	123	49	57
6	87	217	180	170	290	399	1950	329	137	106	45	60
7	83	205	200	180	280	330	1960	336	151	93	46	66
8	79	218	160	170	260	272	1720	372	143	89	65	58
9	78	262	160	180	240	228	1110	298	115	83	62	52
10	77	278	336	180	220	239	561	267	100	71	629	50
11	87	445	286	170	210	235	536	241	108	73	389	152
12	380	330	170	200	200	214	453	445	102	259	206	97
13	258	760	180	200	200	211	415	379	86	147	157	76
14	233	907	190	220	190	222	415	304	83	121	135	66
15	192	631	200	220	200	205	430	276	79	108	133	60
16	167	484	220	220	180	184	484	239	70	91	142	57
17	146	413	170	200	190	176	480	222	149	98	111	57
18	729	367	150	190	180	193	423	295	100	109	94	94
19	532	329	130	200	210	196	362	805	79	89	84	135
20	1200	305	85	200	230	257	317	820	74	62	77	89
21	856	429	90	190	196	547	284	573	157	71	71	79
22	510	584	140	190	273	771	265	488	251	73	66	71
23	375	391	160	200	320	509	295	412	153	55	62	67
24	319	334	190	190	300	501	246	352	109	108	56	62
25	299	312	160	180	320	683	267	372	157	97	52	59
26	355	279	170	190	273	855	492	307	155	63	49	60
27	274	252	170	466	336	1090	449	274	113	56	49	253
28	248	279	160	317	495	1730	386	246	100	66	52	153
29	230	281	150	709	344	1750	320	227	93	52	70	114
30	215	261	150	613	---	1410	278	204	121	88	69	101
31	196	---	160	648	---	1230	---	191	---	81	55	---
TOTAL	8741	10685	5926	7573	8659	16135	20873	11709	4035	3345	3411	2533
MEAN	282	356	191	244	299	520	696	378	135	108	110	84.4
MAX	1200	907	405	709	605	1750	1960	820	314	310	629	253
MIN	77	180	85	140	180	176	246	191	70	52	45	50
MEAN†	282	361	193	264	276	535	678	377	134	108	110	84.6
CFSM†	2.17	2.78	1.48	2.03	2.12	4.12	5.22	2.90	1.03	.83	.85	.65
IN.†	2.50	3.09	1.71	2.34	2.29	4.74	5.82	3.34	1.15	.96	.98	.73

CAL YR 1975 TOTAL 76389 MEAN 209 MAX 1330 MIN 24 MEAN† 209 CFSM† 1.61 IN† 21.86
WTR YR 1976 TOTAL 103625 MEAN 283 MAX 1960 MIN 45 MEAN† 283 CFSM† 2.18 IN† 29.65

† Adjusted for change in contents in Union Village Reservoir.

01141800 MINK BROOK NEAR ETNA, NH

LOCATION.--Lat 43°42'08", long 72°11'15", Grafton County, Hydrologic Unit 01080104, on left bank 2 mi (3 km) northeast of Etna and 5 mi (8 km) east of Hanover.
DRAINAGE AREA.--4.60 mi^2 (11.91 km^2).
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.--14 years, 7.01 ft^3/s (0.199 m^3/s), 20.69 in/yr (526 mm/yr).
REMARKS.--Records fair except those for winter period and period of no gage-height record, which are poor. Several observations of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 560 ft^3/s (15.9 m^3/s) Aug. 15, 1976, gage height, 3.80 ft (1.158 m), from rating curve extended above 130 ft^3/s (3.68 m^3/s) on basis of slope-area measurements at gage heights 3.50 ft (1.067 m) and 3.75 ft (1.143 m); maximum gage height, 4.19 ft (1.277 m) Mar. 26, 1963, backwater from ice; minimum discharge, 0.01 ft^3/s (<0.001 m^3/s) Aug. 11, 1964.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 55 ft^3/s (156 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	Unknown	†420	11.9	‡3.50	1.067	June 20	2100	72	2.04	2.38	.725
Mar. 23	1230	88	2.49	2.46	.750	Aug. 1	1345	82	2.32	2.43	.741
Mar. 28	0230	†289	8.18	3.17	.966	Aug. 10	1045	104	2.95	2.54	.774
Apr. 1	1615	†442	12.5	3.55	1.082	Aug. 15	2100	†*560	15.9	*3.80	1.158
May 19	1215	198	5.61	2.89	.881						

† From rating curve extended above 130 ft^3/s (3.68 m^3/s) as explained above.
‡ From floodmark.

Minimum discharge, 0.35 ft^3/s (0.010 m^3/s) July 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	5.9	18	2.8	11	8.3	201	22	10	22	29	3.8
2	3.6	5.0	13	2.7	12	7.4	111	45	8.0	6.8	15	6.8
3	3.0	5.0	10	2.6	10	7.0	53	22	6.1	4.6	7.3	4.6
4	2.5	17	6.8	2.5	8.4	6.8	32	27	5.0	4.2	2.7	4.2
5	2.2	8.9	6.0	2.4	7.0	11	24	18	4.1	4.2	2.2	3.2
6	2.0	7.8	7.8	2.3	5.9	14	23	12	3.5	2.9	2.0	2.7
7	1.8	7.3	9.0	2.2	5.0	13	22	15	3.2	1.2	2.7	2.4
8	1.7	11	8.0	2.2	4.3	11	21	14	3.3	.80	4.2	2.4
9	1.6	15	6.0	2.1	3.7	10	21	11	2.9	.80	7.8	2.2
10	1.6	16	15	2.1	3.4	9.0	18	9.0	2.4	.62	71	2.2
11	4.3	25	13	2.0	3.8	8.0	18	14	2.6	1.3	25	5.9
12	17	22	10	1.9	4.0	7.0	16	25	2.8	11	11	5.0
13	18	40	8.0	2.0	3.9	6.5	14	26	2.9	2.9	8.3	3.5
14	9.6	62	5.9	2.3	3.6	6.0	15	25	2.2	2.7	7.8	2.4
15	7.8	36	5.8	2.2	3.4	5.8	18	21	2.2	1.8	90	2.0
16	6.8	23	5.2	2.1	4.0	5.5	18	17	2.4	1.5	76	1.8
17	35	23	4.6	2.0	3.7	5.2	15	15	13	1.3	24	1.6
18	80	17	4.0	1.9	3.2	5.1	11	32	8.3	1.3	15	3.5
19	120	14	3.6	1.8	3.6	5.0	10	127	3.5	.90	10	8.9
20	200	12	2.5	1.7	4.2	7.0	9.0	102	11	.49	6.8	2.7
21	61	24	2.0	1.7	3.8	25	8.0	92	71	2.9	5.9	2.2
22	34	32	2.1	1.6	11	36	10	61	29	2.0	5.5	2.0
23	24	18	2.3	1.5	10	46	10	30	21	1.5	4.6	2.0
24	17	17	2.2	1.5	7.4	25	10	19	3.8	18	3.2	2.0
25	13	15	2.1	1.7	6.2	36	12	15	5.9	7.3	2.7	1.6
26	10	13	2.5	2.0	7.8	40	26	12	8.3	1.8	2.4	2.0
27	9.0	11	3.8	15	10	61	20	10	5.5	1.5	2.7	15
28	8.2	11	3.7	13	9.2	158	15	8.1	2.7	4.6	4.6	6.3
29	7.4	11	3.4	11	9.0	69	13	7.0	2.4	3.2	6.0	2.9
30	6.8	11	3.2	9.4	---	39	10	6.1	7.3	5.5	5.5	2.4
31	6.3	---	3.0	8.2	---	48	---	5.4	---	3.8	5.2	---
TOTAL	719.4	535.9	192.5	110.4	182.5	741.6	804.0	864.6	256.3	125.41	466.1	110.2
MEAN	23.2	17.9	6.21	3.56	6.29	23.9	26.8	27.9	8.54	4.05	15.0	3.67
MAX	200	62	18	15	12	158	201	127	71	22	90	15
MIN	1.6	5.0	2.0	1.5	3.2	5.0	8.0	5.4	2.2	.49	2.0	1.6
CFSM	5.04	3.89	1.35	.77	1.37	5.20	5.83	6.07	1.86	.88	3.26	.80
IN.	5.82	4.33	1.56	.89	1.48	6.00	6.50	6.99	2.07	1.01	3.77	.89

CAL YR 1975 TOTAL 3267.14 MEAN 8.95 MAX 200 MIN .36 CFSM 1.95 IN 26.42
WTR YR 1976 TOTAL 5108.91 MEAN 14.0 MAX 201 MIN .49 CFSM 3.04 IN 41.31

NOTE.--No gage-height record Oct. 1-31.

01142500 AYERS BROOK AT RANDOLPH, VT

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

DRAINAGE AREA.--30.5 mi^2 (79.0 km^2).

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

REVISED RECORDS.--WRD MA, NH, RI, VT, 1972: 1949(M), 1952(M), 1953(P), 1958(P), 1960(M), 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 630.50 ft (192.176 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1964, at site 140 ft (43 m) downstream at datum 2.25 ft (0.686 m) higher and Oct. 1, 1964, to Sept. 30, 1975, at site 140 ft (43 m) downstream at datum 1.25 ft (0.381 m) higher.

REMARKS.--Records good. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--36 years (water years 1940-75), 45.8 ft^3/s (1.297 m^3/s), 20.39 in/yr (518 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft^3/s (73.6 m^3/s) June 30, 1973, gage height, 10.37 ft (3.161 m), present datum, from rating curve extended above 500 ft^3/s (14.2 m^3/s) on basis of contracted opening measurement of peak flow; minimum, 0.6 ft^3/s (0.017 m^3/s) July 27, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1830, about 18 ft (5.5 m), present datum, in November 1927.

EXTREMES FOR PERIOD JUNE TO SEPTEMBER 1976.--Peak discharges above base of 350 ft^3/s (9.91 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
July 12	0100	374	10.6	5.30	1.615	Aug. 10	1615	*666	18.9	*6.42	1.957

Minimum discharge, 14 ft^3/s (0.40 m^3/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1976
MEAN VALUES

DAY	JUN	JUL	AUG	SEP
1	100	66	85	24
2	62	40	62	44
3	57	45	48	28
4	57	41	42	25
5	49	34	37	24
6	44	29	36	25
7	49	27	38	21
8	46	27	66	19
9	40	27	49	17
10	37	24	293	21
11	37	34	168	59
12	45	113	107	31
13	35	51	91	25
14	33	44	95	22
15	31	38	78	20
16	29	37	75	20
17	52	61	65	21
18	34	40	56	25
19	28	34	50	22
20	25	31	46	20
21	40	34	42	19
22	56	30	39	17
23	36	26	35	17
24	29	92	33	16
25	58	48	31	15
26	47	38	29	17
27	35	37	29	93
28	31	44	31	40
29	28	34	28	31
30	36	59	25	27
31	---	47	24	---
TOTAL	1286	1332	1933	805
MEAN	42.9	43.0	62.4	26.8
MAX	100	113	293	93
MIN	25	24	24	15
CFSM	1.41	1.41	2.05	.88
IN.	1.57	1.62	2.36	.98

01144000 WHITE RIVER AT WEST HARTFORD, VT

LOCATION.--Lat 43°42'51", long 72°25'07", Windsor County, Hydrologic Unit 01080105, on left bank 700 ft (200 m) upstream from highway bridge at West Hartford and 7.4 mi (11.9 km) upstream from mouth.
DRAINAGE AREA.--690 mi^2 (1,790 km^2).
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).
REVISED RECORDS.--WSP 756: Drainage area. WSP 781: 1928(M). WSP 1031: 1916(m), 1923. WSP 1301: 1916-26(M), 1929(M).
GAGE.--Water-stage recorder. Datum of gage is 374.53 ft (114.157 m) above mean sea level. Prior to Oct. 30, 1927, nonrecording gage at same site and datum.
REMARKS.--Records good except those for winter period, which are fair. Some diurnal fluctuation at low flow during period 1934-50 caused by powerplant upstream. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--61 years, 1,182 ft^3/s (33.47 m^3/s), 23.26 in/yr (591 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 120,000 ft^3/s (3,400 m^3/s) Nov. 4, 1927, gage height, 29.3 ft, (8.93 m), from floodmarks, from rating curve extended above 29,000 ft^3/s (821 m^3/s) on basis of slope-area measurement of peak flow; minimum observed, about 35 ft^3/s (0.99 m^3/s) Aug. 4, 1918; minimum daily, 54 ft^3/s (1.53 m^3/s) Sept. 27, 28, 1963.
Stage and discharge of the flood of Nov. 4, 1927, are the greatest since at least 1761.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 11,600 ft^3/s (329 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	0700	11,600	329	10.75	3.277	Apr. 1	2130	*34,300	971	*17.34	5.285
Mar. 22	0100	15,400	436	12.10	3.688	May 19	2130	11,800	334	10.82	3.298
Mar. 28	0800	17,200	487	12.69	3.868	Aug. 10	1500	25,600	725	15.19	4.630

Minimum discharge, 365 ft^3/s (10.3 m^3/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	1230	2350	800	1540	3280	20300	1870	2050	2250	2150	471
2	896	1160	2410	660	2000	2730	15300	4000	1670	1480	2160	1010
3	819	1160	1940	660	1800	2400	7690	2990	1390	1260	1300	757
4	770	1780	1660	710	1700	2220	5630	2470	1300	1160	985	582
5	645	1690	1300	620	1550	2700	4590	2090	1190	978	840	538
6	610	1350	1550	540	1450	5470	4100	1870	1080	840	718	532
7	570	1240	2020	560	1350	3340	3740	1900	1110	744	724	491
8	532	1280	1220	650	1300	2610	3340	2080	1160	738	1180	419
9	496	1750	1390	580	1200	2090	2960	1770	985	718	1110	396
10	481	1570	1970	550	1150	2170	2680	1650	910	663	12700	429
11	496	2470	2260	550	1100	2010	2660	1550	932	616	8520	1460
12	2300	1920	1670	530	1050	1630	2310	2140	932	1910	3170	932
13	2540	3300	1300	560	1000	1750	2190	2270	882	1220	2300	693
14	1870	4250	1430	590	970	1750	2160	1790	805	962	2200	570
15	1510	3160	1560	600	950	1590	2180	1890	770	840	2010	501
16	1390	2550	2010	590	1300	1460	2550	1690	724	712	1970	471
17	1270	2280	1370	550	1200	1270	3010	1550	1030	1000	1590	457
18	5240	2140	1100	550	1100	1300	2860	1870	932	847	1320	593
19	4190	2070	780	520	1500	1280	2420	6730	693	687	1160	663
20	8030	1890	550	530	1800	1760	2090	6630	659	587	1040	538
21	4900	2070	680	560	1600	5670	1800	4210	1220	797	925	486
22	3180	3620	1140	580	2500	8900	1620	3620	2120	985	840	457
23	2470	2520	1140	540	4500	4100	1670	3140	1270	663	757	447
24	2100	2140	910	540	3500	3770	1560	2520	932	1410	675	433
25	1880	1940	770	540	3000	5030	1500	2280	1220	1370	622	396
26	2310	1750	680	530	2500	6240	2320	2200	1780	889	570	410
27	1960	1690	980	2200	4000	7430	2330	2360	1120	744	576	1930
28	1700	1700	1000	5540	3000	14100	2170	1940	925	932	616	1440
29	1560	1590	800	2910	2800	7150	2110	1690	805	744	651	963
30	1440	1500	720	2150	---	6280	2040	1520	910	994	587	791
31	1320	---	800	1570	---	6260	---	1410	---	1050	501	---
TOTAL	60485	60760	41460	29560	54410	119740	113880	77690	33506	30790	56467	20256
MEAN	1951	2025	1337	954	1876	3863	3796	2506	1117	993	1822	675
MAX	8030	4250	2410	5540	4500	14100	20300	6730	2120	2250	12700	1930
MIN	481	1160	550	520	950	1270	1500	1410	659	587	501	396
CFSM	2.83	2.93	1.94	1.38	2.72	5.60	5.50	3.63	1.62	1.44	2.64	.98
IN.	3.26	3.28	2.24	1.59	2.93	6.46	6.14	4.19	1.81	1.66	3.04	1.09

CAL YR 1975 TOTAL 500033 MEAN 1370 MAX 10700 MIN 139 CFSM 1.99 IN 26.96
WTR YR 1976 TOTAL 699004 MEAN 1910 MAX 20300 MIN 396 CFSM 2.77 IN 37.69

01144500 CONNECTICUT RIVER AT WHITE RIVER JUNCTION, VT

LOCATION.--Lat 43°38'49", long 72°18'53", Windsor County, Hydrologic Unit 01080104, 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 mi^2 (10,598 km^2).
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).
REVISED RECORDS.--WSP 741: 1932 (adjusted monthly and yearly figures only). WSP 781: 1928(M). WSP 891: Drainage area. WSP 1301: 1922-26(M).
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.
REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs, Union Village Reservoir (Reservoirs in Connecticut River basin), and other reservoirs, combined usable capacity, about 17,200,000,000 ft^3 (487,000,000 m^3). Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--65 years, 7,144 ft^3/s (202.3 m^3/s).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 136,000 ft^3/s (3,850 m^3/s) Nov. 4, 1927, gage height, 35.0 ft (10.67 m), present site, from rating curve extended above 70,000 ft^3/s (1,980 m^3/s); minimum daily, 82 ft^3/s (2.32 m^3/s) Aug. 8, 1965.
Stage and discharge of the flood of Nov. 4, 1927, are the greatest since at least 1760.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 34,000 ft^3/s (963 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1700	37,000	1,050	15.95	4.862	Apr. 2	Unknown	*70,400	1,990	*†23.50	7.163
Mar. 28	1515	49,300	1,400	18.89	5.758						

† From floodmark.

Minimum daily discharge, 1,100 ft^3/s (31.2 m^3/s) Jan. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9500	5590	8850	2100	11000	15500	62000	12000	8800	7020	6970	6540
2	8600	3970	10000	3500	13000	14000	65000	18000	11500	6450	7490	6050
3	6200	6720	11700	3400	13500	12000	58000	18500	10000	6000	6470	6970
4	3900	8030	10300	2900	13000	12500	45000	18000	6500	4260	5930	4970
5	3700	9130	8940	4800	10500	13000	39000	15000	3500	4000	5690	3120
6	4000	7860	7310	5100	10500	18000	31000	13500	3000	3860	5780	2830
7	5500	7740	6980	5300	9800	16600	26000	12500	7700	4620	4240	3980
8	5500	4190	6970	5400	6800	14000	21000	12000	6300	4550	4700	4320
9	4800	3740	6500	6400	8000	12000	16500	11500	6700	4120	5360	4900
10	6600	7750	8050	3200	10500	13700	14500	9340	4700	3680	20100	5690
11	4400	9860	10100	2500	9600	12200	15000	8200	6400	3920	22400	6450
12	8600	8200	7810	6600	9400	11400	14000	11300	3100	6650	17900	2900
13	9200	14500	4720	6200	7800	10900	14500	16600	2600	5890	14100	4760
14	7400	18900	5110	4000	7500	10200	13900	17200	5000	3610	8050	4180
15	8200	20100	8660	4300	6800	10300	14000	16600	4500	3720	8100	4160
16	7400	15000	8000	4800	7600	9860	15500	14900	4600	5130	13100	3920
17	8000	13000	5530	2500	7400	9840	22300	11400	5500	4700	17000	4080
18	15400	11900	3400	3900	9600	8850	27400	14000	5000	1970	15300	2690
19	17200	10500	3700	7400	9200	9860	28600	20000	2460	3820	13000	2200
20	29400	10400	3000	3600	8200	10700	26900	29000	2270	3670	9590	4530
21	31900	11400	2200	3300	9600	16600	26700	25000	5520	3720	6840	4970
22	26700	16400	6580	3600	8400	30700	22200	20000	7000	3420	3250	3360
23	19800	14600	4210	5500	13000	22700	19000	19200	9410	3010	6360	3550
24	15300	13200	4200	1800	14000	22600	15500	15700	6790	3570	5780	2850
25	13400	11500	3100	1100	15000	24000	14000	15200	6790	4860	3480	1690
26	10100	10200	4500	2700	14000	25600	15000	14300	8250	4990	2740	3460
27	9970	10600	3800	10000	17000	28800	16500	12100	9260	4530	3460	9800
28	9740	11600	3400	20000	16500	46600	14000	10500	6070	5690	3100	6970
29	7980	5500	5200	19000	15500	43400	15000	10000	5490	7490	3510	7420
30	8070	4560	4200	14000	---	38500	13000	9400	5670	6180	4700	3080
31	8670	---	5400	13000	---	35700	---	6800	---	5930	5690	---
TOTAL	335130	306640	192420	181900	312700	580610	741000	457740	180380	145030	260180	136390
MEAN	10810	10220	6207	5868	10780	18730	24700	14770	6013	4678	8393	4546
MAX	31900	20100	11700	20000	17000	46600	65000	29000	11500	7490	22400	9800
MIN	3700	3740	2200	1100	6800	8850	13000	6800	2270	1970	2740	1690

CAL YR 1975 TOTAL 2650023 MEAN 7260 MAX 40100 MIN 410
WTR YR 1976 TOTAL 3830120 MEAN 10460 MAX 65000 MIN 1100

NOTE.--No gage-height record Oct. 1-17, Apr. 1-13, Apr. 23 to May 9, May 18-21, May 28 to June 18.

01145000 MASCOMA RIVER AT WEST CANAAN, NH

LOCATION.--Lat 43°39'00", long 72°04'50", Grafton County, Hydrologic Unit 01080104, on right bank 45 ft (14 m) downstream from Boston and Maine Railroad bridge, 0.9 mi (1.4 km) east of West Canaan, 1.2 mi (1.9 km) downstream from Indian River, 3.5 mi (5.6 km) west of Canaan, and at mile 19.3 (31.1 km).

DRAINAGE AREA.--80.5 mi^2 (208.5 km^2).

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

REVISED RECORDS.--WSP 1901: 1960.

GAGE.--Water-stage recorder. Altitude of gage is 835 ft (254.5 m), from topographic map.

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

AVERAGE DISCHARGE.--37 years, 118 ft^3/s (3.342 m^3/s), 19.91 in/yr (506 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,780 ft^3/s (107 m^3/s) Mar. 27, 1953, gage height, 8.94 ft (2.725 m), from rating curve extended above 1,900 ft^3/s (53.8 m^3/s) on basis of slope-area measurement at gage height 9.6 ft (2.93 m); minimum, 2.9 ft^3/s (0.082 m^3/s) Aug. 8, 17, 18, 19, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1938 reached a stage of 9.6 ft (2.93 m), from floodmarks, discharge, 4,310 ft (122 m^3/s), from rating curve extended above 1,900 ft^3/s (53.8 m^3/s) as explained above.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 950 ft^3/s (26.9 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	2300	1,570	44.5	5.91	1.801	Apr. 2	0300	*1,990	56.4	*6.61	2.015
Mar. 23	1930	1,250	35.4	5.34	1.628	May 20	0830	1,010	28.6	4.80	1.463
Mar. 28	1730	1,540	43.6	5.87	1.789						

Minimum discharge, 16 ft^3/s (0.45 m^3/s) July 21, Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	85	223	70	220	150	948	141	200	92	206	27
2	60	80	227	66	230	130	1670	404	144	75	380	51
3	45	84	164	64	240	120	1030	327	105	57	132	46
4	38	149	121	62	210	130	673	272	92	46	84	33
5	34	148	100	58	180	150	516	204	80	36	67	29
6	30	105	110	56	150	250	442	165	70	30	54	25
7	27	91	100	56	120	295	404	165	68	25	51	22
8	26	94	65	56	100	200	341	196	74	24	75	20
9	24	162	90	54	95	160	282	160	62	24	70	18
10	24	134	164	52	100	140	242	136	52	22	426	17
11	50	231	270	50	105	130	240	118	59	19	725	56
12	260	178	186	48	110	120	204	311	63	109	247	51
13	280	423	171	51	100	110	177	413	50	69	143	38
14	200	634	131	55	90	100	182	236	57	45	128	29
15	140	548	121	58	85	95	200	277	67	35	115	25
16	110	305	129	53	98	88	238	202	47	27	721	23
17	90	227	121	50	90	84	268	165	61	28	413	21
18	250	208	100	47	86	80	251	160	61	26	204	65
19	400	175	80	45	100	90	212	426	42	21	141	74
20	700	151	54	43	105	153	177	910	36	18	108	56
21	1000	158	50	41	90	322	148	579	64	33	91	41
22	1140	336	58	40	175	589	131	423	86	46	77	32
23	341	225	60	39	300	585	153	353	101	25	67	31
24	245	177	54	38	200	386	129	265	70	108	57	28
25	194	153	52	37	140	373	129	221	66	101	46	24
26	177	132	70	50	130	462	290	186	81	55	39	23
27	146	126	100	100	160	572	295	162	62	38	35	132
28	124	149	105	300	190	1270	221	139	51	41	35	115
29	114	129	85	400	170	1030	190	117	38	29	36	70
30	100	120	78	350	---	714	162	102	36	83	45	60
31	95	---	74	275	---	659	---	94	---	98	33	---
TOTAL	6534	5917	3513	2764	4169	9737	10545	8029	2145	1485	5051	1282
MEAN	211	197	113	89.2	144	314	352	259	71.5	47.9	163	42.7
MAX	1140	634	270	400	300	1270	1670	910	200	109	725	132
MIN	24	80	50	37	85	80	129	94	36	18	33	17
CFSM	2.62	2.45	1.40	1.11	1.79	3.90	4.37	3.22	.89	.60	2.02	.53
IN.	3.02	2.73	1.62	1.28	1.93	4.50	4.87	3.71	.99	.69	2.33	.59

CAL YR 1975 TOTAL 45902.8 MEAN 126 MAX 1140 MIN 7.7 CFSM 1.57 IN 21.21
WTR YR 1976 TOTAL 61171.0 MEAN 167 MAX 1670 MIN 17 CFSM 2.07 IN 28.27

01150500 MASCOMA RIVER AT MASCOMA, NH

LOCATION.--Lat 43°39'01", long 72°11'05", Grafton County, Hydrologic Unit 01080104, on left bank at Mascoma, 250 ft (76 m) downstream from railroad bridge, 1,000 ft (300 m) downstream from outlet of Mascoma Lake, and 9.9 mi (15.9 km) upstream from mouth.

DRAINAGE AREA.--153 mi^2 (396 km^2).

PERIOD OF RECORD.--Discharge: August 1923 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WSP 801: 1925(M).

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

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated by Mascoma and Crystal Lakes and Goose and Grafton Ponds (Reservoirs in Connecticut River basin). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--53 years, 215 ft^3/s (6.089 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,840 ft^3/s (165 m^3/s) Mar. 19, 1936, gage height, 7.50 ft (2.286 m), from rating curve extended above 2,500 ft^3/s (70.8 m^3/s) on basis of computations of flow over dams at gage heights 6.85 ft (2.088 m) and 7.50 ft (2.286 m); minimum daily, 2 ft^3/s (0.06 m^3/s) Feb. 3, 1939, Sept. 1, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,500 ft^3/s (70.8 m^3/s) Apr. 2, gage height, 4.86 ft (1.481 m); minimum daily, 35 ft^3/s (0.99 m^3/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	283	263	335	70	110	466	1470	324	171	109	190	82
2	245	257	350	70	450	475	2130	346	239	109	342	81
3	200	251	354	70	682	457	2340	414	296	109	426	81
4	165	251	303	70	595	431	1820	526	276	104	448	81
5	161	293	251	70	535	405	1430	560	251	100	452	81
6	155	317	254	70	475	422	1220	507	224	95	245	78
7	147	307	257	70	422	452	1060	466	203	92	97	76
8	149	300	254	70	381	443	838	439	171	89	102	75
9	149	300	251	70	350	409	649	328	145	87	273	75
10	143	303	263	65	321	381	540	257	141	86	585	55
11	141	307	314	65	230	354	535	270	114	84	758	35
12	167	324	354	65	169	303	531	270	78	80	788	38
13	230	414	350	65	171	263	335	321	80	87	511	39
14	339	660	328	65	171	257	80	377	80	105	283	41
15	397	838	310	65	173	254	133	401	78	114	129	43
16	357	857	300	65	175	245	212	426	77	116	570	43
17	324	758	279	65	177	236	734	409	81	111	916	68
18	346	585	266	65	180	230	782	393	84	105	819	116
19	484	466	251	65	185	221	511	649	87	99	435	126
20	1060	431	239	65	197	215	215	1060	87	92	133	135
21	1680	409	230	65	221	245	224	1260	99	92	147	131
22	1670	426	220	110	248	350	215	1130	116	94	151	131
23	1300	466	85	110	426	484	218	978	149	92	151	135
24	957	457	85	110	555	560	218	832	169	97	143	131
25	699	484	85	40	526	580	224	575	161	114	129	127
26	590	493	85	40	405	632	251	279	155	120	122	129
27	516	452	85	40	346	734	439	95	149	116	110	145
28	397	422	85	40	401	1040	526	105	137	109	98	171
29	293	401	60	70	448	1850	488	123	120	105	98	200
30	283	361	60	90	---	1760	397	141	107	137	90	224
31	273	---	65	100	---	1490	---	149	---	171	82	---
TOTAL	14300	12853	7008	2160	9725	16644	20765	14410	4325	3220	9823	2973
MEAN	461	428	226	69.7	335	537	692	465	144	104	317	99.1
MAX	1680	857	354	110	682	1850	2340	1260	296	171	916	224
MIN	141	251	60	40	110	215	80	95	77	80	82	35

CAL YR 1975 TOTAL 89042 MEAN 244 MAX 1680 MIN 28
WTR YR 1976 TOTAL 118206 MEAN 323 MAX 2340 MIN 35

01151500 OTTAUQUECHEE RIVER AT NORTH HARTLAND, VT

LOCATION.--Lat 43°36'09", long 72°21'17", Windsor County, Hydrologic Unit 01080106, on left bank 100 ft (30 m) upstream from highway bridge at North Hartland, 0.3 mi (0.5 km) downstream from North Hartland Dam, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--221 mi^2 (572 km^2).

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 good except those for periods of doubtful gage-height record, which are poor. Flow regulated by powerplants upstream and by North Hartland Reservoir (Reservoir in Connecticut River basin) since March 1961; greater regulation by powerplants prior to 1958. Small seasonal storage in reservoir at Plymouth. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--46 years, 395 ft^3/s (11.19 m^3/s), 24.27 in/yr (616 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,400 ft^3/s (691 m^3/s) Sept. 21, 1938, gage height, 17.68 ft (5.389 m), from rating curve extended above 6,200 ft^3/s (176 m^3/s) on basis of computations of flow over dams at gage heights 15.58 ft (4.749 m), 17.68 ft (5.389 m), and 21.5 ft (6.55 m); minimum, 2.9 ft^3/s (0.082 m^3/s) July 31, 1933; minimum daily, 3.8 ft^3/s (0.11 m^3/s) July 3, 1933. Maximum discharge since construction of North Hartland Dam in March 1961, 5,930 ft^3/s (168 m^3/s) Apr. 26, 1969, gage height, 8.52 ft (2.597 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1760, 21.5 ft (6.55 m) in November 1927, from floodmarks, discharge 30,400 ft^3/s (861 m^3/s), by computation of peak flow over dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,640 ft^3/s (131 m^3/s) Apr. 6, gage height, 7.69 ft (2.344 m); minimum, not determined, occurred during period of doubtful gage-height record; minimum daily, 60 ft^3/s (1.70 m^3/s) Sept. 9-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	423	880	270	700	1350	1180	576	640	1050	840	140
2	288	412	590	280	800	1300	1050	1270	620	900	760	240
3	262	408	482	280	590	892	2540	1200	500	600	740	340
4	250	770	420	280	450	651	3470	1000	400	350	634	330
5	209	784	380	280	570	820	3660	850	360	350	243	310
6	189	575	260	270	580	1660	3300	680	360	350	230	310
7	191	509	320	190	464	1680	2070	570	360	320	277	320
8	180	600	450	220	387	1060	1430	600	350	280	433	300
9	151	700	660	220	380	700	1180	560	330	290	285	60
10	152	678	800	210	380	660	870	500	280	300	794	60
11	166	1160	900	210	380	716	810	470	260	1000	2190	60
12	1500	817	720	210	380	667	802	710	270	1500	3500	60
13	657	1970	440	210	380	545	673	950	270	1000	3000	60
14	742	2070	520	220	380	545	565	880	170	700	2400	60
15	395	1470	1100	230	342	545	555	700	150	500	1500	200
16	388	1060	1300	230	335	545	625	920	180	350	950	203
17	684	880	450	230	373	473	662	840	330	330	750	205
18	1500	796	210	230	408	391	731	600	350	290	400	261
19	2550	718	170	210	730	370	726	1500	320	270	370	318
20	3780	662	150	190	730	527	531	2700	300	270	390	240
21	3930	813	130	190	765	1240	356	2200	300	250	390	211
22	2050	1200	140	180	806	2950	405	1500	350	220	300	213
23	928	783	180	190	1460	1700	420	1200	350	230	250	206
24	800	700	270	170	1540	1190	440	1000	340	270	220	190
25	700	620	320	170	909	1740	400	840	280	340	220	182
26	670	555	320	180	789	1860	520	800	270	310	220	167
27	640	600	340	310	1240	2310	960	750	270	250	230	742
28	620	545	360	240	1750	3460	700	700	270	240	270	513
29	570	514	360	1300	1400	3390	620	560	260	270	260	350
30	523	700	340	1800	---	2520	630	500	400	400	250	299
31	469	---	280	1400	---	1980	---	540	---	460	240	---
TOTAL	26338	24492	14242	10800	20398	40437	32881	28666	9890	14240	23536	7150
MEAN	850	816	459	348	703	1304	1096	925	330	459	759	238
MAX	3930	2070	1300	1800	1750	3460	3660	2700	640	1500	3500	742
MIN	151	408	130	170	335	370	356	470	150	220	220	60
MEAN†	818	817	493	361	694	1310	1091	926	327	461	755	203
CFSM†	3.70	3.70	2.23	1.63	3.14	5.93	4.94	4.19	1.48	2.09	3.42	.92
IN.†	4.27	4.12	2.57	1.89	3.39	6.83	5.51	4.83	1.65	2.41	3.94	1.03

CAL YR 1975	TOTAL	175818	MEAN 482	MAX	3930	MIN 41	MEAN†	484	CFSM†	2.19	IN†	29.76
WTR YR 1976	TOTAL	253070	MEAN 691	MAX	3930	MIN 60	MEAN†	689	CFSM†	3.12	IN†	42.44

† Adjusted for change in contents in North Hartland Reservoir.
NOTE.--Doubtful gage-height record Oct. 24-27, Dec. 4-17, Dec. 24 to Feb. 5, Apr. 23-29, May 3 to Aug. 4, Aug 12 to Sept. 2, Sept. 4-15.

01152500 SUGAR RIVER AT WEST CLAREMONT, NH

LOCATION.--Lat 43°23'15", long 72°21'45", Sullivan County, Hydrologic Unit 01080104, on right bank 0.2 mi (0.3 km) downstream from Redwater Brook at West Claremont and 2.4 mi (3.9 km) upstream from mouth.

DRAINAGE AREA.--269 mi^2 (697 km^2).

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).

REVISED RECORDS.--WSP 711: 1930(M). WSP 756: Drainage area. WSP 1901: 1960 (adjusted figures only).

GAGE.--Water-stage recorder. Datum of gage is 358.78 ft (109.356 m) 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.

REMARKS.--Records excellent except those for winter period and period of no gage-height record, which are poor. Regulation by Sunapee Lake 25 mi (40 km) upstream (Reservoirs in Connecticut River basin) and occasional diurnal fluctuation at low flow by mills upstream; greater regulation by mills prior to 1971. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--48 years, 402 ft^3/s (11.38 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,000 ft^3/s (396 m^3/s) Mar. 19, 1936, gage height, 10.92 ft (3.328 m), from rating curve extended above 6,700 ft^3/s (190 m^3/s) on basis of computations of flow over dam at gage heights 10.49 ft (3.197 m) and 10.92 ft (3.328 m); maximum gage height, 11.80 ft (3.597 m) Mar. 12, 1936, ice jam; minimum daily discharge, 14 ft^3/s (0.40 m^3/s) Aug. 26, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s (85.0 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1730	5,380	152	6.81	2.076	Mar. 28	1130	4,430	125	6.22	1.896
Jan. 28	1100	-	-	*a7.69	2.344	Apr. 2	0300	*5,510	156	6.89	2.100
Jan. 28	-	4,000	113	-	-	May 20	0400	3,190	90.3	5.36	1.634

a Ice jam.

Minimum daily discharge, 55 ft^3/s (1.56 m^3/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	447	546	832	410	950	1320	2780	438	415	277	1240	85
2	382	521	892	360	1400	1100	4360	907	430	214	1520	85
3	332	503	749	370	1300	925	2660	869	360	152	855	85
4	295	509	630	350	1100	935	2040	761	289	124	578	78
5	272	507	511	320	920	957	1640	613	244	108	440	75
6	254	472	490	300	780	1340	1410	516	215	101	346	72
7	238	454	479	290	700	1230	1280	471	214	97	344	68
8	223	478	401	280	650	995	1160	513	208	100	625	62
9	211	557	392	270	610	816	1040	484	184	99	629	56
10	201	543	762	260	580	791	956	431	160	91	1840	55
11	202	849	1220	250	560	743	905	368	141	101	1860	120
12	695	753	843	250	520	641	829	625	135	695	1260	120
13	938	1270	669	260	500	629	666	835	126	558	999	95
14	763	1870	582	380	480	659	625	630	117	384	931	80
15	626	1590	578	450	450	662	598	1160	109	288	830	73
16	527	1170	582	340	460	639	589	937	105	219	800	68
17	452	958	473	310	480	538	484	739	113	187	650	68
18	1620	821	446	290	493	533	450	673	116	146	450	200
19	1930	728	250	280	560	536	414	1660	104	120	320	190
20	4220	669	210	280	813	559	371	2730	97	103	250	130
21	3130	775	250	270	782	1270	350	1900	94	112	200	103
22	1870	1600	320	260	900	2130	320	1570	93	123	170	91
23	1390	1170	340	250	1750	1420	409	1310	123	113	160	99
24	1120	925	270	250	1450	1260	384	1120	104	334	155	104
25	966	805	280	260	1190	1500	366	991	106	312	150	99
26	923	715	400	300	1110	1740	734	874	110	202	130	107
27	836	723	700	460	1210	1940	766	650	103	161	110	267
28	748	929	600	3000	1580	4010	648	557	92	216	120	322
29	692	819	460	2200	1440	2880	573	482	84	209	120	242
30	647	716	420	1500	---	2190	497	419	118	984	105	194
31	588	---	450	1100	---	1950	---	382	---	980	90	---
TOTAL	27738	24945	16481	16150	25718	38838	30304	26615	4909	7910	18277	3493
MEAN	895	832	532	521	887	1253	1010	859	164	255	590	116
MAX	4220	1870	1220	3000	1750	4010	4360	2730	430	984	1860	322
MIN	201	454	210	250	450	533	320	368	84	91	90	55

CAL YR 1975 TOTAL 194593 MEAN 533 MAX 4220 MIN 63
WTR YR 1976 TOTAL 241378 MEAN 660 MAX 4360 MIN 55

NOTE.--No gage-height record Aug. 15 to Sept. 20.

01152800 BLACK RIVER AT COVERED BRIDGE, AT WEATHERSFIELD, VT

LOCATION.--Lat 43°23'55", long 72°31'14", Windsor County, Hydrologic Unit 01080106, on left bank 540 ft (165 m) downstream from covered bridge, 0.3 mi (0.5 km) west of Downers, and 1.7 mi (2.7 km) north of Perkinsville (Weathersfield Town Hall).

DRAINAGE AREA.--114 mi^2 (295 km^2).

PERIOD OF RECORD.--December 1975 to September 1976.

GAGE.--Water-stage recorder. Datum of gage is 563.33 ft (171.703 m) above mean sea level.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Flow regulated by powerplant and mills upstream. High flow slightly affected by retarding reservoirs.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 30, 1973, reached a discharge of 15,100 ft^3/s (428 m^3/s), by slope-area measurement 2.4 mi (3.9 km) upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft^3/s (70.8 m^3/s) and maximums (*) for period December 1975 to September 1976:

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 28	-	4,600	130	-	-	Aug. 10	1100	*a8,590	243	*8.64	2.633
Apr. 1	-	7,400	210	-	-						

a From rating curve extended above 1,900 ft^3/s (53.8 m^3/s).

Minimum discharge, 34 ft^3/s (0.96 m^3/s) June 17; minimum daily, 60 ft^3/s (1.70 m^3/s) Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, DECEMBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	620	140	360	720	4500	412	421	882	1500	105
2	416	120	550	619	1600	1020	398	500	950	137
3	348	125	500	532	1000	669	335	352	525	152
4	289	120	350	431	850	524	278	278	378	116
5	238	110	270	399	770	428	233	234	310	117
6	242	97	220	687	690	365	201	186	255	107
7	291	105	195	450	623	397	251	155	308	88
8	260	115	180	330	542	400	229	192	453	70
9	245	94	175	310	468	352	191	190	386	69
10	614	94	165	290	415	311	179	165	4220	108
11	507	100	165	260	404	272	154	169	2050	263
12	374	90	170	220	355	503	163	839	881	200
13	310	96	160	230	322	491	154	621	775	168
14	268	100	165	250	320	400	134	443	837	132
15	278	120	140	220	334	895	118	364	596	100
16	350	105	160	195	385	593	126	223	600	87
17	270	105	185	180	433	456	140	221	462	91
18	250	100	180	180	393	510	140	167	344	110
19	160	97	280	180	324	1510	108	154	251	120
20	110	94	310	240	266	1360	137	144	204	112
21	110	94	270	860	218	994	455	139	164	103
22	140	97	700	860	218	904	445	144	154	82
23	140	94	850	540	225	757	380	127	146	79
24	130	90	584	580	207	613	290	247	130	66
25	120	90	434	750	224	539	250	201	120	60
26	130	87	362	900	498	468	250	166	109	72
27	170	500	675	1200	454	398	230	147	89	327
28	180	1100	847	3500	434	353	210	172	95	274
29	150	741	592	1600	438	344	200	184	100	220
30	135	511	---	1250	434	298	380	1130	122	170
31	140	390	---	1100	---	290	---	642	113	---
TOTAL	7985	5921	10194	20063	18344	17826	7180	9778	17627	3905
MEAN	258	191	352	647	611	575	239	315	569	130
MAX	620	1100	850	3500	4500	1510	455	1130	4220	327
MIN	110	87	140	180	207	272	108	127	89	60
CFSM	2.26	1.68	3.09	5.68	5.36	5.04	2.10	2.76	4.99	1.14
IN.	2.61	1.93	3.33	6.55	5.99	5.82	2.34	3.19	5.75	1.27

NOTE.--No gage-height record Dec. 16 to Jan. 18, Mar. 7 to Apr. 6, June 23-30.

01153000 BLACK RIVER AT NORTH SPRINGFIELD, VT

LOCATION.--Lat 43°20'00", long 72°30'55", Windsor County, Hydrologic Unit 01080106, on right bank at North Springfield, 800 ft (250 m) downstream from North Springfield Dam, 1,300 ft (400 m) upstream from Great Brook, and 8.1 mi (13.0 km) upstream from mouth.

DRAINAGE AREA.--158 mi^2 (409 km^2).

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).

REVISED RECORDS.--WSP 756: Drainage area. WSP 781: 1931(M), 1934(M).

GAGE.--Water-stage recorder. Datum of gage is 445.79 ft (135.877 m) above mean sea level (levels by Corps of Engineers).

REMARKS.--Records good. Flow regulated by powerplant and mills upstream and by North Springfield Reservoir (Reservoirs in Connecticut River basin) since November 1960. High flow slightly affected by retarding reservoirs since 1968. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--47 years, 286 ft^3/s (8,100 m^3/s), 24.58 in/yr (624 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft^3/s (439 m^3/s) Sept. 22, 1938, gage height, 17.68 ft (5.389 m), from rating curve extended above 3,200 ft^3/s (90.6 m^3/s) on basis of computations of flow over dams at gage heights 16.41 ft (5.002 m) and 17.68 ft (5.389 m); minimum daily, 7.0 ft^3/s (0.20 m^3/s) Nov. 13, 1973. Maximum discharge since construction of North Spingfield Dam in 1960, 3,550 ft^3/s (101 m^3/s) Apr. 11, 1962, gage height, 6.43 ft (1.960 m); maximum gage height, 7.24 ft (2.207 m) Apr. 6, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,230 ft^3/s (91.5 m^3/s) Apr. 6, gage height, 7.24 ft (2.207 m); minimum daily, 96 ft^3/s (2.72 m^3/s) Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	279	229	560	191	430	865	1560	501	454	1250	1150	163
2	228	246	563	169	587	680	934	1100	468	746	1570	183
3	212	232	439	177	674	605	1690	918	378	424	1190	226
4	189	290	361	169	475	529	2020	729	303	332	550	177
5	175	365	264	155	365	575	2440	583	265	282	398	166
6	167	314	278	135	310	992	2900	454	228	199	317	153
7	155	271	326	145	265	708	2670	473	262	179	321	138
8	143	264	275	158	249	540	2050	535	255	193	608	115
9	135	298	278	130	242	383	1010	459	208	205	535	96
10	121	374	657	130	226	401	669	411	185	182	1280	117
11	186	703	703	140	226	361	643	351	174	166	1800	430
12	1250	475	475	124	236	305	574	579	174	872	2740	294
13	1000	1170	374	133	222	314	520	669	158	751	2790	246
14	751	1450	309	138	226	339	506	525	149	510	2460	200
15	495	1030	326	166	194	301	510	936	128	407	1800	163
16	490	674	396	148	229	267	593	854	113	289	679	140
17	431	523	309	143	253	246	588	608	137	222	772	210
18	1750	444	290	140	246	256	540	564	158	199	921	119
19	1990	415	183	135	343	242	468	1320	119	171	410	174
20	1510	378	148	129	454	322	411	1820	133	158	326	171
21	1690	460	150	131	326	805	343	1820	370	142	253	155
22	1760	823	191	136	551	1360	332	1020	718	154	246	138
23	1910	540	191	130	1040	1030	347	774	424	135	226	136
24	1550	435	183	124	774	780	328	638	299	303	207	115
25	546	378	163	126	535	992	321	564	265	213	188	106
26	605	314	180	119	480	1240	696	520	272	185	180	106
27	486	330	239	345	738	1500	707	550	246	166	140	401
28	401	378	246	1700	1050	2410	623	441	216	182	166	378
29	352	343	197	2060	756	2340	603	398	144	193	166	298
30	318	301	188	967	---	1970	559	347	299	985	188	226
31	286	---	194	529	---	1680	---	324	---	1050	177	---
TOTAL	21561	14447	9636	9322	12702	25338	28155	21785	7702	11445	24754	5740
MEAN	696	482	311	301	438	817	939	703	257	369	799	191
MAX	1990	1450	703	2060	1050	2410	2900	1820	718	1250	2790	430
MIN	121	229	148	119	194	242	321	324	113	135	140	96
MEAN†	694	482	311	300	441	825	929	702	258	378	789	192
CFSM†	4.39	3.05	1.97	1.90	2.79	5.22	5.88	4.44	1.63	2.39	4.99	1.22
IN.†	5.07	3.40	2.27	2.19	3.01	6.02	6.56	5.12	1.82	2.76	5.76	1.36

CAL YR 1975 TOTAL 133843 MEAN 367 MAX 2340 MIN 38 MEAN† 366 CFSM† 2.32 IN† 31.49
WTR YR 1976 TOTAL 192587 MEAN 526 MAX 2900 MIN 96 MEAN† 526 CFSM† 3.33 IN† 45.34

† Adjusted for change in contents in North Springfield Reservoir.

01153500 WILLIAMS RIVER AT BROCKWAYS MILLS, VT

LOCATION.--Lat 43°12'31", long 72°31'05", Windham County, Hydrologic Unit 01080107, on left bank 25 ft (7.6 m) upstream from highway bridge at Brockways Mills, 4 mi (6.4 km) downstream from Hall Brook, 4.6 mi (7.4 km) upstream from mouth, and 6 mi (9.7 km) northwest of Bellows Falls.
DRAINAGE AREA.--103 mi^2 (267 km^2).
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).
REVISED RECORDS.--WSP 1031: 1943-44(P). WSP 1301: 1941-42(M).
GAGE.--Water-stage recorder. Altitude of gage is 430 ft (131 m), from topographic map.
REMARKS.--Records excellent except those for periods of doubtful gage-height record, which are good, and those for winter period and period of no gage-height record, which are fair. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--36 years, 171 ft^3/s (4.843 m^3/s), 22.54 in/yr (573 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft^3/s (334 m^3/s) Aug. 10, 1976, gage height, 15.85 ft (4.831 m), from rating curve extended above 3,300 ft^3/s (93.5 m^3/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 ft^3/s (0.10 m^3/s) Aug. 27, 1949.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1938 had greatest discharge since at least 1753, gage height, 22.7 ft (6.92 m), from floodmarks. Flood in November 1927 reached a stage possibly 2 ft (1 m) higher than that of September 1938 flood because of backwater from milldam, from information by local residents.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,600 ft^3/s (73.6 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 18	1630	2,760	78.2	7.19	2.192	Apr. 1	-	a7,010	199	b11.68	3.560
Oct. 20	0900	4,940	140	9.64	2.938	Aug. 1	1530	3,400	96.3	7.98	2.432
Mar. 28	-	4,400	125	-	-	Aug. 10	1200	*a11,800	334	*15.85	4.831

a From rating curve extended as explained above.
b From peak-stage indicator.

Minimum discharge, 38 ft^3/s (1.08 m^3/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203	203	517	110	291	614	3000	214	174	510	1170	53
2	170	191	371	105	470	447	1400	574	156	152	543	63
3	151	185	299	100	348	413	650	348	137	102	251	59
4	137	241	233	96	266	365	550	291	128	85	174	52
5	128	214	191	88	220	422	500	246	114	68	137	51
6	122	185	212	78	200	602	450	219	105	62	115	47
7	115	174	207	84	170	400	420	246	154	52	212	43
8	107	212	149	88	170	331	375	288	122	53	371	42
9	101	253	172	82	180	277	343	226	101	68	280	40
10	98	348	686	78	175	291	310	203	88	52	4020	60
11	224	495	425	75	174	264	313	185	75	47	982	168
12	1020	337	285	72	168	236	269	380	88	763	457	83
13	513	1000	241	73	160	258	251	322	71	216	328	60
14	447	920	233	120	170	270	248	238	64	139	282	51
15	328	521	258	120	147	240	246	463	63	109	241	47
16	302	397	258	86	185	220	256	274	54	86	343	44
17	241	343	187	82	200	215	243	231	62	85	209	48
18	1480	305	183	78	200	210	216	388	59	70	164	91
19	1040	274	112	76	368	205	194	1280	51	58	139	73
20	2690	256	90	75	348	310	174	806	50	51	122	57
21	940	437	100	75	256	800	160	562	80	48	109	50
22	578	543	115	75	782	780	158	447	98	51	96	49
23	431	351	115	74	782	500	191	362	71	44	86	51
24	362	299	110	72	447	530	164	293	63	168	77	46
25	371	272	100	70	386	720	200	266	59	88	70	42
26	431	246	110	72	419	880	502	251	60	58	64	45
27	319	282	140	200	763	1100	374	282	49	49	71	229
28	280	334	140	960	745	2400	305	216	45	52	78	124
29	256	277	120	528	502	1000	274	185	46	49	73	86
30	241	264	115	340	---	850	226	164	246	699	62	71
31	214	---	110	240	---	780	---	156	---	272	56	---
TOTAL	14040	10359	6584	4472	9692	16930	12962	10606	2733	4406	11382	2025
MEAN	453	345	212	144	334	546	432	342	91.1	142	367	67.5
MAX	2690	1000	686	960	782	2400	3000	1280	246	763	4020	229
MIN	98	174	90	70	147	205	158	156	45	44	56	40
CFSM	4.40	3.35	2.06	1.40	3.24	5.30	4.19	3.32	.88	1.38	3.56	.66
IN.	5.07	3.74	2.38	1.62	3.50	6.11	4.68	3.83	.99	1.59	4.11	.73

CAL YR 1975 TOTAL 95648 MEAN 262 MAX 2690 MIN 27 CFSM 2.54 IN 34.54
WTR YR 1976 TOTAL 106191 MEAN 290 MAX 4020 MIN 40 CFSM 2.82 IN 38.35

NOTE.--No gage-height record Mar. 14 to Apr. 8. Doubtful gage-height record May 30 to July 14, Aug. 17 to Sept. 21.

01154000 SAXTONS RIVER AT SAXTONS RIVER, VT

LOCATION.--Lat 43°08'14", long 72°29'17", Windham County, Hydrologic Unit 01080107, on right bank 130 ft (40 m) upstream from highway bridge, 0.8 mi (1.3 km) east of Saxtons River, 1.4 mi (2.3 km) upstream from Bundy Brook, and 3.9 mi (6.3 km) upstream from mouth.
DRAINAGE AREA.--72.2 mi^2 (187.0 km^2).
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).
REVISED RECORDS.--WSP 1301: 1948-49(M).
GAGE.--Water-stage recorder. Altitude of gage is 390 ft (119 m), from topographic map.
REMARKS.--Records good except those for periods of doubtful or no gage-height record and those for December and January, which are fair. Occasional diurnal fluctuation at low flow prior to 1962; fluctuation more frequent prior to 1946. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--36 years, 120 ft^3/s (3.398 m^3/s), 22.57 in/yr (573 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,460 ft^3/s (240 m^3/s) Aug. 10, 1976, gage height, 14.06 ft (4.285 m), from rating curve extended above 2,000 ft^3/s (56.6 m^3/s) on basis of slope-area measurements at gage heights 10.51 ft (3.203 m), 11.37 ft (3.466 m), and 13.26 ft (4.042 m); minimum, 1.9 ft^3/s (0.054 m^3/s) July 25, 1949; minimum daily, 2.4 ft^3/s (0.068 m^3/s) Aug. 6, 1955.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1869, 17.9 ft (5.46 m) in September 1938, from floodmarks (discharge not determined).
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,750 ft^3/s (49.6 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 18	1230	2,650	75.0	8.27	2.521	Apr. 1	1630	†4,680	133	10.55	3.216
Oct. 20	0800	3,880	110	9.65	2.941	Aug. 10	1000	†*8,460	240	*14.06	4.285
Mar. 28	0400	2,940	83.3	8.61	2.624						

† From rating curve extended above 2,000 ft^3/s (56.6 m^3/s) as explained above.

Minimum discharge, 21 ft^3/s (0.59 m^3/s) June 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	150	370	88	174	427	2070	155	97	300	351	32
2	100	140	265	84	386	322	1000	430	92	95	252	35
3	87	135	215	80	271	292	450	270	82	66	119	33
4	79	180	175	76	199	249	380	210	75	53	83	32
5	73	155	149	72	169	303	350	170	68	47	67	31
6	70	140	158	62	154	409	320	150	66	43	58	29
7	65	130	153	66	132	289	300	170	80	40	122	28
8	61	155	122	70	135	228	270	200	68	42	226	27
9	58	185	133	65	140	195	240	160	58	45	185	26
10	56	260	477	62	135	191	220	140	52	40	2480	39
11	111	370	314	60	135	178	220	120	47	37	531	110
12	593	250	213	58	129	160	190	260	53	519	233	54
13	383	740	181	58	127	179	180	220	45	165	156	44
14	308	670	178	90	130	187	175	165	40	105	130	39
15	217	380	183	90	124	167	170	320	40	81	121	35
16	179	290	181	72	140	149	175	190	35	65	160	31
17	153	250	149	66	146	149	165	160	40	60	96	32
18	1090	225	141	63	146	141	150	210	36	52	76	60
19	624	200	98	61	300	141	135	589	31	45	65	54
20	2120	190	70	60	249	219	120	508	28	41	56	41
21	700	330	80	60	189	547	110	393	41	38	51	35
22	430	410	90	60	624	539	115	310	45	39	45	31
23	320	260	90	59	527	342	140	245	38	35	41	34
24	250	225	86	57	314	364	115	200	34	49	37	31
25	270	200	80	55	257	496	150	180	30	43	33	29
26	300	180	85	80	284	606	350	170	27	34	31	30
27	225	210	110	240	523	770	260	185	25	32	36	110
28	205	250	110	750	515	1660	210	145	23	31	73	76
29	190	210	95	389	380	706	180	125	22	30	60	56
30	175	200	90	249	---	593	155	115	110	183	40	47
31	160	---	88	176	---	535	---	105	---	109	35	---
TOTAL	9772	7670	4929	3578	7134	11733	9065	6970	1528	2564	6049	1291
MEAN	315	256	159	115	246	378	302	225	50.9	82.7	195	43.0
MAX	2120	740	477	750	624	1660	2070	589	110	519	2480	110
MIN	56	130	70	55	124	141	110	105	22	30	31	26
CFSM	4.36	3.55	2.20	1.59	3.41	5.24	4.18	3.12	.70	1.15	2.70	.60
IN.	5.03	3.95	2.54	1.84	3.68	6.05	4.67	3.59	.79	1.32	3.12	.67

CAL YR 1975 TOTAL 65558 MEAN 180 MAX 2120 MIN 18 CFSM 2.49 IN 33.78
WTR YR 1976 TOTAL 72283 MEAN 197 MAX 2480 MIN 22 CFSM 2.73 IN 37.24

NOTE.--Doubtful or no gage-height record Oct. 1-10, Oct. 21 to Dec. 4, Apr. 2 to May 18, May 22 to June 30, July 2-11, 13, 14, Aug. 17 to Sept. 9, Sept. 11-30.

01154500 CONNECTICUT RIVER AT NORTH WALPOLE, NH

LOCATION.--Lat 43°07'34", long 72°26'14", Cheshire County, Hydrologic Unit 01080104, on left bank at North Walpole, 100 ft (30 m) upstream from Saxtons River, 0.7 mi (1.1 km) downstream from Vilas Bridge between Bellows Falls, VT, and North Walpole, NH, and at mile 172.5 (277.6 km).

DRAINAGE AREA.--5,493 mi^2 (14,227 km^2), 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, which are good. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs (Reservoirs in Connecticut River basin), and other reservoirs, combined usable capacity, about 24,800,000,000 ft^3 (702,000,000 m^3). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--34 years, 9,327 ft^3/s (264.1 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 97,000 ft^3/s (2,750 m^3/s) Mar. 27, 1953, gage height, 30.37 ft (9.257 m); minimum daily, 115 ft^3/s (3.26 m^3/s) Aug. 31, 1952, Sept. 2, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1750, 43.8 ft (13.35 m) Mar. 19, 1936, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 44,000 ft^3/s (1,250 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	2030	56,500	1,600	21.72	6.620	Apr. 2	0645	*85,100	2,410	*27.98	8.528
Mar. 22	1545	48,400	1,370	19.71	6.008	May 20	0945	44,600	1,260	18.76	5.718
Mar. 28	2100	67,600	1,910	24.19	7.373						

Minimum daily discharge, 2,300 ft^3/s (65.1 m^3/s) Dec. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12400	10100	9850	5300	15000	23000	57400	14300	8690	11100	12900	6950
2	11000	6840	14800	5400	17500	20500	81200	21400	14200	8900	15700	6900
3	8740	7360	15600	4600	18500	16500	71000	23600	11800	7870	12200	8570
4	6080	9140	13600	3500	16500	15500	62200	23500	10000	5160	9790	7940
5	5380	11900	12500	5700	13500	17000	51300	20400	5800	5200	9200	4870
6	5430	11800	11300	6300	12500	23200	44600	17700	3900	5360	7310	3070
7	6010	9960	8380	6200	12500	24000	38300	14900	7000	5770	6910	5050
8	5470	8150	9320	6000	12000	19900	30900	15800	7460	5280	8070	5910
9	6750	6510	8920	7500	10500	17000	22000	14900	7230	5800	9270	6010
10	5790	7930	11000	5000	10500	16500	20500	12800	6080	5600	27000	5980
11	4860	14600	16700	3500	12000	15500	19200	10700	6380	4600	35600	8670
12	12100	13000	12700	6200	11500	14600	16500	13200	4840	11000	28600	5060
13	15200	20800	10500	7000	11000	13500	17500	20600	2670	11500	23400	6150
14	13600	27600	7050	6200	9800	14000	16800	21000	5000	8200	17900	5390
15	10900	28600	9900	6300	8700	13000	16300	22400	4600	5010	13500	4880
16	10800	22100	11900	5400	9400	13400	17400	21000	6590	5100	17900	4980
17	9960	18600	11000	6100	9200	12000	22900	15700	5900	6660	21000	4540
18	22700	16100	6710	3900	10500	12100	27900	16000	6080	3420	20300	4450
19	30400	14500	5080	7000	11500	11900	30200	27700	3460	5110	16500	4050
20	47700	13900	3250	5400	12000	12700	28800	42100	3550	5000	12300	5060
21	49900	15700	2300	5100	12000	23400	27800	33900	5090	4320	11300	6080
22	39400	23800	7400	4900	15000	40500	24500	28600	8510	3710	6740	3750
23	29400	20700	5500	4800	20500	34000	21500	24900	11100	4450	7260	5600
24	22600	17500	6800	4100	19500	29000	17000	20800	8470	4500	7890	4870
25	18700	15600	4300	3600	18000	32300	17500	19600	8950	6760	5940	2770
26	15300	14000	5700	4700	18500	34100	18900	18600	9210	6370	5860	2320
27	14200	14500	6100	6400	21000	37900	20500	15500	11300	5990	3680	9270
28	13600	16600	4800	24000	26000	59800	18500	13600	8980	6940	4530	12100
29	12500	12400	7500	27000	24000	60000	17500	13300	5320	7470	5250	9200
30	10900	7850	6200	20000	---	52400	16500	11200	8720	10400	5030	6550
31	10600	---	6600	17000	---	46200	---	10400	---	11800	6800	---
TOTAL	488370	438140	273260	234100	419100	775400	893100	600100	216880	204350	395630	176990
MEAN	15750	14600	8815	7552	14450	25010	29770	19360	7229	6592	12760	5900
MAX	49900	28600	16700	27000	26000	60000	81200	42100	14200	11800	35600	12100
MIN	4860	6510	2300	3500	8700	11900	16300	10400	2670	3420	3680	2320

CAL YR 1975 TOTAL 3694450 MEAN 10120 MAX 51000 MIN 1420
WTR YR 1976 TOTAL 5115420 MEAN 13980 MAX 81200 MIN 2300

01155000 COLD RIVER AT DREWSVILLE, NH

LOCATION.--Lat 43°07'54", long 72°23'23", Cheshire County, Hydrologic Unit 01080104, on left bank 50 ft (15 m) upstream from bridge on State Highway 123 at Drewsville, 1.0 mi (1.6 km) upstream from Great Brook, 2.7 mi (4.3 km) east of Bellows Falls, VT, and 3.4 mi (5.5 km) upstream from mouth.

DRAINAGE AREA.--82.7 mi^2 (214.2 km^2).

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).

REVISED RECORDS.--WSP 1431: 1952(P). WRD MA, NH, RI, VT, 1973: 1951(M), 1969(M).

GAGE.--Water-stage recorder. Altitude of gage is 375 ft (114 m), from topographic map.

REMARKS.--Records good. Occasional diurnal fluctuation at low flow caused by sawmill upstream; fluctuation more frequent prior to 1945. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--36 years, 117 ft^3/s (3.313 m^3/s), 19.21 in/yr (488 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,710 ft^3/s (190 m^3/s) Dec. 21, 1973, gage height, 12.30 ft (3.749 m), from rating curve extended above 3,400 ft^3/s (96.3 m^3/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 ft^3/s (0.037 m^3/s) Sept. 23, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft^3/s (31.2 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 18	1215	1,210	34.3	6.05	1.844	Mar. 28	0700	2,290	64.9	7.27	2.216
Oct. 20	0800	*4,010	114	*8.85	2.697	Apr. 1	1915	2,480	70.2	7.45	2.271

Minimum discharge, 13 ft^3/s (0.37 m^3/s) Sept. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	126	220	115	252	326	1160	130	106	175	119	19
2	107	118	210	99	361	277	1240	353	98	71	155	19
3	89	113	185	103	345	258	646	264	83	56	87	19
4	78	113	162	99	297	239	436	222	72	44	56	17
5	71	113	137	88	248	261	344	185	65	35	44	17
6	65	100	145	78	214	332	290	162	61	34	36	16
7	61	92	134	78	197	274	258	169	67	29	47	15
8	56	112	101	81	181	233	234	188	49	35	73	14
9	54	168	120	72	174	201	213	156	55	33	75	13
10	55	154	255	68	157	204	196	150	51	27	332	13
11	73	246	286	64	159	188	188	125	46	29	286	26
12	320	196	210	68	145	174	174	240	45	304	169	26
13	258	445	177	69	139	184	162	273	42	138	111	20
14	222	642	168	110	135	203	157	211	39	87	101	17
15	178	407	170	120	127	184	149	268	37	64	84	16
16	144	288	168	92	136	172	142	238	34	49	161	15
17	123	237	136	84	145	158	136	201	37	40	101	15
18	679	209	133	79	144	162	129	188	42	33	70	52
19	548	185	75	76	196	154	121	400	36	29	56	50
20	2170	170	54	74	236	187	112	758	33	24	48	34
21	947	223	67	73	198	433	101	439	30	30	42	27
22	461	449	90	72	308	607	105	325	28	35	37	23
23	315	286	91	71	446	368	137	271	27	26	36	22
24	249	240	73	67	327	321	115	225	27	29	34	27
25	225	207	73	64	273	400	120	200	32	27	33	24
26	223	184	98	64	256	510	243	180	36	22	28	26
27	191	214	181	170	338	597	212	170	32	20	24	114
28	170	275	153	870	408	1580	179	153	28	19	26	74
29	158	220	124	584	330	805	154	134	26	17	26	50
30	147	196	115	391	---	547	137	122	72	46	23	41
31	133	---	121	283	---	448	---	116	---	54	20	---
TOTAL	8694	6728	4432	4426	6872	10987	7990	7216	1436	1661	2540	861
MEAN	280	224	143	143	237	354	266	233	47.9	53.6	81.9	28.7
MAX	2170	642	286	870	446	1580	1240	758	106	304	332	114
MIN	54	92	54	64	127	154	101	116	26	17	20	13
CFSM	3.39	2.71	1.73	1.73	2.87	4.28	3.22	2.82	.58	.65	.99	.35
IN.	3.91	3.03	1.99	1.99	3.09	4.94	3.59	3.25	.65	.75	1.14	.39

CAL YR 1975 TOTAL 58488 MEAN 160 MAX 2170 MIN 13 CFSM 1.93 IN 26.31
WTR YR 1976 TOTAL 63843 MEAN 174 MAX 2170 MIN 13 CFSM 2.10 IN 28.72

01155050 CONNECTICUT RIVER AT WALPOLE, NH
(National stream-quality accounting network station)

LOCATION.--Lat 43°05'04", long 72°26'04", Cheshire County, Hydrologic Unit 01080104, near left bank on downstream end of bridge pier on State Highway 123 at Walpole, 2.6 mi (4.2 km) downstream from Cold River, and at mile 169.6 (272.9 km).

DRAINAGE AREA.--5,612 mi^2 (14,535 km^2).

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1975 to current year.
WATER TEMPERATURES: September 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1975.

REMARKS.--Discharge based on records for gaging stations at North Walpole (station 01154500) and Cold River at Drewsville (station 01155000). Interruptions in the record were due to malfunction of the instrument.

EXTREMES FOR CURRENT PERIOD.--
September 1975:
SPECIFIC CONDUCTANCE: Maximum recorded, 157 micromhos Sept. 18; minimum recorded, 99 micromhos Sept. 27.
WATER TEMPERATURES: Maximum recorded, 21.5°C Sept. 10; minimum, 15.0°C Sept. 26-29.
Water year 1976:
SPECIFIC CONDUCTANCE: Maximum recorded, 156 micromhos Sept. 23; minimum recorded, 72 micromhos Aug. 11.
WATER TEMPERATURES: Maximum recorded, 25.5°C June 22; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA,MG) (MG/L)
OCT												
28...	1030	12000	100	7.0	9.0	10.0	--	10.2	3200	--	430	--
DEC												
08...	1145	10300	118	6.0	.0	1.0	--	13.2	B1600	250	650	--
FEB												
10...	0930	13240	112	6.2	2.0	.0	1	13.3	2100	180	280	40
MAR												
01...	1015	24200	97	7.2	4.5	.5	--	14.8	1100	160	130	--
APR												
14...	1345	16300	107	7.5	21.0	7.0	2	13.0	370	B40	B20	38
JUN												
03...	1130	11800	99	7.3	19.5	16.5	--	9.2	540	60	B28	--
16...	1230	9730	132	6.0	--	22.0	--	--	170	B20	17	--
AUG												
09...	1500	8220	120	6.2	--	18.0	1	4.2	100	300	36	36
SEP												
01...	1000	6910	135	6.2	25.0	20.5	--	7.5	900	B10	B17	--
03...	1130	4920	99	7.3	19.5	16.5	--	9.2	--	--	--	--
27...	1130	9320	138	6.2	13.0	16.5	1	4.8	1700	1200	380	45

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
OCT												
28...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
08...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
10...	12	14	1.2	5.6	.9	34	0	28	34	12	8.7	.0
MAR												
01...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
14...	10	13	1.3	4.8	1.0	34	0	28	1.7	9.4	7.3	.1
JUN												
03...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
09...	4	12	1.4	5.5	1.0	39	0	32	39	6.7	4.3	.1
SEP												
01...	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--
27...	1	15	1.8	5.3	1.2	54	0	44	55	6.4	5.9	.1

B NON-IDEAL COLONY COUNT.

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (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)	TOTAL ORGANIC CARBON (C) (MG/L)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT											
28...	--	--	--	.18	.23	.41	.02	--	37	1200	77
DEC											
08...	--	--	--	.28	.24	.52	.05	--	138	3840	44
FEB											
10...	6.0	61	65	.04	.57	.61	.03	4.7	6	214	62
MAR											
01...	--	--	--	.35	.31	.66	.04	--	14	915	78
APR											
14...	5.1	75	59	.41	.23	.64	.02	2.8	--	--	--
JUN											
03...	--	--	--	.19	.25	.44	.03	--	--	--	--
16...	--	--	--	.19	.25	.44	.03	--	2	53	100
AUG											
09...	3.3	67	54	.19	.20	.39	.03	--	4	89	100
SEP											
01...	--	--	--	.20	.18	.38	.03	--	6	112	100
03...	--	--	--	--	--	--	--	--	--	--	--
27...	3.8	80	66	.16	.75	.91	.05	--	10	252	100

DATE	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)
FEB											
10...	0	0	0	8	--	--	<10	0	<10	0	--
MAR											
01...	1	1	0	3	0	4	<10	0	<10	0	0
APR											
14...	0	0	0	1	1	0	20	10	10	1	1
AUG											
09...	0	0	0	3	2	1	<10	0	<10	1	1
SEP											
27...	0	0	0	8	0	8	<10	0	<10	0	0

DATE	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)
FEB											
10...	--	10	10	0	230	80	20	--	--	<.5	.0
MAR											
01...	0	0	0	10	620	70	5	2	3	<.5	.0
APR											
14...	0	10	10	0	400	60	5	2	3	<.5	.0
AUG											
09...	0	10	10	0	290	100	17	14	3	.8	.3
SEP											
27...	2	20	10	10	300	100	4	4	0	<.5	.0

DATE	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	SUS-PENDED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
FEB										
10...	<.5	20	0	30	0	--	--	20	0	50
MAR										
01...	<.5	40	10	30	0	0	0	30	20	10
APR										
14...	<.5	30	10	20	0	0	0	50	40	10
AUG										
09...	<.5	30	20	10	0	0	0	20	10	10
SEP										
27...	<.5	60	30	30	0	0	0	40	30	10

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

OCT. 28, 1975
1030 HOURS

IDENTIFICATION OF PHYTOPLANKTON

250 CELLS/ML

	_ORGANISM__NAME_____	_COMMON__NAME_____	CELLS/ML	PER_CENT
	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OOCYSTACEAE			
D	....ANKISTRODESMUS		42	17
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
L	....CYCLOTELLA			
D	....MELOSIRA		70	28
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
D	....ACHNANTHES		42	17
L	....COCCONEIS			
	...CYMBELLACEAE			
L	....CYMBELLA			
	...FRAGILARIACEAE			
L	....ASTERIONELLA			
	...GOMPHONEMATACEAE			
L	....GOMPHONEMA			
	...NAVICULACEAE	NAVICULOID		
D	....NAVICULA		85	33
	...NITZSCHIACEAE			
	....NITZSCHIA		14	6
	...TABELLARIACEAE			
L	....TABELLARIA			

NOTE: D - DOMINANT ORGANISM: GREATER OR EQUAL TO 15%
L - LESS THEN 1%: MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
PHYL/DIV 0.650
CLASS 0.650
ORDER 1.415
FAMILY 2.135
GENERA 2.135
USED DEPTH-INTEGRATED SAMPLING METHOD.

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

DEC. 8, 1975
1145 HOURS

IDENTIFICATION OF PHYTOPLANKTON

320 CELLS/ML

	_ORGANISM__NAME_____	_COMMON__NAME_____	CELLS/ML	PER_CENT
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		18	6
	....MELOSIRA		18	6
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
D	....ACHNANTHES		88	28
	...CYMBELLACEAE			
	....CYMBELLA		9	3
	...DIATOMACEAE			
	....DIATOMA		9	3
	...FRAGILARIACEAE			
L	....ASTERIONELLA			0
L	....HANNAEA			0
D	....SYNEDRA		71	22
	...NAVICULACEAE	NAVICULOID		
	....AMPHIPRORA		9	3
	....NAVICULA		35	11
	....STAURONEIS		9	3
	...NITZSCHIACEAE			
	....NITZSCHIA		27	8
	.CHRYSOPHYCEAE	YELLOW-BROWN ALGAE		
	..CHRYSOMONADALES			
	...OCHROMONADACEAE			
	....DINOBRYON		18	6
	EUGLENOPHYTA	EUGLENOIDS		
	.EUGLENOPHYCEAE			
	..EUGLENALES			
	...EUGLENACEAE			
	....EUGLENA			0
	PYRRHOPHYTA			
	.DINOPHYCEAE	DINOFLAGELLATES		
	..PERIDINIALES			
	...GLENODINIACEAE			
	....GLENODINIUM		9	3

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
PHYL/DIV 0.183
CLASS 0.490
ORDER 0.979
FAMILY 2.740
GENERA 3.060
USED DEPTH-INTEGRATED SAMPLING METHOD.

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

MAR. 1, 1976
1015 HOURS

IDENTIFICATION OF PHYTOPLANKTON

310 CELLS/ML

	_ORGANISM__NAME	_COMMON__NAME	CELLS/ML	PER_CENT
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
D	....ACHNANTHES		170	56
	...CYMBELLACEAE			
	....CYMBELLA		35	11
	...DIATOMACEAE			
L	....DIATOMA			0
	...FRAGILARIACEAE			
D	....FRAGILARIA		70	22
	...GOMPHONEMATACEAE			
L	....GOMPHONEMA			0
	...MERIDIONACEAE			
L	....MERIDION			0
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		35	11
	...NITZSCHIACEAE			
L	....NITZSCHIA			0

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
FAMILY 1.658
GENERA 1.658
USED DEPTH-INTEGRATED SAMPLING METHOD.

APR. 14, 1976
1345 HOURS

IDENTIFICATION OF PHYTOPLANKTON

64 CELLS/ML

	_ORGANISM__NAME	_COMMON__NAME	CELLS/ML	PER_CENT
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...CYMBELLACEAE			
	....CYMBELLA		6	9
	...FRAGILARIACEAE			
	....FRAGILARIA		6	9
	....HANNAEA		6	9
	....SYNEDRA		6	9
	...GOMPHONEMATACEAE			
	....GOMPHONEMA		6	9
	...NAVICULACEAE	NAVICULOID		
D	....NAVICULA		23	36
	...NITZSCHIACEAE			
	....NITZSCHIA		6	9
	...TABELLARIACEAE			
	....TABELLARIA		6	9
	...ACHNANTHACEAE			
L	....RHOICOSPHENIA			0

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
FAMILY 2.300
GENERA 2.732
USED DEPTH-INTEGRATED SAMPLING METHOD.

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

FEB. 10, 1976
0930 HOURS

IDENTIFICATION OF PHYTOPLANKTON

470 CELLS/ML

	_ORGANISM__NAME_____	_COMMON__NAME_____	CELLS/ML	PER_CENT
	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OCCYSTACEAE			
	....ANKISTRODESMUS		6	1
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....MELOSIRA		68	14
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		25	5
	...CYMBELLACEAE			
	....AMPHORA		6	1
	....CYMBELLA		18	4
	...DIATOMACEAE			
	....DIATOMA		6	1
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		25	5
	...NITZSCHIACEAE			
	....NITZSCHIA		6	1
	.CHRYSOPHYCEAE	YELLOW-BROWN ALGAE		
	..CHRYSOMONADALES			
	...MALLOMONADACEAE			
	....MALLOMONAS		6	1
	...OCHROMONADACEAE			
	....DINOBRYON		31	6
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...OSCILLATORIACEAE			
D	....LYNGBYA		280	58

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
PHYL/DIV 1.063
CLASS 1.348
ORDER 1.669
FAMILY 2.101
GENERA 2.143
USED DEPTH-INTEGRATED SAMPLING METHOD.

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

JUNE 16, 1976
1230 HOURS
IDENTIFICATION OF PHYTOPLANKTON
13,000 CELLS/ML

	_ORGANISM__NAME_____	_COMMON__NAME_____	CELLS/ML	PER_CENT
	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...COELASTRACEAE			
L	....COELASTRUM			0
	...HYDRODICTYACEAE			
L	....PEDIASTRUM			0
	...MICRACTINIACEAE			
L	....GOLENKINIA			0
	....MICRACTINIUM		360	3
	...OOCYSTACEAE			
L	....ANKISTRODESMUS			0
	....DICTYOSPHAERIUM		1,400	11
	....KIRCHNERIELLA		91	1
L	....OOCYSTIS			0
	...SCENEDESMACEAE			
D	....CRUCIGENIA		5,800	44
L	....SCENEDESMUS			0
	..VOLVOCALES			
	...CHLAMYDOMONADACEAE			
	....CHLAMYDOMONAS		91	1
	...VOLVOCACEAE			
L	....PANDORINA			0
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		720	5
L	....MELOSIRA			0
	..PENNALES	PENNATE		
	...CYMBELLACEAE			
L	....CYMBELLA			0
	...DIATOMACEAE			
L	....DIATOMA			0
	...FRAGILARIACEAE			
L	....ASTERIONELLA			0
L	....HANNAEA			0
	....SYNEDRA		91	1
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		91	1
	...NITZSCHIACEAE			
	....NITZSCHIA		180	1
	...TABELLARIACEAE			
L	....TABELLARIA			0
	.CHRYSOPHYCEAE	YELLOW-BROWN ALGAE		
	..CHRYSOMONADALES			
	...OCHROMONADACEAE			
L	....DINOBRYON			0
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..CHROOCOCCALES	COCCOID		
	...CHROOCOCCACEAE			
D	....ANACYSTIS		3,300	24
L	....GOMPHOSPHAERIA			0
	..OSCILLATORIALES	FILAMENTOUS		
	...NOSTOCACEAE			
L	....ANABAENA			0
	...OSCILLATORIACEAE			
L	....OSCILLATORIA			0
	EUGLENOPHYTA	EUGLENOIDS		
	.CRYPTOPHYCEAE	CRYPTOMONADS		
	..CRYPTOMONIDALES			
	...CRYPTOCHRYSIDACEAE			
	....CHROOMONAS		1,200	9
	PYRRHOPHYTA			
	.DINOPHYCEAE	DINOFLAGELLATES		
	..GYMNODINIALES			
	...GYMNODINIACEAE			
L	....GYMNODINIUM			0
	..PERIDINIALES			
	...PERIDINIACEAE			
L	....PERIDINIUM			0

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV	1.554
CLASS	1.554
ORDER	1.683
FAMILY	2.290
GENERA	2.327

USED DEPTH-INTEGRATED SAMPLING METHOD.

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

AUG. 9, 1976
1500 HOURS

IDENTIFICATION OF PHYTOPLANKTON

150 CELLS/ML

	ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT
	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OCCYSTACEAE			
	....ANKISTRODESMUS		15	10
L	....OOCYSTIS			0
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
D	....ACHNANTHES		29	19
	...CYMBELLACEAE			
D	....CYMBELLA		24	16
	...FRAGILARIACEAE			
L	....ASTERIONELLA			0
L	....HANNAEA			0
	...GOMPHONEMATACEAE			
	....GOMPHONEMA		10	6
	...MERIDIONACEAE			
	....MERIDION		5	3
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		19	13
	...NITZSCHIACEAE			
D	....NITZSCHIA		29	19
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...OSCILLATORIACEAE			
	....OSCILLATORIA		19	13

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
PHYL/DIV 0.993
CLASS 0.993
ORDER 0.993
FAMILY 2.845
GENERA 2.845
USED DEPTH-INTEGRATED SAMPLING METHOD.

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

SEP. 1, 1976
1000 HOURS

IDENTIFICATION OF PHYTOPLANKTON

2,400 CELLS/ML

	_ORGANISM__NAME_____	_COMMON__NAME_____	CELLS/ML	PER_CENT
	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OCCYSTACEAE			
D	....DICTYOSPHAERIUM		390	17
	...SCENEDESMACEAE			
	....SCENEDESMUS		160	7
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		65	3
	....MELOSIRA		140	6
	..PENNALES	PENNATE		
	...FRAGILARIACEAE			
	....ASTERIONELLA		130	6
	....FRAGILARIA		91	4
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		52	2
	...NITZSCHIACEAE			
	....NITZSCHIA		100	4
	...TABELLARIACEAE			
D	....TABELLARIA		940	40
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..CHROOCOCCALES	COCCOID		
	...CHROOCOCCACEAE			
	....ANACYSTIS		100	4
	..OSCILLATORIALES	FILAMENTOUS		
	...OSCILLATORIACEAE			
	....OSCILLATORIA		130	6
	EUGLENOPHYTA	EUGLENOIDS		
	.EUGLENOPHYCEAE			
	..EUGLENALES			
	...EUGLENACEAE			
	....TRACHELOMONAS		52	2

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV	1.349
CLASS	1.349
ORDER	1.819
FAMILY	2.720
GENERA	2.891

USED DEPTH-INTEGRATED SAMPLING METHOD.

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

SEP. 3, 1976
1130 HOURS

IDENTIFICATION OF PHYTOPLANKTON

630 CELLS/ML

	ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT
	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OCCYSTACEAE			
	....ANKISTRODESMUS		10	2
	....CHLORELLA		10	2
	....DICTYOSPHAERIUM		36	6
	...SCENEDESMACEAE			
D	....CRUCIGENIA		100	16
	....SCENEDESMUS		41	7
	..VOLVOCALES			
	...CHLAMYDOMONADACEAE			
	....CHLAMYDOMONAS		10	2
	...VOLVOCACEAE			
L	....PANDORINA			0
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
L	....ACHNANTHES			0
	...CYMBELLACEAE			
	....CYMBELLA		20	3
	...DIATOMACEAE			
	....DIATOMA		10	2
	...FRAGILARIACEAE			
	....HANNAEA		5	1
	....SYNEDRA		61	10
	...GOMPHONEMATACEAE			
	....GOMPHONEMA		10	2
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		15	2
	...NITZSCHIACEAE			
	....NITZSCHIA		71	11
	.CHRYSOPHYCEAE	YELLOW-BROWN ALGAE		
	..CHRYSOMONADALES			
	...CHROMULINACEAE			
	....CHRYSOCOCCUS		10	2
	...OCHROMONADACEAE			
D	....DINOBRYON		130	20
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...OSCILLATORIACEAE			
	....OSCILLATORIA		71	11
	EUGLENOPHYTA	EUGLENOIDS		
	.CRYPTOPHYCEAE	CRYPTOMONADS		
	..CRYPTOMONIDALES			
	...CRYPTOCHRYSIDACEAE			
	....CHROOMONAS		15	2

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV	1.502
CLASS	2.020
ORDER	2.113
FAMILY	3.130
GENERA	3.485

USED DEPTH-INTEGRATED SAMPLING METHOD.

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

SEP. 27, 1976
1130 HOURS

IDENTIFICATION OF PHYTOPLANKTON

860 CELLS/ML

	_ORGANISM__NAME_____	_COMMON__NAME_____	CELLS/ML	PER_CENT
	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...CHARACIACEAE			
	....SCHROEDERIA		7	1
	...OCCYSTACEAE			
	....CLOSTERIOPSIS		14	2
	...SCENEDESMACEAE			
	....SCENEDESMUS		28	3
	..TETRASPORALES			
	...PALMELLACEAE			
	....GLOEOCYSTIS		14	2
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		56	7
	....MELOSIRA		28	3
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		70	8
	....COCCONEIS		14	2
	...CYMBELLACEAE			
	....CYMBELLA		28	3
	...FRAGILARIACEAE			
	....ASTERIONELLA		49	6
	....FRAGILARIA		28	3
	....SYNEDRA		21	2
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		42	5
	....PINNULARIA		7	1
	...NITZSCHIACEAE			
	....NITZSCHIA		28	3
	...TABELLARIACEAE			
	....TABELLARIA		70	8
	.CHRYSOPHYCEAE	YELLOW-BROWN ALGAE		
	..CHRYSOMONADALES			
	...OCHROMONADACEAE			
	....DINOBRYON		7	1
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..CHROOCOCCALES	COCCOID		
	...CHROOCOCCACEAE			
D	....ANACYSTIS		350	41

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
PHYL/DIV 1.294
CLASS 1.355
ORDER 1.771
FAMILY 2.858
GENERA 3.214
USED DEPTH-INTEGRATED SAMPLING METHOD.

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), SEPTEMBER 1975

	SEPTEMBER		
DAY	MAX	MIN	MEAN
1	---	---	---
2	---	---	---
3	---	---	---
4	---	---	---
5	---	---	---
6	---	---	---
7	---	---	---
8	---	---	---
9	147	145	146
10	153	150	151
11	154	150	152
12	153	149	152
13	151	146	148
14	149	146	147
15	146	142	144
16	149	141	145
17	147	140	144
18	157	141	148
19	153	143	147
20	146	137	143
21	137	124	132
22	134	122	128
23	132	116	124
24	123	115	117
25	124	111	120
26	111	106	109
27	112	99	105
28	112	100	106
29	110	102	106
30	120	105	111
31	---	---	---
MONTH	---	---	---
PERIOD	157	99	133

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	115	103	109	115	110	113	114	105	110	124	118	121
2	106	102	103	117	109	114	121	110	115	126	121	124
3	108	105	107	116	107	111	113	106	110	126	121	124
4	113	106	110	123	115	118	109	104	106	125	120	122
5	114	108	110	120	112	115	117	110	113	135	122	128
6	115	112	114	118	110	113	119	115	117	131	126	129
7	124	116	120	109	107	108	118	114	116	133	127	129
8	126	118	123	117	109	113	120	103	111	129	123	126
9	122	119	120	117	110	114	110	102	105	125	121	123
10	122	118	120	122	115	117	104	90	98	125	122	124
11	123	118	121	121	111	115	105	95	100	127	122	125
12	119	107	112	111	107	109	99	96	97	126	122	124
13	118	108	113	109	100	102	103	98	100	134	123	127
14	118	104	111	105	100	102	106	103	105	142	128	136
15	108	105	106	101	94	97	106	101	104	129	115	121
16	110	106	108	97	91	93	110	102	105	126	115	121
17	116	108	112	95	92	93	107	104	105	127	119	122
18	115	100	108	97	93	95	109	106	107	131	126	129
19	101	88	95	102	97	100	111	107	109	128	119	125
20	88	77	82	106	98	101	115	111	113	127	118	122
21	87	82	84	103	97	101	116	113	115	130	123	127
22	88	83	86	102	97	99	122	117	120	126	114	120
23	92	88	90	102	96	99	122	117	120	119	115	117
24	93	89	90	99	95	97	121	117	119	122	117	120
25	94	91	93	100	98	99	122	118	120	126	122	124
26	98	94	96	110	100	106	123	121	122	129	124	127
27	110	98	103	108	101	104	122	117	120	147	123	131
28	108	100	104	103	99	101	127	117	122	143	119	131
29	108	101	103	103	101	102	127	117	123	114	103	111
30	109	103	105	107	103	104	128	117	122	117	109	114
31	112	107	110	---	---	---	128	120	125	109	103	106
MONTH	126	77	105	123	91	105	128	90	112	147	103	124

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

	FEBRUARY			MARCH			APRIL		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	116	108	113	101	96	98	97	88	92
2	112	104	109	102	99	101	93	82	87
3	114	108	111	104	100	102	91	85	88
4	111	102	108	108	103	105	91	85	89
5	110	100	105	110	103	106	96	89	92
6	112	105	108	111	105	108	98	91	95
7	110	108	109	109	97	102	101	96	99
8	114	105	110	104	97	100	106	99	102
9	115	109	112	107	99	104	107	102	105
10	120	111	115	111	101	107	111	106	109
11	121	117	120	111	106	109	117	110	113
12	122	114	118	111	103	107	112	108	110
13	124	118	120	113	106	109	115	111	113
14	124	118	121	116	104	109	---	---	---
15	123	116	119	116	109	112	---	---	---
16	121	115	118	115	108	111	---	---	---
17	120	117	118	115	108	111	---	---	---
18	123	116	120	115	109	112	---	---	---
19	123	121	122	120	109	115	---	---	---
20	128	119	123	120	113	116	---	---	---
21	130	124	128	113	104	109	---	---	---
22	129	111	119	106	85	97	---	---	---
23	111	104	108	92	85	90	---	---	---
24	110	101	106	102	91	95	---	---	---
25	109	102	106	101	97	99	---	---	---
26	115	106	111	97	94	95	---	---	---
27	115	106	112	97	90	93	---	---	---
28	108	99	103	93	85	89	---	---	---
29	100	94	97	94	89	92	---	---	---
30	---	---	---	101	91	96	---	---	---
31	---	---	---	97	90	92	---	---	---
MONTH	130	94	113	120	85	103	---	---	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	106	104	105	108	102	104	141	130	136
2	---	---	---	108	100	104	108	92	99	129	117	123
3	---	---	---	120	108	115	92	89	91	131	116	123
4	---	---	---	118	112	115	98	92	95	135	122	129
5	---	---	---	125	118	122	101	97	99	143	134	138
6	---	---	---	126	117	123	103	100	101	137	131	134
7	---	---	---	121	117	119	105	102	103	136	131	134
8	---	---	---	123	116	120	105	103	104	135	127	131
9	---	---	---	122	116	120	107	102	104	136	130	133
10	---	---	---	121	116	118	103	74	88	139	125	133
11	---	---	---	123	117	120	96	72	80	134	113	121
12	---	---	---	127	103	116	93	75	83	127	116	122
13	---	---	---	121	114	118	92	82	86	122	116	119
14	---	---	---	130	115	123	98	83	93	144	122	132
15	---	---	---	124	120	123	94	89	92	143	133	137
16	153	135	145	122	117	119	106	94	98	137	126	133
17	154	132	145	126	118	122	101	96	100	133	126	129
18	139	130	135	129	121	126	101	95	99	131	122	128
19	141	127	134	125	122	123	105	99	101	133	121	127
20	135	128	132	132	122	127	98	94	95	137	124	131
21	136	127	130	141	131	135	104	95	100	140	120	131
22	139	125	131	142	137	140	105	101	103	151	136	144
23	140	128	133	137	133	135	117	102	108	156	133	144
24	145	128	135	136	131	134	127	106	114	141	125	133
25	127	117	122	140	130	134	123	109	118	135	125	129
26	126	117	121	130	125	128	122	109	114	139	133	137
27	138	121	127	130	124	127	119	109	115	136	125	131
28	138	113	122	125	115	119	127	115	120	142	125	132
29	117	108	112	125	116	120	132	121	125	134	120	129
30	111	106	108	125	109	119	138	123	131	122	113	117
31	---	---	---	109	103	105	138	123	132	---	---	---
MONTH	---	---	---	142	100	122	138	72	103	156	113	131
YEAR	156	72	113									

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

TEMPERATURE (DEG. C) OF WATER, SEPTEMBER 1975

DAY	SEPTEMBER MAX	MIN	MEAN	DAY	SEPTEMBER MAX	MIN	MEAN
1	---	---	---	16	17.5	17.0	17.0
2	---	---	---	17	17.5	16.5	17.0
3	---	---	---	18	17.0	16.5	16.5
4	---	---	---	19	17.0	16.5	16.5
5	---	---	---	20	17.5	16.5	17.0
6	---	---	---	21	18.5	17.5	18.0
7	---	---	---	22	19.0	17.0	18.0
8	---	---	---	23	18.0	17.5	17.5
9	19.5	18.5	19.0	24	17.0	16.5	17.0
10	21.5	19.0	20.0	25	16.5	15.5	16.0
11	21.0	19.0	20.0	26	15.5	15.0	15.0
12	20.0	19.5	19.5	27	16.0	15.0	15.5
13	19.5	18.5	19.0	28	16.0	15.0	15.5
14	19.0	17.5	18.0	29	16.0	15.0	15.5
15	18.5	17.0	17.5	30	16.0	15.5	15.5
				31	---	---	---
				MONTH	---	---	---
				PERIOD	21.5	15.0	17.5

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER MAX	MIN	MEAN	NOVEMBER MAX	MIN	MEAN	DECEMBER MAX	MIN	MEAN	JANUARY MAX	MIN	MEAN
1	16.0	15.0	15.5	7.5	7.0	7.5	5.0	4.0	4.5	0.5	0.5	0.5
2	16.0	15.5	16.0	8.0	7.0	7.5	4.5	4.0	4.5	0.5	0.5	0.5
3	15.5	14.5	15.0	8.0	7.5	8.0	4.0	3.0	3.5	0.5	0.5	0.5
4	15.5	14.0	14.5	9.5	8.0	9.0	3.0	2.5	3.0	0.5	0.5	0.5
5	15.0	13.5	14.5	9.5	9.0	9.5	2.5	2.0	2.0	0.5	0.5	0.5
6	15.0	14.0	14.5	9.5	8.5	9.0	2.0	2.0	2.0	0.5	0.5	0.5
7	15.0	13.5	14.0	9.0	8.5	8.5	2.0	1.0	1.5	0.5	0.5	0.5
8	14.5	13.0	13.5	9.5	8.5	9.0	2.0	1.0	1.5	0.5	0.5	0.5
9	14.0	13.5	13.5	10.5	9.5	10.0	1.5	1.5	1.5	0.5	0.5	0.5
10	13.5	12.5	13.0	10.5	10.0	10.0	2.5	1.5	2.0	0.0	0.0	0.0
11	13.0	12.5	12.5	10.5	9.5	10.0	3.0	2.0	2.5	0.0	0.0	0.0
12	12.5	12.0	12.0	9.5	9.0	9.0	2.5	2.0	2.0	0.0	0.0	0.0
13	12.5	11.5	12.0	9.0	8.0	8.5	2.0	1.5	1.5	0.0	0.0	0.0
14	12.5	11.5	12.0	8.5	8.0	8.5	2.0	1.5	1.5	0.0	0.0	0.0
15	13.5	12.0	12.5	8.0	7.0	7.5	3.0	2.0	2.5	0.0	0.0	0.0
16	13.0	13.0	13.0	7.0	6.5	6.5	3.5	2.5	3.0	0.0	0.0	0.0
17	13.0	12.5	12.5	6.5	6.0	6.0	2.5	2.0	2.0	0.0	0.0	0.0
18	12.5	11.5	12.0	6.5	6.0	6.5	2.0	1.0	1.5	0.0	0.0	0.0
19	11.0	10.5	10.5	6.5	6.0	6.0	0.5	0.5	0.5	0.0	0.0	0.0
20	10.5	10.0	10.0	6.5	6.0	6.5	0.5	0.5	0.5	0.0	0.0	0.0
21	10.5	9.5	10.0	7.0	6.5	6.5	0.5	0.5	0.5	0.0	0.0	0.0
22	11.0	10.5	10.5	6.5	6.5	6.5	0.5	0.5	0.5	0.0	0.0	0.0
23	11.5	10.5	11.0	6.5	6.0	6.0	1.0	0.5	0.5	0.0	0.0	0.0
24	11.5	11.0	11.0	6.0	5.0	5.5	1.0	0.5	0.5	0.0	0.0	0.0
25	11.5	11.0	11.0	5.0	5.0	5.0	0.5	0.5	0.5	0.0	0.0	0.0
26	11.5	11.0	11.0	5.0	4.5	4.5	0.5	0.5	0.5	0.0	0.0	0.0
27	11.5	10.5	11.0	4.5	4.0	4.5	0.5	0.5	0.5	0.0	0.0	0.0
28	10.5	10.0	10.5	4.0	4.0	4.0	0.5	0.5	0.5	0.0	0.0	0.0
29	10.5	10.0	10.0	4.0	3.5	3.5	0.5	0.5	0.5	0.0	0.0	0.0
30	10.0	9.0	9.5	4.0	3.5	3.5	0.5	0.5	0.5	0.0	0.0	0.0
31	8.5	7.5	8.0	---	---	---	0.5	0.5	0.5	0.0	0.0	0.0
MONTH	16.0	7.5	12.0	10.5	3.5	7.0	5.0	0.5	1.5	0.5	0.0	0.0

01155050 CONNECTICUT RIVER AT WALPOLE, NH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

	FEBRUARY			MARCH		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	1.0	0.5	0.5
2	0.0	0.0	0.0	0.5	0.5	0.5
3	0.0	0.0	0.0	0.5	0.5	0.5
4	0.0	0.0	0.0	0.5	0.5	0.5
5	0.5	0.0	0.0	1.0	0.5	0.5
6	0.0	0.0	0.0	1.0	0.5	0.5
7	0.0	0.0	0.0	1.0	0.5	0.5
8	0.0	0.0	0.0	1.0	0.0	0.5
9	0.5	0.0	0.0	0.5	0.0	0.5
10	0.5	0.0	0.5	1.0	0.0	0.5
11	0.5	0.5	0.5	1.0	0.5	0.5
12	1.0	0.5	0.5	1.0	0.0	0.5
13	1.0	0.5	0.5	1.0	0.5	0.5
14	1.0	0.0	0.5	1.0	0.5	0.5
15	0.5	0.0	0.5	1.5	0.5	0.5
16	0.5	0.5	0.5	0.5	0.0	0.5
17	0.5	0.5	0.5	0.5	0.0	0.5
18	0.5	0.5	0.5	1.0	0.0	0.5
19	0.5	0.5	0.5	0.5	0.0	0.5
20	1.0	0.0	0.5	1.5	0.5	1.0
21	0.5	0.0	0.5	1.0	0.5	1.0
22	0.5	0.5	0.5	1.0	0.5	1.0
23	0.5	0.5	0.5	2.0	1.0	1.5
24	0.5	0.5	0.5	3.0	1.5	2.0
25	1.0	0.5	0.5	3.5	3.0	3.0
26	1.0	0.5	0.5	4.5	3.0	3.5
27	1.0	0.5	0.5	5.0	3.5	4.5
28	1.0	0.5	0.5	5.0	4.5	4.5
29	1.0	0.5	0.5	---	---	---
30	---	---	---	---	---	---
31	---	---	---	---	---	---
MONTH	1.0	0.0	0.5	5.0	0.0	1.0

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	21.5	21.0	21.0	19.0	18.5	19.0	21.0	20.0	20.5
2	---	---	---	21.5	20.5	21.0	18.5	18.0	18.5	20.5	20.0	20.0
3	---	---	---	21.5	20.5	21.0	19.0	18.0	18.5	20.5	19.5	20.0
4	---	---	---	22.0	20.0	21.0	19.5	18.5	19.0	19.5	19.0	19.5
5	---	---	---	22.5	20.5	21.5	20.5	19.0	20.0	19.5	19.0	19.0
6	---	---	---	23.0	21.0	22.0	20.5	19.5	20.0	19.5	18.0	19.0
7	---	---	---	23.0	22.0	22.5	20.5	19.5	20.0	18.5	17.5	18.5
8	---	---	---	23.5	22.5	23.0	19.5	19.0	19.0	19.0	18.0	18.5
9	---	---	---	24.0	22.5	23.0	19.0	18.0	18.5	19.0	17.5	18.0
10	---	---	---	23.5	22.0	23.0	19.0	18.0	18.5	18.5	18.0	18.0
11	---	---	---	24.0	22.0	23.0	19.0	17.5	18.5	18.5	17.5	18.0
12	---	---	---	23.5	22.0	23.0	19.5	18.5	19.0	18.5	17.0	17.5
13	---	---	---	23.0	21.5	22.0	20.0	19.5	19.5	18.5	17.0	18.0
14	---	---	---	21.5	20.5	21.0	20.5	19.5	20.0	19.0	17.5	18.0
15	---	---	---	22.5	20.0	21.0	20.5	20.0	20.0	18.5	18.0	18.0
16	22.5	22.0	22.0	22.0	21.0	21.5	21.0	20.5	20.5	19.0	18.5	18.5
17	23.0	21.5	22.5	22.5	21.0	22.0	21.0	19.5	20.5	19.0	18.5	19.0
18	24.0	22.0	23.0	23.0	21.0	22.0	21.0	20.0	20.5	19.5	18.5	19.0
19	24.0	23.0	23.5	23.0	21.0	22.5	21.0	20.0	20.5	20.0	18.5	19.0
20	24.5	23.0	23.5	23.5	21.5	22.5	21.0	19.5	20.5	19.5	18.5	19.0
21	24.5	23.5	24.0	23.0	22.0	22.5	22.0	20.5	21.0	19.5	18.5	19.0
22	25.5	24.0	25.0	23.5	21.0	22.0	23.0	21.5	22.0	19.0	17.5	18.0
23	25.0	24.0	24.0	23.5	21.5	22.5	24.0	22.0	23.0	18.0	17.0	17.5
24	25.0	23.5	24.0	23.5	22.5	23.0	24.0	22.0	23.0	17.5	16.0	17.0
25	24.0	23.5	24.0	23.5	21.5	22.5	23.5	21.5	23.0	17.5	15.5	16.5
26	24.5	23.5	24.0	23.0	21.5	22.5	23.5	22.0	23.0	16.0	15.0	15.5
27	24.5	23.5	24.0	22.5	21.5	22.0	23.5	22.5	23.0	15.5	15.5	15.5
28	23.5	23.0	23.0	22.5	21.5	22.0	23.5	22.5	23.0	15.5	14.5	15.0
29	23.5	22.5	23.0	22.0	21.5	22.0	24.0	22.5	23.5	15.0	14.0	14.5
30	22.5	21.5	22.0	21.5	20.5	21.0	23.0	21.5	22.0	14.5	13.5	14.0
31	---	---	---	20.5	19.0	19.5	22.5	21.0	21.5	---	---	---
MONTH	---	---	---	24.0	19.0	22.0	24.0	17.5	20.5	21.0	13.5	18.0
YEAR	25.5	0.0	10.0									

01155500 WEST RIVER AT JAMAICA, VT

LOCATION.--Lat 43°06'32", long 72°46'33", Windham County, Hydrologic Unit 01080107, on left bank 0.2 mi (0.3 km) upstream from highway bridge at Jamaica, 0.4 mi (0.6 km) upstream from Ball Mountain Brook, and 2.8 mi (4.5 km) downstream from Ball Mountain Dam, and at mile 26.2 (42.2 km).

DRAINAGE AREA.--179 mi^2 (464 km^2).

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 good except those for winter period, which are poor. Flow regulated by Ball Mountain Reservoir since 1961 (Reservoirs in Connecticut River basin). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--30 years, 364 ft^3/s (10.31 m^3/s), 27.62 in/yr (702 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,500 ft^3/s (835 m^3/s) Dec. 31, 1948, gage height, 14.87 ft (4.532 m), from rating curve extended above 9,800 ft^3/s (278 m^3/s), verified by slope-area measurement of peak flow; minimum, 0.94 ft^3/s (0.027 m^3/s) Sept. 23-25, 1968; minimum daily, 0.94 ft^3/s (0.027 m^3/s) Sept. 23, 24, 1968. Maximum discharge since construction of Ball Mountain Dam in 1961, 5,020 ft^3/s (142 m^3/s) Apr. 24, 1962, gage height, 8.75 ft (2.667 m); maximum gage height, 9.46 ft (2.883 m) Feb. 4, 1970, ice jam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,910 ft^3/s (111 m^3/s) Aug. 14, gage height, 8.80 ft (2.682 m); maximum gage height, 8.90 ft (2.713 m) Jan. 30, ice jam; minimum discharge, 26 ft^3/s (0.74 m^3/s) June 29; minimum daily, 45 ft^3/s (1.27 m^3/s) Sept. 20 .

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	397	258	558	230	1040	1490	1450	509	154	1050	1680	81
2	315	236	696	230	898	1050	846	1100	235	658	2540	157
3	251	240	646	230	870	827	1490	913	279	235	1270	260
4	191	336	440	220	690	711	1980	486	218	162	428	186
5	159	565	280	210	560	809	2640	411	158	85	298	107
6	159	480	275	180	510	1330	2650	410	102	59	296	62
7	159	336	320	210	460	1200	2420	413	119	59	424	51
8	159	329	320	220	440	690	1840	744	206	61	1120	51
9	159	393	307	190	400	430	748	642	154	62	1030	51
10	158	560	579	165	390	440	326	136	123	98	779	55
11	589	969	938	170	448	519	386	200	121	83	1010	59
12	1140	1010	691	170	431	408	489	818	82	1650	2080	115
13	1570	1570	464	170	324	301	512	911	56	1770	3000	154
14	1790	2030	388	190	349	500	507	521	52	1110	3720	154
15	1360	1400	394	220	312	543	466	917	79	677	3440	151
16	1050	765	503	240	320	389	486	1100	120	394	2070	148
17	658	647	417	220	444	304	577	864	83	253	881	101
18	1460	536	333	170	408	306	616	675	57	201	581	57
19	2350	524	235	160	642	305	602	2120	57	147	294	46
20	2330	458	130	180	892	427	459	1930	93	120	177	45
21	3520	506	170	180	454	1080	304	1440	117	65	151	53
22	2050	962	250	170	955	2010	218	1590	193	75	148	59
23	1310	787	260	170	1770	1760	258	1020	179	107	106	57
24	1370	588	250	160	1970	1040	333	589	134	141	79	57
25	546	442	230	160	1220	1220	476	511	95	222	79	57
26	663	369	270	160	771	1470	915	429	71	379	79	60
27	499	380	320	500	1140	1810	1080	384	109	297	81	512
28	366	425	340	1400	1510	2830	952	344	83	88	81	700
29	322	417	320	1900	1110	2640	726	317	60	64	81	385
30	334	341	300	1700	---	1710	505	305	136	1610	81	167
31	322	---	280	1320	---	1540	---	200	---	1370	81	---
TOTAL	27706	18859	11904	11795	21728	32089	27257	22949	3725	13352	28165	4198
MEAN	894	629	384	380	749	1035	909	740	124	431	909	140
MAX	3520	2030	938	1900	1970	2830	2650	2120	279	1770	3720	700
MIN	158	236	130	160	312	301	218	136	52	59	79	45
MEAN†	862	627	384	435	702	1044	922	740	127	429	913	135
CFSM†	4.82	3.50	2.15	2.43	3.92	5.83	5.15	4.13	.71	2.40	5.10	.75
IN.†	5.56	3.91	2.47	2.80	4.23	6.73	5.75	4.77	.79	2.77	5.88	.84

CAL YR 1975 TOTAL 186416 MEAN 511 MAX 3520 MIN 22 MEAN† 511 CFSM† 2.85 IN† 38.73
WTR YR 1976 TOTAL 223727 MEAN 611 MAX 3720 MIN 45 MEAN† 611 CFSM† 3.41 IN† 46.49

† Adjusted for change in contents in Ball Mountain Reservoir.

01156000 WEST RIVER AT NEWFANE, VT

LOCATION.--Lat 42°59'43", long 72°38'13", Windham County, Hydrologic Unit 01080107, on left bank 400 ft (100 m) downstream from highway bridge, 1.0 mi (1.6 km) northeast of Newfane, and at mile 12.7 (20.4 km).
DRAINAGE AREA.--308 mi^2 (798 km^2).
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.
REVISED RECORDS.--WSP 756: Drainage area. WSP 1231: 1922-23, 1929-31(M).
GAGE.--Water-stage recorder. Datum of gage is 384.21 ft (117.107 m) 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.
REMARKS.--Records good 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 (Reservoirs in Connecticut River basin). Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--52 years, 625 ft^3/s (17.70 m^3/s).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52,300 ft^3/s (1,480 m^3/s) Sept. 21, 1938, gage height, 22.81 ft (6.952 m), from floodmarks, from rating curve extended above 20,000 ft^3/s (566 m^3/s) on basis of contracted-opening measurement at gage height 19.3 ft (5.88 m) and slope-area measurements at gage heights 19.46 ft (5.931 m) and 22.81 ft (6.952 m); minimum, 7.6 ft^3/s (0.22 m^3/s) Aug. 24, 25, 26, 1962; minimum daily, 8.2 ft^3/s (0.23 m^3/s) Aug. 25, 1962. Maximum discharge since construction of Ball Mountain and Townshend Reservoirs in 1961, 9,410 ft^3/s (266 m^3/s) Apr. 10, 1969, gage height, 9.77 ft (2.978 m).
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1869, that of Sept. 21, 1938. Flood of Nov. 3, 1927, reached a discharge of 45,000 ft^3/s (1,270 m^3/s), gage height, 23.0 ft (7.01 m), from floodmarks, at nonrecording-gage site, from rating curve extended above 20,000 ft^3/s (566 m^3/s) on basis of computation of peak flow over dam at West Dummerston, about 5 mi (8 km) downstream, adjusted for flow from intervening area.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,970 ft^3/s (197 m^3/s) Apr. 1, gage height, 8.91 ft (2.716 m); maximum gage height unknown, occurred about Feb. 22 during ice jam; minimum discharge, 95 ft^3/s (2.69 m^3/s) July 22, Sept. 27; minimum daily, 103 ft^3/s (2.92 m^3/s) Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	692	530	1070	400	1900	2640	3360	802	307	1170	1990	147
2	635	463	1310	390	2000	2140	1520	1910	312	1240	3780	148
3	499	447	1130	400	1700	1470	2770	1800	367	331	2000	288
4	438	515	869	390	1300	1340	3750	1010	346	282	668	300
5	349	748	617	350	1100	1450	4560	774	271	196	409	217
6	336	802	533	330	950	2500	5520	719	227	145	396	147
7	315	553	589	340	860	2100	3920	701	191	127	548	116
8	303	546	528	380	820	1420	2840	1320	273	123	1680	108
9	295	656	528	320	750	814	1660	1110	266	128	1630	103
10	289	823	1280	280	720	834	719	402	198	133	3790	106
11	850	1790	1670	280	760	835	692	384	186	157	3810	198
12	2380	1660	1260	310	800	765	793	936	178	1650	3810	179
13	2920	2980	837	310	760	575	811	1640	131	2820	4700	215
14	2670	3650	725	330	700	795	793	897	119	1430	5160	213
15	2150	2610	717	360	700	876	765	1510	115	931	4890	208
16	1580	1490	837	390	700	727	737	1690	153	581	3530	208
17	1250	1090	790	380	800	508	849	1370	166	349	1070	200
18	3230	919	587	300	900	519	907	1120	132	280	917	206
19	4960	887	446	280	1200	514	858	3260	116	248	526	189
20	5790	827	243	300	1700	704	737	4300	115	191	346	148
21	5540	951	281	310	1200	2150	525	2570	154	176	258	171
22	4040	1850	430	300	2000	3710	415	2680	179	114	258	130
23	1920	1520	450	290	3200	3170	396	1970	260	134	258	129
24	2230	1130	420	300	3400	1940	458	1050	200	153	201	139
25	1170	883	410	310	2250	2200	573	917	180	204	150	137
26	1270	681	480	300	1520	2830	1440	821	138	299	139	136
27	1020	702	540	700	2280	3350	1710	683	123	454	140	322
28	815	819	580	3740	2950	5520	1500	511	156	228	173	772
29	592	801	560	3060	2180	5300	1260	491	111	123	181	632
30	614	699	520	2800	---	3500	849	478	152	1310	161	326
31	586	---	490	2500	---	2670	---	415	---	2300	150	---
TOTAL	51728	34022	21727	21430	42100	59866	47687	40241	5822	18007	47719	6538
MEAN	1669	1134	701	691	1452	1931	1590	1298	194	581	1539	218
MAX	5790	3650	1670	3740	3400	5520	5520	4300	367	2820	5160	772
MIN	289	447	243	280	700	508	396	384	111	114	139	103

CAL YR 1975 TOTAL 337898 MEAN 926 MAX 5790 MIN 73
WTR YR 1976 TOTAL 396887 MEAN 1084 MAX 5790 MIN 103

NOTE.--No gage-height record Feb. 22-25.

01157000 ASHUELOT RIVER NEAR GILSUM, NH

LOCATION.--Lat 43°02'21", long 72°16'14", Cheshire County, Hydrologic Unit 01080201, on right bank 50 ft (15 m) downstream from White Brook, 60 ft (18 m) upstream from stone-arch bridge just off Keene-Newport Road, 0.7 mi (1.1 km) downstream from Gilsum, and at mile 43.4 (69.8 km).
DRAINAGE AREA.--71.1 mi^2 (184.1 km^2).
PERIOD OF RECORD.--Discharge: August 1922 to current year.
Chemical analyses: Water year 1955 (partial-record station).
Water temperatures: Water year 1955 (partial-record station).
REVISED RECORDS.--WSP 661: Drainage area. WSP 781: 1934(M). WSP 1231: 1923-27(M), 1928, 1929-30(M), 1931, 1932(M).
GAGE.--Water-stage recorder. Datum of gage is 772.86 ft (235.568 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1964, datum was 1.00 ft (0.305 m) higher.
REMARKS.--Records good except those for winter period, which are fair, and those for period of no gage-height record, which are poor. Some regulation by reservoir upstream. Prior to 1938, diurnal fluctuation caused by powerplant upstream. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--54 years, 125 ft^3/s (3.540 m^3/s), 23.88 in/yr (607 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,220 ft^3/s (148 m^3/s) Sept. 21, 1938, gage height, 12.24 ft (3.731 m) in gage well, present datum, from rating curve extended above 2,000 ft^3/s (56.6 m^3/s) on basis of float measurements at gage heights 11.66 ft (3.554 m) and 11.72 ft (3.572 m) and slope-area measurement at gage height 12.24 ft (3.731 m), all at present datum; maximum gage height, 13.80 ft (4.206 m) present datum, Mar. 19, 1936; minimum discharge, about 1 ft^3/s (0.028 m^3/s) Oct. 6, 1922, July 10, 1923, Nov. 14, 1952.
Maximum discharge since at least 1859, that of Sept. 21, 1938.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1500	1,720	48.7	8.06	2.457	Mar. 28	1245	1,510	42.8	7.74	2.359
Jan. 28	-	1,100	31.2	ice jam		Apr. 1	2330	*1,970	55.8	*8.41	2.563

Minimum discharge, not determined; minimum daily, 16 ft^3/s (0.45 m^3/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	99	190	103	231	260	918	146	93	95	49	29
2	152	102	196	94	324	238	1440	305	90	86	102	28
3	121	102	173	96	320	221	742	303	83	56	81	26
4	102	102	156	93	260	219	461	277	77	44	61	25
5	87	104	139	86	230	245	350	237	70	35	49	25
6	79	100	135	76	210	312	288	204	67	33	43	23
7	67	96	125	72	195	272	248	187	72	32	45	21
8	58	108	115	74	180	235	222	196	71	38	58	19
9	51	145	110	70	175	212	203	183	65	44	73	17
10	52	159	191	68	165	201	186	166	53	37	192	16
11	57	226	257	66	160	191	176	150	35	43	324	20
12	209	197	191	63	165	179	167	228	29	336	277	28
13	318	387	160	66	160	184	160	284	24	257	230	23
14	298	451	149	100	154	192	155	238	21	166	192	21
15	249	370	152	110	145	178	149	299	21	118	164	20
16	194	316	152	90	150	172	111	277	21	88	145	19
17	152	253	137	82	153	164	97	231	27	70	141	22
18	461	205	129	78	147	155	93	214	26	55	110	45
19	624	179	95	74	177	154	90	292	23	47	82	50
20	1300	165	70	72	192	181	94	498	21	41	60	40
21	1070	237	85	69	166	364	100	444	22	40	54	33
22	530	511	90	67	270	543	114	362	23	40	47	26
23	344	352	95	64	392	352	161	299	23	36	41	27
24	242	292	105	62	272	314	138	250	25	39	38	25
25	196	238	130	60	219	385	130	214	27	37	35	23
26	199	203	150	61	214	458	195	187	25	31	32	23
27	174	197	170	180	270	543	197	170	23	27	30	80
28	150	229	140	800	336	1260	172	149	20	25	33	100
29	139	204	126	500	275	963	161	129	19	23	45	80
30	128	179	110	330	---	611	152	108	39	24	37	60
31	112	---	114	260	---	458	---	97	---	26	31	---
TOTAL	8112	6508	4337	4086	6307	10416	7870	7324	1235	2069	2901	994
MEAN	262	217	140	132	217	336	262	236	41.2	66.7	93.6	33.1
MAX	1300	511	257	800	392	1260	1440	498	93	336	324	100
MIN	51	96	70	60	145	154	90	97	19	23	30	16
CFSM	3.68	3.05	1.97	1.86	3.05	4.73	3.68	3.32	.58	.94	1.32	.47
IN.	4.24	3.40	2.27	2.14	3.30	5.45	4.12	3.83	.65	1.08	1.52	.52

CAL YR 1975 TOTAL 58707.9 MEAN 161 MAX 1300 MIN 6.9 CFSM 2.26 IN 30.72
WTR YR 1976 TOTAL 62159.0 MEAN 170 MAX 1440 MIN 16 CFSM 2.39 IN 32.52

NOTE.--No gage-height record Aug. 20 to Sept. 30.

01158000 ASHUELOT RIVER BELOW SURRY MOUNTAIN DAM, NEAR KEENE, NH

LOCATION.--Lat 42°59'40", long 72°18'40", Cheshire County, Hydrologic Unit 01080201, on right bank 600 ft (200 m) downstream from Surry Mountain Dam, 2.5 mi (4.0 km) upstream from Sturtevant Brook, 4.5 mi (7.2 km) north of Keene, and at mile 34.0 (54.7 km).

DRAINAGE AREA.--101 mi^2 (262 km^2).

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 ft^3/s (1.42 m^3/s) and good below. Flow regulated by Surry Mountain Lake (Reservoirs in Connecticut River basin). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--31 years, 173 ft^3/s (4.899 m^3/s), 23.26 in/yr (591 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,320 ft^3/s (37.4 m^3/s) Oct. 28, 1959, gage height, 9.60 ft (2.926 m); minimum daily, 0.4 ft^3/s (0.011 m^3/s) Sept. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,080 ft^3/s (30.6 m^3/s) Apr. 7, gage height, 8.96 ft (2.731 m); minimum daily, 6.1 ft^3/s (0.17 m^3/s) Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	493	212	302	177	639	511	524	199	143	95	43	23
2	316	189	306	143	623	463	423	336	135	117	89	22
3	233	184	291	126	645	383	941	446	132	96	104	21
4	185	177	277	128	665	349	997	432	92	72	89	19
5	158	175	247	128	590	360	975	386	23	55	71	19
6	142	172	234	128	427	444	980	328	27	44	58	18
7	131	166	228	109	316	458	1030	286	44	39	56	89
8	127	159	110	100	281	397	1030	278	61	47	73	105
9	126	180	110	138	272	328	866	266	72	55	84	101
10	124	207	121	174	234	308	574	242	71	51	174	97
11	121	278	182	140	224	288	555	215	60	43	369	49
12	128	316	359	121	223	252	487	264	49	245	398	33
13	252	387	350	105	220	248	317	382	38	429	334	33
14	355	606	343	112	218	264	249	376	32	321	275	18
15	367	683	239	162	191	267	217	411	30	224	228	18
16	319	593	228	180	182	263	194	447	27	160	207	23
17	267	491	230	179	212	237	166	395	31	119	186	27
18	253	405	209	161	225	218	149	345	32	91	160	27
19	593	346	150	139	227	208	138	398	29	73	118	27
20	148	301	132	112	271	226	132	591	26	59	92	12
21	852	275	108	112	284	347	132	631	25	53	75	6.1
22	995	561	119	112	347	474	133	634	25	51	63	17
23	1030	609	132	112	476	577	155	616	24	46	53	17
24	1020	571	132	112	464	564	170	549	23	46	45	17
25	584	469	132	112	478	558	170	413	25	44	40	17
26	565	362	132	111	456	616	217	327	26	39	38	17
27	545	335	183	140	448	665	269	277	24	35	34	17
28	520	364	254	102	496	726	258	238	21	31	34	46
29	485	354	241	473	528	836	234	204	19	29	33	71
30	340	320	198	655	---	914	213	178	26	30	29	74
31	258	---	177	662	---	915	---	157	---	30	26	---
TOTAL	12032	10447	6456	5465	10862	13664	12895	11247	1392	2869	3678	1080.1
MEAN	388	348	208	176	375	441	430	363	46.4	92.5	119	36.0
MAX	1030	683	359	662	665	915	1030	634	143	429	398	105
MIN	121	159	108	100	182	208	132	157	19	29	26	6.1
MEAN†	366	351	212	224	332	497	356	360	47.7	93.0	119	54.6
CFSM†	3.62	3.48	2.10	2.22	3.29	4.92	3.52	3.56	.47	.92	1.18	.54
IN.†	4.18	3.87	2.42	2.56	3.55	5.68	3.93	4.11	.53	1.06	1.35	.60

CAL YR 1975 TOTAL 84008.0 MEAN 230 MAX 1030 MIN 13 MEAN† 230 CFSM† 2.28 IN† 30.92
WTR YR 1976 TOTAL 92087.1 MEAN 252 MAX 1030 MIN 6.1 MEAN† 251 CFSM† 2.49 IN† 33.85

† Adjusted for change in contents in Surry Mountain Lake.

01158600 OTTER BROOK BELOW OTTER BROOK DAM, NEAR KEENE, NH

LOCATION.--Lat 42°56'45", long 72°14'14", Cheshire County, Hydrologic Unit 01080201, on right bank 450 ft (150 m) downstream from Otter Brook Dam, 2 mi (3 km) northeast of Keene, 2.4 mi (3.9 km) upstream from Minnewawa Brook, and 4.9 mi (7.9 km) upstream from mouth.

DRAINAGE AREA.--47.2 mi^2 (122.2 km^2).

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. Flow regulated by Otter Brook Lake (Reservoirs in Connecticut River basin). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--18 years, 77.2 ft^3/s (2.186 m^3/s), 22.21 in/yr (564 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 685 ft^3/s (19.4 m^3/s) Apr. 20, 1959, gage height, 8.59 ft (2.618 m); maximum gage height, 8.61 ft (2.624 m) Apr. 26, 1972; minimum discharge, 0.1 ft^3/s (0.003 m^3/s) Nov. 28, 1959; minimum daily, 0.3 ft^3/s (0.008 m^3/s) Sept. 27 to Oct. 2, Oct. 9, 10, 12-20, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 600 ft^3/s (17.0 m^3/s) Apr. 5, gage height, 8.45 ft (2.576 m); minimum, 2.1 ft^3/s (0.059 m^3/s) Jan. 28; minimum daily, 4.2 ft^3/s (0.12 m^3/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	76	144	74	377	242	192	86	52	7.7	19	9.1
2	88	73	147	74	369	170	260	129	44	7.7	36	9.9
3	73	68	131	73	368	182	470	183	44	7.8	26	9.1
4	63	66	88	73	355	160	514	171	44	8.1	24	9.1
5	56	62	90	50	344	184	566	115	44	8.4	18	9.1
6	51	58	91	38	326	206	544	97	32	8.4	12	9.1
7	174	55	91	39	274	207	431	97	26	8.4	13	9.1
8	129	69	91	53	190	205	240	100	26	8.4	21	11
9	42	93	73	46	106	153	219	101	27	8.4	21	11
10	13	88	141	39	89	131	163	100	27	8.4	54	9.1
11	13	113	159	39	105	111	99	73	21	8.4	119	9.9
12	26	102	138	40	105	81	108	116	18	78	77	9.9
13	148	284	138	50	85	109	105	188	18	95	56	9.9
14	141	446	116	67	76	133	95	147	18	68	48	5.8
15	116	308	102	88	69	133	85	131	12	52	35	4.9
16	97	214	102	88	73	93	80	172	9.1	41	37	4.2
17	82	168	102	88	93	85	71	174	17	33	35	4.5
18	229	141	85	82	101	102	66	119	35	28	29	6.7
19	375	124	74	53	85	102	66	159	34	23	26	7.4
20	243	110	59	55	107	101	56	346	22	19	21	6.9
21	458	155	50	51	121	170	51	402	12	17	15	5.8
22	500	372	50	51	141	336	52	251	8.7	15	14	5.2
23	470	371	50	51	250	428	84	195	8.7	14	13	4.8
24	355	248	52	42	287	265	105	158	8.7	16	12	4.7
25	156	172	52	37	206	224	113	139	8.7	16	11	4.5
26	152	146	77	51	173	286	124	108	8.2	13	11	5.2
27	132	150	89	88	176	338	182	97	7.7	12	9.9	22
28	115	201	104	33	224	433	127	97	7.7	11	11	28
29	103	167	113	198	246	481	115	82	7.7	10	11	23
30	94	139	89	353	---	473	102	62	7.7	11	9.9	21
31	84	---	74	390	---	447	---	56	---	11	9.9	---
TOTAL	4888	4839	2962	2554	5521	6771	5485	4451	655.9	673.1	854.7	289.9
MEAN	158	161	95.5	82.4	190	218	183	144	21.9	21.7	27.6	9.66
MAX	500	446	159	390	377	481	566	402	52	95	119	28
MIN	13	55	50	33	69	81	51	56	7.7	7.7	9.9	4.2
MEAN†	155	162	95.7	119	154	222	166	143	23.1	28.7	27.6	9.97
CFSM†	3.28	3.43	2.03	2.52	3.26	4.70	3.52	3.03	.49	.61	.58	.21
IN.†	3.78	3.82	2.34	2.91	3.53	5.43	3.92	3.50	.55	.70	.67	.24

CAL YR 1975 TOTAL 38697.1 MEAN 106 MAX 553 MIN 4.2 MEAN† 106 CFSM† 2.25 IN† 30.48
WTR YR 1976 TOTAL 39944.6 MEAN 109 MAX 566 MIN 4.2 MEAN† 109 CFSM† 2.31 IN† 31.39

† Adjusted for change in contents in Otter Brook Lake.

01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, NH

LOCATION.--Lat 42°52'20", long 72°12'51", Cheshire County, Hydrologic Unit 01080201, on right bank 15 ft (5 m) downstream from bridge, at Webb, 2.5 mi (4.0 km) south of Marlborough, and at mile 10.9 (17.5 km).

DRAINAGE AREA.--36.0 mi^2 (93.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only October 1920, published in WSP 1301.

REVISED RECORDS.--WSP 641: 1925(M). WSP 871: Drainage area. WSP 1231: 1921-24(M), 1926(M), 1929, 1933-34(M), 1939. WRD MA, NH, RI, VT, 1971: 1966(M), 1967-69.

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).

REMARKS.--Records good except those for winter period, which are fair. Regulation at times prior to 1962 by powerplant and several small reservoirs upstream; regulation greater prior to 1956. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--56 years, 59.5 ft^3/s (1.685 m^3/s), 22.44 in/yr (570 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,960 ft^3/s (169 m^3/s) Sept. 21, 1938, gage height, 7.89 ft (2.405 m), from rating curve extended above 3,300 ft^3/s (93.5 m^3/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 ft^3/s (0.011 m^3/s) Sept. 15-17, 1926.
Maximum discharge known since at least 1869, that of Sept. 21, 1938.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft^3/s (15.6 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1230	627	17.8	5.17	1.576	Apr. 1	2245	967	27.4	5.71	1.740
Jan. 28	0330	*1,110	31.4	*5.92	1.804						

Minimum discharge not determined; minimum daily, 4.6 ft^3/s (0.13 m^3/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	59	102	64	149	165	430	77	38	59	13	8.8
2	70	59	99	57	325	146	567	272	41	30	20	8.1
3	62	57	88	56	250	138	298	180	35	23	13	7.7
4	57	51	79	54	200	125	215	128	34	17	10	7.5
5	51	47	68	47	160	165	165	96	30	14	8.5	7.1
6	61	41	68	47	130	248	135	93	24	12	7.5	6.5
7	50	40	65	50	110	169	118	93	28	16	9.0	5.9
8	43	60	56	46	96	125	99	89	26	14	15	5.4
9	40	76	46	45	87	107	91	76	23	13	60	4.9
10	39	72	99	44	82	95	86	69	20	12	176	4.6
11	49	86	123	43	78	88	83	61	17	10	140	5.0
12	183	79	92	43	76	86	78	112	17	63	59	7.0
13	138	260	78	45	74	114	72	103	13	56	30	6.2
14	123	335	74	100	76	130	69	83	12	30	25	5.6
15	111	195	76	86	80	105	63	80	11	22	21	5.2
16	80	118	73	78	84	92	72	69	10	17	21	5.0
17	64	95	63	72	95	91	61	63	17	14	18	5.4
18	226	84	59	66	95	92	54	74	19	12	14	8.0
19	229	77	46	61	130	85	59	195	15	10	11	10
20	478	71	34	56	130	118	49	289	13	9.2	11	8.0
21	321	118	43	52	105	276	44	199	12	9.4	10	6.7
22	176	307	50	48	285	325	52	143	11	9.7	9.0	6.1
23	123	159	56	46	367	187	68	105	12	9.2	8.3	6.1
24	100	118	56	44	229	152	52	87	12	9.7	12	5.9
25	95	107	52	45	143	176	63	77	12	9.7	7.7	5.6
26	100	89	70	49	146	191	133	69	13	9.0	7.1	5.9
27	93	140	100	440	218	187	103	68	11	8.0	7.5	17
28	79	207	90	869	252	353	91	56	9.9	7.4	9.0	22
29	72	130	78	425	199	252	86	47	8.8	7.0	9.9	17
30	68	103	66	265	---	180	78	43	15	7.0	13	14
31	62	---	68	190	---	143	---	43	---	8.0	10	---
TOTAL	3552	3440	2217	3633	4451	4906	3634	3239	559.7	547.3	785.5	238.2
MEAN	115	115	71.5	117	153	158	121	104	18.7	17.7	25.3	7.94
MAX	478	335	123	869	367	353	567	289	41	63	176	22
MIN	39	40	34	43	74	85	44	43	8.8	7.0	7.1	4.6
CFSM	3.19	3.19	1.99	3.25	4.25	4.39	3.36	2.89	.52	.49	.70	.22
IN.	3.67	3.55	2.29	3.75	4.60	5.07	3.76	3.35	.58	.57	.81	.25

CAL YR 1975 TOTAL 31276.0 MEAN 85.7 MAX 1190 MIN 6.8 CFSM 2.38 IN 32.32
WTR YR 1976 TOTAL 31202.7 MEAN 85.3 MAX 869 MIN 4.6 CFSM 2.37 IN 32.24

01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, NH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 1972 to current year.
WATER TEMPERATURES: October 1954 to current year.

INSTRUMENTATION.--Water-quality monitor. Prior to August 1972, water-temperature recorder.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 170 micromhos Sept. 9, 1972; minimum recorded, 27 micromhos on many days during February, March, and April 1976.
WATER TEMPERATURES: Maximum, 33.5°C July 14, 1965; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 113 micromhos Jan. 27; minimum recorded, 27 micromhos on many days during February, March, and April.
WATER TEMPERATURES: Maximum, 27.0°C June 24; minimum, 0.0°C on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	46	40	43	50	49	50	44	44	44	61	54	56
2	48	46	47	51	50	50	44	44	44	56	54	54
3	52	46	49	52	49	51	45	45	45	57	55	55
4	51	49	50	53	52	53	47	45	45	55	55	55
5	52	49	51	54	52	53	48	45	46	57	56	56
6	52	46	50	54	53	54	45	45	45	60	58	59
7	52	49	51	55	54	54	45	45	45	60	59	60
8	55	52	54	56	54	54	49	45	45	61	57	60
9	55	53	54	55	53	54	50	48	49	60	58	60
10	55	53	54	53	51	52	56	46	51	62	60	61
11	55	52	54	53	50	52	46	46	46	63	61	62
12	57	48	52	54	49	51	46	46	46	63	61	62
13	48	46	47	52	43	46	46	46	46	64	60	61
14	49	46	49	43	43	43	46	46	46	102	59	85
15	49	44	46	43	43	43	46	46	46	78	59	64
16	50	48	49	43	43	43	47	47	47	59	59	59
17	52	50	51	47	43	43	48	47	47	59	59	59
18	50	43	49	46	43	43	48	48	48	59	59	59
19	43	43	43	49	43	45	52	48	50	59	59	59
20	43	43	43	50	45	47	55	52	54	60	58	58
21	43	43	43	46	43	45	55	53	54	58	58	58
22	47	43	44	43	43	43	53	52	53	60	58	58
23	47	43	44	43	43	43	55	53	54	60	59	59
24	48	43	46	45	44	44	55	54	55	59	59	59
25	48	47	47	44	44	44	54	53	54	60	59	59
26	48	47	48	44	44	44	69	54	58	74	59	64
27	48	45	47	55	44	47	72	52	60	113	63	92
28	49	47	48	44	44	44	52	52	52	63	57	58
29	49	48	48	44	44	44	54	53	53	57	57	57
30	49	48	49	44	44	44	56	53	54	57	57	57
31	50	48	49	---	---	---	57	54	55	56	56	56
MONTH	57	40	48	56	43	47	72	44	50	113	54	61

01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, NH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	65	56	57	30	28	29	29	27	28	56	52	53
2	84	56	67	30	28	29	27	27	27	53	44	47
3	62	56	57	34	29	29	27	27	27	47	44	45
4	60	56	56	34	29	30	27	27	27	46	44	45
5	56	56	56	46	33	38	33	27	29	50	45	47
6	57	55	55	40	31	33	33	30	31	52	48	50
7	58	55	57	31	29	30	36	30	32	48	46	46
8	57	57	57	32	29	30	43	33	35	50	46	48
9	61	57	58	32	29	31	37	35	36	51	48	50
10	61	58	59	33	31	32	37	36	37	53	49	51
11	75	58	62	45	32	35	37	35	37	60	51	54
12	69	63	66	44	33	37	39	36	37	61	52	55
13	68	63	65	57	35	46	55	39	47	51	48	50
14	78	65	70	43	36	38	56	54	55	52	49	50
15	71	63	65	37	35	36	67	55	58	53	50	52
16	86	64	75	36	33	35	59	51	56	53	50	52
17	85	68	73	37	34	36	61	55	58	56	50	53
18	95	65	69	39	34	36	62	58	60	56	53	54
19	94	71	81	40	36	37	65	56	60	56	42	48
20	78	64	68	47	39	42	70	62	64	42	38	39
21	64	62	63	41	27	32	69	64	66	43	38	39
22	68	53	64	27	27	27	69	61	65	42	40	41
23	52	51	51	27	27	27	69	59	64	44	41	43
24	52	50	51	33	27	29	63	60	61	48	44	45
25	57	52	53	31	28	29	60	57	59	50	47	48
26	57	55	55	32	27	28	58	50	55	52	48	49
27	33	30	31	29	27	28	54	48	50	50	46	48
28	30	27	27	29	27	28	53	50	51	55	50	52
29	29	27	27	27	27	27	55	52	53	56	52	54
30	---	---	---	29	27	28	53	51	52	56	54	55
31	---	---	---	29	27	28	---	---	---	56	53	54
MONTH	95	27	58	57	27	32	70	27	47	61	38	49

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	55	55	55	80	69	73	81	61	73	72	65	69
2	59	54	57	68	58	62	67	59	63	73	71	72
3	58	57	58	69	59	64	61	57	59	80	71	74
4	60	53	57	75	68	72	66	60	63	89	80	84
5	60	54	57	79	73	76	72	67	69	91	84	87
6	63	60	62	80	77	79	76	72	74	92	85	89
7	62	59	60	81	52	68	76	53	66	93	88	90
8	64	62	63	76	63	72	51	43	46	94	91	92
9	70	63	66	80	75	78	47	38	44	105	90	97
10	74	70	73	82	79	81	50	37	44	105	92	100
11	77	73	74	80	68	77	39	37	38	92	73	78
12	75	72	74	68	48	58	43	39	40	82	75	78
13	76	71	74	48	45	46	48	43	45	82	80	81
14	78	75	76	49	47	48	54	48	50	83	80	81
15	80	77	78	56	49	53	56	54	55	---	---	---
16	83	80	82	60	56	58	56	53	54	---	---	---
17	84	67	75	64	60	63	60	54	58	---	---	---
18	80	76	78	69	65	67	64	58	61	---	---	---
19	80	78	78	74	68	71	70	63	66	---	---	---
20	80	78	79	79	73	76	79	71	75	---	---	---
21	82	79	80	80	52	68	80	77	79	---	---	---
22	85	82	83	77	64	72	80	78	79	---	---	---
23	87	84	86	83	77	80	81	77	79	---	---	---
24	88	86	87	84	78	81	81	50	68	---	---	---
25	89	86	88	80	76	78	84	64	77	---	---	---
26	90	87	88	81	78	79	92	78	84	---	---	---
27	90	87	89	82	73	78	91	77	83	---	---	---
28	90	83	88	90	81	85	77	72	75	---	---	---
29	90	85	88	85	78	81	72	68	70	---	---	---
30	91	70	87	84	81	82	68	52	61	---	---	---
31	---	---	---	82	80	81	65	60	63	---	---	---
MONTH	91	53	75	90	45	71	92	37	63	---	---	---
YEAR	113	27	56									

01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, NH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.0	14.0	15.0	6.5	4.5	5.5	6.5	4.5	5.5	0.0	0.0	0.0
2	15.5	13.0	14.5	8.0	6.0	7.0	4.0	3.0	3.5	0.0	0.0	0.0
3	13.0	11.5	12.5	9.5	7.5	8.5	3.0	1.5	2.5	0.0	0.0	0.0
4	13.5	11.0	12.5	11.0	9.0	10.0	1.5	0.5	1.0	0.0	0.0	0.0
5	13.0	10.5	12.0	10.0	8.5	9.0	1.5	0.5	1.0	0.0	0.0	0.0
6	15.0	12.5	13.5	8.5	7.0	8.0	3.0	1.0	2.0	0.0	0.0	0.0
7	13.5	12.0	13.0	9.5	7.0	8.5	2.5	0.5	1.0	0.0	0.0	0.0
8	12.0	10.5	11.5	11.5	9.5	10.5	0.5	0.5	0.5	0.0	0.0	0.0
9	11.5	10.0	11.0	11.5	10.5	11.0	2.0	0.5	1.0	0.0	0.0	0.0
10	11.5	9.5	10.5	11.5	10.5	11.0	2.5	2.0	2.5	0.0	0.0	0.0
11	11.0	10.5	11.0	11.0	8.5	10.0	2.0	1.5	2.0	0.0	0.0	0.0
12	11.0	11.0	11.0	8.5	7.5	8.0	1.5	1.0	1.0	0.0	0.0	0.0
13	12.0	10.5	11.0	9.0	8.5	8.5	1.5	1.5	1.5	0.0	0.0	0.0
14	13.0	11.5	12.0	9.0	7.0	8.0	3.0	1.5	2.5	0.0	0.0	0.0
15	13.5	11.5	12.5	6.5	5.5	6.0	4.0	2.5	3.0	0.0	0.0	0.0
16	14.5	12.5	13.5	5.5	4.5	5.0	4.0	1.5	3.0	0.0	0.0	0.0
17	12.5	11.0	11.5	6.0	4.5	5.0	1.5	0.5	1.5	0.0	0.0	0.0
18	11.5	10.5	11.0	6.5	5.0	5.5	1.5	0.5	1.0	0.0	0.0	0.0
19	10.5	9.5	10.0	6.0	4.5	5.5	0.5	0.5	0.5	0.0	0.0	0.0
20	10.0	9.5	9.5	6.5	5.0	6.0	0.5	0.5	0.5	0.0	0.0	0.0
21	10.5	9.0	10.0	8.0	5.5	7.0	0.5	0.5	0.5	0.0	0.0	0.0
22	11.5	10.0	10.5	8.0	5.5	7.0	0.5	0.5	0.5	0.0	0.0	0.0
23	11.5	10.0	10.5	5.5	4.0	5.0	0.5	0.5	0.5	0.0	0.0	0.0
24	11.5	9.5	10.5	4.0	3.5	3.5	0.5	0.5	0.5	0.0	0.0	0.0
25	12.0	10.5	11.0	4.0	3.5	3.5	0.5	0.5	0.5	0.0	0.0	0.0
26	12.0	10.5	11.5	3.5	3.0	3.5	0.5	0.5	0.5	0.0	0.0	0.0
27	10.5	9.0	10.0	4.0	3.0	3.5	0.5	0.5	0.5	0.0	0.0	0.0
28	10.0	8.0	9.5	4.0	3.5	3.5	0.5	0.5	0.5	0.0	0.0	0.0
29	10.5	8.5	9.5	3.5	2.5	3.0	0.5	0.5	0.5	0.5	0.0	0.0
30	10.0	7.0	9.0	5.5	2.5	4.0	0.5	0.5	0.5	0.0	0.0	0.0
31	7.0	5.5	6.0	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	16.0	5.5	11.0	11.5	2.5	6.5	6.5	0.0	1.5	0.5	0.0	0.0

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	0.0	0.0	1.5	1.0	1.5	5.5	4.5	5.0	11.5	9.0	10.5
2	0.5	0.0	0.0	1.0	0.0	0.0	5.5	3.0	4.5	13.0	10.5	11.5
3	0.0	0.0	0.0	0.0	0.0	0.0	6.5	4.0	5.0	13.5	10.5	12.0
4	0.0	0.0	0.0	0.5	0.0	0.0	6.5	4.0	5.0	10.5	8.5	9.5
5	0.0	0.0	0.0	2.0	0.5	1.0	6.5	3.5	5.0	12.0	7.5	10.0
6	0.0	0.0	0.0	2.0	0.5	1.0	7.5	4.5	6.0	15.5	10.0	13.0
7	0.0	0.0	0.0	1.5	0.0	0.5	8.0	5.0	6.5	14.0	11.5	12.5
8	0.0	0.0	0.0	1.0	0.0	0.0	6.5	4.0	5.5	12.0	10.0	11.0
9	0.0	0.0	0.0	0.5	0.0	0.0	7.5	4.5	6.0	12.5	9.0	11.0
10	0.0	0.0	0.0	1.0	0.0	0.5	7.5	3.5	6.0	15.5	10.0	12.5
11	0.0	0.0	0.0	2.0	0.0	1.0	6.0	3.5	5.5	16.5	12.0	14.5
12	0.0	0.0	0.0	1.5	0.0	0.5	4.5	1.0	3.0	14.5	12.5	14.0
13	0.5	0.0	0.0	3.0	0.0	1.5	6.5	1.5	4.5	15.0	10.5	13.0
14	0.0	0.0	0.0	2.5	0.5	1.5	9.0	4.0	6.5	16.5	11.5	14.5
15	0.0	0.0	0.0	2.5	0.5	1.0	9.5	5.5	8.0	19.5	15.5	17.0
16	0.5	0.0	0.0	0.5	0.0	0.0	13.0	8.5	11.0	18.5	15.0	17.0
17	0.5	0.0	0.5	0.0	0.0	0.0	16.0	10.5	13.5	18.0	16.0	17.0
18	0.5	0.0	0.5	0.0	0.0	0.0	17.5	12.0	14.5	18.5	16.5	17.0
19	1.0	0.5	0.5	1.0	0.0	0.0	19.0	13.5	16.0	16.5	11.0	13.5
20	1.0	0.0	0.5	3.5	0.5	1.5	17.0	13.5	15.5	11.0	10.0	10.5
21	1.0	0.0	0.5	3.5	1.5	2.0	17.5	12.5	14.5	11.5	10.0	11.0
22	1.5	0.0	0.5	2.0	0.0	1.0	13.5	12.0	12.5	12.0	10.5	11.5
23	0.0	0.0	0.0	2.5	0.0	1.0	14.0	11.0	12.5	13.5	10.5	12.0
24	0.5	0.0	0.0	4.5	0.5	2.5	12.0	9.5	11.0	14.5	12.0	13.5
25	1.5	0.0	0.5	4.5	2.5	3.5	10.5	8.0	9.5	14.5	12.5	13.5
26	2.0	0.5	1.0	5.5	2.0	4.0	8.0	7.0	7.5	13.0	12.0	12.5
27	2.0	0.5	1.5	6.5	3.0	4.5	7.5	6.5	7.0	16.5	12.0	14.0
28	2.0	0.0	1.0	5.5	4.0	5.0	8.5	6.5	8.0	19.0	13.0	16.0
29	1.5	0.0	0.5	5.5	2.5	4.0	10.0	7.5	9.0	19.5	14.5	17.0
30	---	---	---	6.5	3.5	5.0	12.0	8.0	10.0	18.0	16.5	17.5
31	---	---	---	5.5	4.5	5.5	---	---	---	21.0	16.5	18.5
MONTH	2.0	0.0	0.5	6.5	0.0	1.5	19.0	1.0	8.5	21.0	7.5	13.5

01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, NH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.5	17.5	18.5	21.5	19.0	20.0	17.5	15.0	16.5	16.5	10.5	14.0
2	20.0	16.0	18.0	22.5	18.5	20.5	19.0	13.0	16.0	15.5	12.0	14.5
3	20.5	15.5	17.5	21.5	18.0	19.5	20.0	12.5	16.0	14.5	3.5	10.0
4	20.5	16.0	18.0	22.0	17.0	19.5	20.5	13.5	17.0	15.0	11.0	13.0
5	21.5	14.5	18.0	24.5	17.0	20.5	21.0	14.5	18.0	17.0	13.5	15.0
6	18.5	16.5	17.5	26.0	18.0	22.0	20.0	17.5	18.5	14.5	10.5	12.5
7	19.5	16.0	17.0	22.5	19.0	21.0	18.0	15.0	16.0	13.0	4.0	9.5
8	22.5	16.0	19.0	24.0	19.5	21.5	16.0	14.0	15.0	14.5	3.0	9.5
9	24.5	17.0	20.5	24.5	19.0	21.0	16.5	15.0	16.0	14.0	4.0	10.0
10	25.0	18.5	21.5	25.0	17.0	21.0	17.0	16.0	16.5	14.0	12.0	13.0
11	25.0	20.0	22.0	24.5	18.5	21.5	19.0	15.5	17.5	13.0	5.0	10.0
12	22.5	17.5	20.0	21.5	20.0	21.0	21.0	16.5	18.5	---	---	---
13	22.0	14.5	18.0	20.0	18.5	19.0	22.0	18.5	20.0	---	---	---
14	22.5	16.0	19.0	19.5	17.5	18.5	22.0	18.5	20.0	---	---	---
15	26.0	18.5	22.0	21.5	16.5	18.5	22.5	19.0	20.5	---	---	---
16	26.5	20.0	23.0	22.0	16.5	19.0	20.5	17.5	19.0	---	---	---
17	24.0	20.5	22.0	23.0	18.0	20.0	21.0	16.0	18.0	---	---	---
18	25.0	18.5	21.5	21.0	15.5	18.5	20.0	14.0	17.0	---	---	---
19	24.5	21.0	22.5	22.5	15.5	19.0	20.0	12.5	16.5	---	---	---
20	24.5	21.5	22.5	24.5	17.0	21.0	20.0	13.0	16.5	---	---	---
21	25.0	21.0	22.5	21.0	18.0	20.0	22.0	15.5	19.0	---	---	---
22	25.5	21.0	23.0	23.0	15.5	19.0	24.0	18.0	21.0	---	---	---
23	26.5	21.0	23.5	22.0	15.5	19.0	23.0	19.0	20.5	---	---	---
24	27.0	21.0	23.5	23.5	19.0	21.0	20.5	15.5	18.0	---	---	---
25	23.5	21.5	22.5	21.5	16.0	18.5	20.5	14.0	17.5	---	---	---
26	26.0	20.0	22.5	21.0	13.5	17.5	21.0	14.5	18.0	---	---	---
27	24.5	19.5	22.0	22.5	16.5	19.0	20.0	17.5	19.0	---	---	---
28	26.0	19.5	22.5	23.0	17.0	20.0	21.0	17.5	19.0	---	---	---
29	26.0	20.0	22.5	18.5	17.0	18.0	20.5	16.5	19.0	---	---	---
30	23.0	20.0	21.0	17.5	16.5	17.0	16.0	12.0	14.5	---	---	---
31	---	---	---	19.0	16.0	17.0	15.0	4.0	10.5	---	---	---
MONTH	27.0	14.5	21.0	26.0	13.5	19.5	24.0	4.0	17.5	---	---	---
YEAR	27.0	0.0	9.5									

01161000 ASHUELOT RIVER AT HINSDALE, NH

LOCATION.--Lat 42°47'07", long 72°29'12", Cheshire County, Hydrologic Unit 01080201, on left bank 40 ft (12 m) upstream from highway bridge at Hinsdale, 0.2 mi (0.3 km) downstream from dam, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--420 mi^2 (1,088 km^2).

PERIOD OF RECORD.--Discharge: March 1907 to December 1911, July 1914 to current year.
Chemical analyses: Water years 1953, 1958, 1968 (partial-record station).
Water temperatures: Water year 1958 (partial-record station).

REVISED RECORDS.--WSP 661: Drainage area. WSP 781: 1907-10, 1914-34. WSP 1301: 1915(M), 1917-19(M), 1921-33(M). WSP 1701: 1920.

GAGE.--Water-stage recorder. Datum of gage is 201.32 ft (61.362 m) above mean sea level (levels by Corps of Engineers). Prior to Sept. 29, 1933, nonrecording gage on highway bridge at same datum.

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 (Reservoirs in Connecticut River basin). Occasional diurnal fluctuation at low flow by mills upstream; greater regulation prior to 1952. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--66 years, 665 ft^3/s (18.83 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,600 ft^3/s (470 m^3/s) Mar. 19, 1936, by computation of peak flow over dam; maximum gage height, 20.2 ft (6.16 m) Mar. 19, 1936, from floodmarks, backwater from Connecticut River; minimum discharge, 10 ft^3/s (0.28 m^3/s) Sept. 9, 1953; minimum daily, 12 ft^3/s (0.34 m^3/s) Sept. 15, 1929.
Maximum discharge since at least 1859, that of Mar. 19, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,960 ft^3/s (112 m^3/s) Oct. 20, gage height, 6.98 ft (2.128 m); minimum, 89 ft^3/s (2.52 m^3/s) Sept. 26; minimum daily, 94 ft^3/s (2.66 m^3/s) Sept. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1790	879	1360	837	2250	2070	2880	903	583	460	149	131
2	1300	804	1320	897	2500	1950	3520	1370	550	447	243	126
3	986	754	1260	788	2600	1660	3160	1610	509	353	255	122
4	804	721	1140	689	2480	1590	2950	1500	470	272	232	115
5	681	689	1000	729	2280	1600	2720	1310	399	224	200	113
6	605	635	1000	681	1990	1900	2570	1120	321	205	172	108
7	575	605	968	705	1630	1970	2430	1050	315	209	292	102
8	689	650	820	620	1410	1750	2240	1060	320	250	503	121
9	513	837	763	590	1210	1480	2030	973	307	290	468	174
10	443	871	941	597	1060	1320	1770	884	294	344	1070	187
11	449	1060	1420	635	986	1220	1450	827	295	251	1330	205
12	1080	1120	1390	620	986	1100	1340	1210	294	417	1070	188
13	1340	1770	1270	642	941	1110	1200	1430	253	1040	817	145
14	1360	2570	1190	804	950	1400	1010	1290	226	989	703	139
15	1280	2720	1100	1040	905	1350	901	1220	203	689	595	129
16	1130	2260	1040	1100	888	1230	822	1240	197	439	562	113
17	950	1780	986	1040	1050	1060	762	1170	222	336	477	109
18	1470	1500	932	959	1170	1030	675	1170	285	273	393	136
19	2510	1320	780	905	1300	995	623	1660	295	232	327	162
20	3490	1180	561	837	1460	1070	583	2250	240	201	272	141
21	3520	1180	605	721	1420	1700	536	2290	200	187	236	124
22	3170	2110	642	658	1760	2400	666	2060	170	188	209	105
23	2740	2340	763	627	2460	2380	815	1740	180	174	188	97
24	2450	2060	771	605	2310	2180	761	1550	190	165	169	97
25	2070	1680	729	568	2050	2060	796	1340	210	164	155	94
26	1720	1470	820	554	1810	2160	1190	1140	200	150	146	94
27	1580	1420	1030	1010	1940	2290	1280	995	170	136	140	181
28	1460	1750	1140	2910	2240	2810	1140	905	150	130	151	241
29	1350	1660	1180	3260	2230	2940	1020	829	135	123	163	219
30	1180	1450	1080	2870	---	2760	932	721	155	124	158	207
31	1010	---	897	2570	---	2560	---	635	---	129	141	---
TOTAL	45695	41845	30898	32068	48266	55095	44772	39452	8338	9591	11986	4225
MEAN	1474	1395	997	1034	1664	1777	1492	1273	278	309	387	141
MAX	3520	2720	1420	3260	2600	2940	3520	2290	583	1040	1330	241
MIN	443	605	561	554	888	995	536	635	135	123	140	94

CAL YR 1975 TOTAL 353170 MEAN 968 MAX 4030 MIN 100
WTR YR 1976 TOTAL 372231 MEAN 1017 MAX 3520 MIN 94

01167800 BEAVER BROOK AT WILMINGTON, VT

LOCATION.--Lat 42°51'38", long 72°51'04", Windham County, Hydrologic Unit 01080203, 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 mi^2 (16.52 km^2).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WRD MA, NH, RI, VT, 1972: 1963(M), 1964(P), 1967-68(P), 1969-70, 1971(P).

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (475 m), from topographic map.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Recording rain gage at station April 1964 to November 1974 (no winter records).

AVERAGE DISCHARGE.--13 years, 15.7 ft^3/s (0.445 m^3/s), 33.42 in/yr (849 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft^3/s (33.1 m^3/s) Aug. 10, 1976, gage height, 8.76 ft (2.670 m), from rating curve extended above 160 ft^3/s (4.53 m^3/s) on basis of slope-area measurement at gage height 8.61 ft (2.624 m); minimum, 0.06 ft^3/s (0.002 m^3/s) Aug 1, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 230 ft^3/s (6.51 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 18	1115	354	10.0	4.94	1.506	Apr. 1	1515	632	17.9	6.32	1.926
Oct. 20	0715	274	7.76	4.49	1.369	Aug. 10	0715	*1,170	33.1	*8.76	2.670
Mar. 28	0215	345	9.77	4.89	1.490						

Minimum discharge, 0.70 ft^3/s (0.020 m^3/s) July 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	49	10	20	50	221	26	8.9	23	28	1.9
2	10	11	23	9.0	50	34	81	82	7.8	8.5	11	2.3
3	8.9	10	15	9.5	27	36	47	36	6.1	5.4	4.7	2.1
4	8.1	14	12	8.7	18	28	35	25	5.4	4.1	2.7	1.9
5	7.4	11	11	8.3	14	62	26	19	4.4	5.1	2.1	2.1
6	7.0	9.3	11	8.0	13	69	23	17	4.7	3.0	1.3	1.9
7	6.6	8.5	9.8	7.7	12	34	20	19	7.4	2.1	21	1.5
8	6.3	15	8.1	7.4	11	23	18	22	5.1	4.1	15	1.5
9	5.6	13	8.1	7.2	10	18	16	18	4.1	8.5	11	1.5
10	5.3	36	55	7.0	10	17	15	18	3.5	4.1	351	3.8
11	25	33	27	6.9	11	14	16	17	3.0	3.0	48	6.7
12	89	35	15	6.8	11	13	14	41	3.0	9.7	20	3.3
13	44	103	12	6.7	10	26	12	26	2.5	7.1	27	2.3
14	33	79	15	25	10	23	12	20	2.1	4.7	34	1.9
15	22	37	17	13	10	16	12	28	1.9	3.8	20	1.5
16	19	25	15	10	11	12	14	20	1.9	3.3	19	1.5
17	15	19	10	8.0	13	12	13	20	3.5	2.5	13	2.7
18	172	17	9.4	7.0	14	12	12	25	3.0	2.7	9.3	5.5
19	99	14	7.0	6.8	30	13	10	78	1.9	2.3	7.4	3.8
20	176	13	6.6	6.8	22	33	9.3	64	1.9	1.5	6.1	2.7
21	64	65	7.6	6.2	17	94	8.5	46	2.3	1.3	4.4	2.2
22	36	56	9.0	5.9	70	67	8.9	31	2.3	1.2	3.5	1.9
23	25	27	8.4	5.6	50	35	12	25	15	.92	3.3	1.8
24	20	19	7.8	5.5	30	36	9.3	20	8.9	3.0	2.5	1.7
25	26	19	7.8	5.2	20	46	16	17	6.7	1.9	2.3	1.5
26	29	14	15	6.3	27	55	49	16	5.7	1.5	1.9	2.0
27	19	18	30	50	60	69	29	13	3.0	1.1	2.1	15
28	16	19	16	110	52	147	21	12	2.1	.92	5.4	7.0
29	14	14	12	50	36	42	18	10	1.9	.92	3.8	4.0
30	13	15	11	30	---	33	14	10	19	6.1	2.7	3.2
31	11	---	12	17	---	27	---	10	---	3.5	2.1	---
TOTAL	1043.2	779.8	472.6	471.5	689	1196	812.0	831	149.0	130.86	685.6	92.7
MEAN	33.7	26.0	15.2	15.2	23.8	38.6	27.1	26.8	4.97	4.22	22.1	3.09
MAX	176	103	55	110	70	147	221	82	19	23	351	15
MIN	5.3	8.5	6.6	5.2	10	12	8.5	10	1.9	.92	1.3	1.5
CFSM	5.28	4.08	2.38	2.38	3.73	6.05	4.25	4.20	.78	.66	3.46	.48
IN.	6.08	4.55	2.76	2.75	4.02	6.97	4.73	4.84	.87	.76	4.00	.54

CAL YR 1975 TOTAL 7533.50 MEAN 20.6 MAX 191 MIN 1.6 CFSM 3.23 IN 43.92
WTR YR 1976 TOTAL 7353.26 MEAN 20.1 MAX 351 MIN .92 CFSM 3.15 IN 42.87

NOTE.--No gage-height record Sept. 16-30.

01167800 BEAVER BROOK AT WILMINGTON, VT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 1972 to current year.
WATER TEMPERATURES: August 1972 to current year.

INSTRUMENTATION.--Water-quality monitor since August 1972.

REMARKS.--Records are considered to be only fair.

EXTREMES FOR PERIOD OF DAILY 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, July 6, 1976; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 104 micromhos Feb. 12; minimum recorded, 32 micromhos Dec. 1.
WATER TEMPERATURES: Maximum, 25.5°C July 6; minimum, 0.0°C on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	53	51	52	38	32	34	49	46	46
2	47	47	47	55	52	53	42	34	35	50	47	49
3	46	46	46	55	54	54	37	35	36	50	47	48
4	51	46	47	54	53	53	38	35	37	50	47	48
5	51	47	49	55	52	53	39	37	39	53	50	52
6	54	51	53	62	55	58	40	36	38	54	52	53
7	55	53	54	66	58	60	43	38	41	55	52	53
8	58	53	54	58	51	53	45	43	44	57	54	56
9	61	56	57	52	38	51	46	43	44	58	58	58
10	63	57	59	53	40	48	44	38	41	59	56	58
11	63	46	55	46	42	44	39	37	38	65	58	59
12	48	44	47	47	43	46	41	37	39	60	56	59
13	48	46	48	43	40	41	43	40	42	62	55	58
14	46	44	45	39	38	38	43	39	41	66	55	59
15	47	45	46	38	37	38	40	37	39	59	53	56
16	64	47	49	40	38	38	45	37	39	54	51	53
17	52	49	50	40	39	39	46	44	45	53	50	53
18	51	42	46	43	40	41	48	44	46	55	54	55
19	47	44	45	45	43	44	50	46	48	57	56	57
20	44	43	44	46	44	45	52	49	51	58	55	58
21	44	42	43	46	33	41	52	48	50	58	55	57
22	48	43	45	38	33	35	50	47	48	59	56	58
23	55	49	52	44	35	37	50	47	49	61	60	61
24	54	53	53	44	36	37	52	49	52	63	62	62
25	57	47	51	38	37	37	60	51	53	64	62	63
26	46	45	46	40	36	38	54	50	52	67	63	65
27	50	46	48	42	38	39	53	51	52	102	68	85
28	55	49	50	40	38	38	56	51	53	78	56	65
29	55	52	53	42	38	39	66	52	55	58	52	55
30	55	50	52	42	39	40	54	47	52	56	51	53
31	52	50	51	---	---	---	47	45	46	56	54	55
MONTH	64	42	50	66	33	44	66	32	44	102	46	57

01167800 BEAVER BROOK AT WILMINGTON, VT--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

	FEBRUARY			MARCH		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
1	63	53	56	56	54	55
2	71	63	68	56	54	55
3	68	56	60	59	56	57
4	60	58	59	---	---	---
5	64	63	63	54	52	53
6	65	62	64	56	55	55
7	66	64	65	62	56	58
8	72	65	67	---	---	---
9	72	66	68	---	---	---
10	69	67	68	61	59	60
11	71	67	68	78	60	65
12	104	70	74	73	63	68
13	75	72	74	63	62	62
14	75	74	75	64	57	62
15	75	74	74	66	45	62
16	82	74	79	64	63	64
17	80	76	83	69	64	66
18	77	76	113	51	48	50
19	85	76	105	50	48	49
20	---	---	---	48	45	46
21	72	66	69	---	---	---
22	65	59	62	---	---	---
23	60	56	58	54	48	49
24	---	---	---	---	---	---
25	62	56	58	---	---	---
26	59	57	58	48	45	45
27	57	55	56	54	45	46
28	57	55	56	---	---	---
29	58	55	56	---	---	---
30	---	---	---	---	---	---
31	---	---	---	---	---	---
MONTH	104	53	69	---	---	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	61	53	58	76	54	64	70	68	69
2	57	54	55	65	61	63	68	58	63	71	67	70
3	72	56	59	67	64	65	72	65	68	71	67	69
4	62	60	61	71	67	69	76	71	73	---	---	---
5	65	62	64	73	71	72	79	74	77	73	65	68
6	66	61	65	80	73	76	83	79	81	70	65	68
7	60	54	57	85	81	83	81	54	69	73	69	70
8	63	56	59	87	85	86	58	55	56	74	71	72
9	69	34	65	84	70	74	59	57	58	---	---	---
10	73	69	71	77	71	73	55	41	41	---	---	---
11	75	72	73	85	78	82	37	36	36	---	---	---
12	74	72	73	86	81	83	41	36	39	---	---	---
13	76	34	73	84	71	74	44	39	41	---	---	---
14	77	74	75	76	72	74	41	33	39	---	---	---
15	78	75	76	79	76	77	44	40	42	---	---	---
16	79	78	78	82	80	82	44	40	42	---	---	---
17	77	70	72	86	83	85	48	43	46	---	---	---
18	73	70	72	87	86	87	55	47	50	---	---	---
19	76	73	75	89	87	88	59	53	56	---	---	---
20	78	74	76	90	88	89	59	55	57	---	---	---
21	81	77	78	90	89	90	64	59	61	---	---	---
22	83	81	82	91	89	90	65	62	63	---	---	---
23	84	56	73	93	91	92	68	64	65	---	---	---
24	68	60	64	93	84	87	71	65	67	---	---	---
25	77	69	73	89	87	88	71	67	69	---	---	---
26	80	75	77	91	88	90	72	69	70	---	---	---
27	81	79	80	90	89	90	73	68	71	88	53	71
28	85	81	83	91	89	90	70	56	61	61	53	59
29	85	84	84	92	41	89	60	56	58	62	60	61
30	85	52	76	87	77	80	63	56	60	62	59	61
31	---	---	---	78	76	77	70	63	66	---	---	---
MONTH	85	34	71	93	41	81	83	33	58	---	---	---
YEAR	104	32	59									

01167800 BEAVER BROOK AT WILMINGTON, VT--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.5	10.0	11.5	6.0	3.0	4.5	5.5	2.0	4.0	0.5	0.5	0.5
2	13.0	10.5	12.0	9.0	6.0	7.5	2.5	1.0	1.5	0.5	0.0	0.5
3	11.0	8.0	9.5	9.5	7.5	9.0	2.0	0.0	1.0	0.5	0.5	0.5
4	12.5	9.0	10.5	11.0	8.0	10.0	1.0	0.0	0.5	0.5	0.5	0.5
5	12.0	8.5	10.5	8.5	6.5	8.0	0.5	0.0	0.5	0.5	0.0	0.5
6	13.0	11.0	12.0	8.0	5.5	7.0	3.0	0.5	2.0	0.5	0.0	0.5
7	11.5	9.5	10.5	10.0	6.0	8.0	1.5	0.0	0.5	0.5	0.5	0.5
8	11.0	7.5	9.5	12.0	10.0	11.0	0.5	0.0	0.5	0.5	0.5	0.5
9	11.5	8.5	10.0	11.5	10.0	10.5	1.0	0.5	1.0	0.5	0.0	0.5
10	11.0	8.5	10.0	11.5	9.5	10.5	2.0	1.0	1.5	0.5	0.5	0.5
11	11.0	10.0	10.5	9.5	7.0	8.5	2.0	0.5	1.0	0.5	0.0	0.5
12	11.0	10.0	10.5	7.5	6.0	7.0	1.5	0.0	1.0	0.5	0.5	0.5
13	11.5	9.5	10.5	8.5	7.5	8.0	1.0	1.0	1.0	1.0	0.5	0.5
14	13.5	10.5	12.0	8.0	5.0	6.5	2.5	1.0	2.0	0.5	0.5	0.5
15	14.5	11.0	12.5	5.0	4.0	4.5	4.5	2.0	3.5	0.5	0.5	0.5
16	13.5	11.5	12.5	5.0	4.0	4.5	3.5	0.5	2.5	0.5	0.5	0.5
17	12.0	10.0	11.0	5.5	3.5	4.5	1.0	0.0	0.5	0.5	0.5	0.5
18	10.5	9.5	10.0	7.0	5.0	6.0	1.0	0.0	0.5	0.5	0.0	0.5
19	9.5	8.5	9.0	6.0	3.5	5.0	0.5	0.0	0.0	0.5	0.0	0.5
20	9.0	8.5	9.0	7.0	4.5	6.0	0.5	0.0	0.0	0.5	0.5	0.5
21	10.5	8.5	9.5	7.5	5.0	6.5	0.5	0.5	0.5	0.5	0.5	0.5
22	11.5	9.0	10.0	6.5	4.5	5.5	0.5	0.5	0.5	0.5	0.0	0.5
23	11.5	8.0	9.5	5.0	3.0	4.0	0.5	0.0	0.5	0.5	0.0	0.0
24	12.0	8.5	10.0	3.5	2.5	3.0	0.5	0.0	0.5	0.5	0.5	0.5
25	11.5	9.5	11.0	3.5	2.5	3.0	0.5	0.0	0.5	0.5	0.5	0.5
26	11.5	9.0	10.5	3.5	2.5	3.0	0.5	0.5	0.5	0.5	0.5	0.5
27	9.5	7.0	8.0	3.0	0.5	2.0	0.5	0.5	0.5	0.5	0.5	0.5
28	10.5	6.0	8.0	3.0	1.5	2.5	0.5	0.5	0.5	0.5	0.5	0.5
29	10.0	7.5	9.0	2.5	1.0	1.5	0.5	0.0	0.5	0.5	0.5	0.5
30	9.5	4.5	7.0	5.0	2.0	3.5	0.5	0.0	0.5	1.0	0.5	0.5
31	5.5	3.5	4.5	---	---	---	0.5	0.5	0.5	0.5	0.5	0.5
MONTH	14.5	3.5	10.0	12.0	0.5	6.0	5.5	0.0	1.0	1.0	0.0	0.5

	FEBRUARY			MARCH		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	0.5	0.5	3.0	1.0	2.0
2	0.5	0.5	0.5	1.0	0.0	0.5
3	1.0	0.5	0.5	1.5	1.0	1.0
4	0.5	0.5	0.5	---	---	---
5	1.0	0.5	0.5	1.5	1.0	1.0
6	1.0	0.5	0.5	1.5	1.0	1.0
7	1.0	0.5	0.5	1.0	0.5	1.0
8	1.0	0.5	1.0	1.0	0.5	1.0
9	1.0	0.5	1.0	2.0	1.0	1.5
10	1.0	0.5	1.0	1.5	0.5	1.0
11	1.0	1.0	1.0	2.0	0.5	1.0
12	1.0	1.0	1.0	2.5	0.0	1.0
13	1.0	1.0	1.0	3.0	0.5	1.0
14	1.5	1.0	1.0	1.0	0.0	0.5
15	1.0	0.5	1.0	0.5	0.0	0.5
16	1.5	1.0	1.0	1.0	0.0	0.5
17	1.5	0.5	1.0	1.0	0.5	0.5
18	1.5	0.5	1.0	5.0	2.0	3.0
19	1.5	1.0	1.0	6.0	2.0	3.5
20	2.0	0.5	1.5	6.0	3.0	4.0
21	2.5	0.5	2.0	---	---	---
22	1.5	0.5	1.0	---	---	---
23	1.0	0.5	0.5	---	---	---
24	---	---	---	---	---	---
25	2.5	1.0	1.5	---	---	---
26	3.0	1.5	2.0	---	---	---
27	2.5	1.5	1.5	---	---	---
28	3.0	1.0	1.5	---	---	---
29	3.0	1.5	2.5	---	---	---
30	---	---	---	---	---	---
31	---	---	---	---	---	---
MONTH	3.0	0.5	1.0	---	---	---

01167800 BEAVER BROOK AT WILMINGTON, VT--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	21.0	18.5	19.5	17.5	15.5	16.5	17.5	12.0	14.0
2	17.0	13.5	15.0	21.5	17.0	19.0	17.5	13.5	15.5	18.0	15.5	16.0
3	15.0	11.0	14.0	18.5	16.0	17.5	17.5	13.0	15.5	16.0	11.0	13.5
4	16.5	12.0	15.0	21.0	15.5	18.5	19.0	13.5	16.0	---	---	---
5	18.0	11.5	15.0	22.5	16.0	19.5	20.0	14.5	17.0	17.0	14.5	15.5
6	15.5	13.0	14.5	25.5	18.0	21.0	19.0	17.0	17.5	16.5	12.0	14.5
7	16.0	13.0	15.5	21.0	18.5	19.5	17.0	15.0	15.5	16.0	11.0	13.0
8	20.0	14.0	16.5	22.0	18.0	19.5	16.0	15.0	15.5	15.5	11.0	13.0
9	18.5	14.5	17.0	21.5	18.0	19.5	16.5	15.5	16.0	---	---	---
10	21.5	14.5	18.5	23.0	16.0	19.5	17.0	16.0	16.5	---	---	---
11	21.5	17.0	19.0	22.5	17.0	20.0	19.5	15.0	17.0	---	---	---
12	21.0	15.5	17.5	21.0	19.0	20.0	20.5	15.5	18.0	---	---	---
13	20.0	12.5	15.5	19.0	17.0	17.5	21.0	17.5	18.5	---	---	---
14	20.5	14.0	17.0	19.5	16.5	17.5	20.0	16.5	18.0	---	---	---
15	24.0	16.5	20.0	22.0	16.5	18.5	20.5	17.5	19.0	---	---	---
16	25.0	18.0	21.5	20.5	16.0	18.5	18.5	15.5	17.0	---	---	---
17	20.5	17.5	19.0	23.0	17.5	19.5	19.0	15.0	16.5	---	---	---
18	23.0	16.5	19.5	21.5	15.5	18.5	18.5	14.0	16.0	---	---	---
19	24.0	18.5	21.0	23.5	16.0	19.0	19.0	14.0	16.0	---	---	---
20	24.0	19.5	21.5	24.5	17.5	20.5	19.5	14.0	17.0	---	---	---
21	22.5	20.0	21.0	20.0	17.0	19.5	22.0	16.5	19.0	---	---	---
22	25.0	19.5	21.5	23.5	15.0	18.5	23.0	17.5	20.5	---	---	---
23	23.0	20.0	21.0	21.5	14.5	18.0	22.5	18.5	20.0	---	---	---
24	23.0	19.0	21.0	22.5	18.0	19.5	21.0	16.5	18.5	---	---	---
25	22.0	19.5	20.5	21.5	15.5	18.0	20.5	15.0	17.5	---	---	---
26	24.0	18.5	20.0	21.0	13.0	16.5	20.5	14.5	17.0	---	---	---
27	22.5	18.5	20.0	21.0	15.5	17.5	20.5	18.0	18.5	---	---	---
28	24.0	16.5	20.0	21.5	15.5	18.5	21.0	17.0	19.0	13.0	8.5	11.5
29	24.0	18.5	21.0	17.0	15.5	16.5	21.5	18.5	20.0	12.5	9.0	11.0
30	20.0	18.5	19.0	16.5	15.0	16.0	20.5	14.5	16.5	13.0	11.5	12.5
31	---	---	---	17.5	15.5	16.5	17.0	11.5	14.5	---	---	---
MONTH	25.0	11.0	18.5	25.5	13.0	18.5	23.0	11.5	17.5	---	---	---
YEAR	25.5	0.0	9.0									

Reservoirs in Connecticut River basin

01127850; 01128000. FIRST CONNECTICUT AND SECOND CONNECTICUT LAKES on Connecticut River are operated as a unit for storage of water for power and are used for recreation. The downstream order and usable capacity of each are as follows: Second Lake, 12 mi (19 km) northeast of Pittsburg, NH, 506,000,000 ft³ (14,300,000 m³); First Lake, 5.6 mi (9.0 km) northeast of Pittsburg, NH, 3,330,000,000 ft³ (94,300,000 m³). Records furnished by New England Power Co.

01129000. LAKE FRANCIS on Connecticut River at Pittsburg, NH, completed in March 1940, used for storage of water for power and for recreation, has usable capacity of 4,326,000,000 ft³ (122,500,000 m³). Records furnished by New Hampshire Water Resources Board.

01132000; 01132500. MOORE AND COMERFORD RESERVOIRS on Connecticut River are operated as a unit for storage of water for hydroelectric power development and are used for recreation. The downstream order and usable capacity of each are as follows: Moore Reservoir, 4.5 mi (7.2 km) northwest of Littleton, NH, filled in April 1956, 4,970,000,000 ft³ (141,000,000 m³); Comerford Reservoir, 5 mi (8 km) northeast of Monroe, NH, completed in 1930, 1,279,000,000 ft³ (36,220,000 m³). Records furnished by New England Power Co.

01141000. UNION VILLAGE RESERVOIR on Ompompanoosuc River, 0.3 mi (0.5 km) north of Union Village, VT, completed in 1949 for flood control, has usable capacity of 1,660,000,000 ft³ (47,000,000 m³). Records furnished by Corps of Engineers.

01148000; 01150000. LAKES AND PONDS IN MASCOMA RIVER BASIN are operated as a unit for storage of water for power and are used for recreation. The reservoirs and usable capacity of each are as follows: 01148000 Goose Pond, 5.2 mi (8.4 km) northeast of Mascoma, NH, 509,000,000 ft³ (14,400,000 m³); Grafton Pond, 8.5 mi (13.7 km) southeast of Mascoma, 144,000,000 ft³ (4,080,000 m³); Crystal Lake, 5.8 mi (9.3 km) southeast of Mascoma, 75,000,000 ft³ (2,100,000 m³); 01150000 Mascoma Lake at Mascoma, 337,000,000 ft³ (9,540,000 m³); total usable capacity of the four reservoirs, 1,060,000,000 ft³ (30,000,000 m³). Records furnished by New Hampshire Water Resources Board.

01151400. NORTH HARTLAND RESERVOIR on Ottauquechee River at North Hartland, VT, completed in 1961, used for flood control and recreation, has usable capacity of 3,110,000,000 ft³ (88,100,000 m³). Records furnished by Corps of Engineers.

01152000. SUNAPEE LAKE on Sugar River at Sunapee, NH, used for recreation and storage of water for power, has usable capacity of 862,000,000 ft³ (24,400,000 m³). Records collected by Geological Survey.

01152900. NORTH SPRINGFIELD RESERVOIR on Black River at North Springfield, VT, completed in 1960, used for flood control and recreation, has usable capacity of 2,230,000,000 ft³ (63,200,000 m³). Records furnished by Corps of Engineers.

01155400. BALL MOUNTAIN RESERVOIR on West River, 2 mi (3.2 km) north of Jamaica, VT, completed in 1961, used for flood control and recreation, has usable capacity of 2,380,000,000 ft³ (67,400,000 m³). Records furnished by Corps of Engineers.

01155900. TOWNSHEND RESERVOIR on West River, 1.8 mi (2.9 km) northwest of Townshend, VT, completed in 1961, used for flood control and recreation, has usable capacity of 1,460,000,000 ft³ (41,300,000 m³). Records furnished by Corps of Engineers.

01157500. SURRY MOUNTAIN LAKE on Ashuelot River, 4.5 mi (7.2 km) north of Keene, NH, completed in 1942, used for flood control and recreation, has usable capacity of 1,420,000,000 ft³ (40,200,000 m³). Records furnished by Corps of Engineers.

01158550. OTTER BROOK LAKE on Otter Brook, 2.5 mi (4.0 km) northeast of Keene, NH, completed in 1958, used for flood control and recreation, has usable capacity of 798,000,000 ft³ (22,600,000 m³). Records furnished by Corps of Engineers.

MONTHEND USABLE CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

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, 1975	3,186.0	4,065.2	5,539.1	2.5	977.9	107.3
Oct. 31	2,507.5	3,958.3	5,412.5	2.2	828.1	23.6
Nov. 30	2,023.6	3,945.6	5,910.4	13.4	724.6	24.2
Dec. 31	1,933.7	3,455.5	5,732.2	18.1	622.1	113.0
Jan. 31, 1976	1,651.5	2,240.6	5,932.2	70.7	758.2	148.0
Feb. 29	846.5	1,598.7	4,269.9	13.6	818.4	124.0
Mar. 31	1,039.9	1,213.1	3,488.6	51.5	1,070.0	138.0
Apr. 30	3,021.8	2,949.5	5,673.5	6.6	1,022.7	126.0
May 31	3,396.5	4,168.8	5,519.6	4.1	1,125.3	129.0
June 30	3,455.8	3,789.4	5,840.2	1.7	1,093.2	121.0
July 31	3,318.7	3,431.2	5,686.9	1.6	1,076.7	126.0
Aug. 31	3,240.1	3,246.6	5,617.3	1.4	1,048.2	116.0
Sept. 30	2,107.3	3,463.6	5,627.4	1.8	973.6	25.3

Date	Sunapee Lake	North Springfield Reservoir	Ball Mountain Reservoir	Townshend Reservoir	Surry Mountain Lake	Otter Brook Lake
Sept. 30, 1975	502	26.9	93.8	40.0	124.0	43.2
Oct. 31	483	23.3	9.5	32.4	65.7	34.8
Nov. 30	362	24.0	5.3	39.4	71.8	35.8
Dec. 31	343	25.4	4.6	38.6	80.7	36.2
Jan. 31, 1976	348	23.3	150.8	47.2	209.1	134.6
Feb. 29	396	30.5	32.0	45.5	102.5	44.4
Mar. 31	479	51.5	55.8	43.3	254.0	55.1
Apr. 30	495	26.9	91.7	41.1	62.2	11.2
May 31	644	24.7	90.3	37.2	55.3	10.5
June 30	600	26.9	98.1	34.4	58.6	13.8
July 31	588	50.4	94.5	43.3	59.8	32.6
Aug. 31	552	24.0	105.5	36.6	59.8	32.6
Sept. 30	496	26.9	93.8	58.0	108.1	33.4

† Affected by diversion from Ware River and diversion to Wachusett Reservoir and Chicopee Valley aqueduct.
‡ Estimated.

01329000 BATTEN KILL AT ARLINGTON, VT

LOCATION.--Lat 43°04'38", long 73°09'26", Bennington County, Hydrologic Unit 02020003, on left bank 5 ft (1.5 m) upstream from bridge on Highway 313 at Arlington and 0.9 mi (1.4 km) downstream from Warm Brook.
DRAINAGE AREA.--152 mi^2 (394 km^2).
PERIOD OF RECORD.--Discharge: October 1928 to current year.
REVISED RECORDS.--WSP 756: Drainage area. WSP 851: 1936 (maximum gage height). WSP 1302: 1929-34(M).
GAGE.--Water-stage recorder. Datum of gage is 597.68 ft (182.173 m) above mean sea level, unadjusted. Prior to Nov. 18, 1941, nonrecording gage at downstream side of bridge at same datum.
REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. Prior to 1949, diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--48 years, 339 ft^3/s (9.600 m^3/s), 30.29 in/yr (769 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft^3/s (314 m^3/s) Mar. 18, 1936, gage height, 11.3 ft (3.44 m), from floodmarks, present site, from rating curve extended above 6,100 ft^3/s (173 m^3/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 ft^3/s (1.05 m^3/s) Sept. 25, 1964.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft^3/s (62.3 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 18	1300	2,890	81.8	7.46	2.274	May 21	1830	2,720	77.0	7.34	2.237
Jan. 28	-	2,320	65.7	†7.02	2.140	July 12	0200	3,300	93.5	7.75	2.362
Mar. 21	2130	2,370	67.1	7.06	2.152	July 13	0130	3,490	98.8	7.87	2.399
Mar. 28	0530	3,190	90.3	7.67	2.338	Aug. 1	1430	2,820	79.9	7.41	2.259
Apr. 2	0230	3,800	108	8.08	2.463	Aug. 10	1700	*5,990	170	*9.37	2.856

† From peak-stage indicator.

Minimum discharge, 157 ft^3/s (4.45 m^3/s) June 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	366	319	551	290	550	1120	2380	429	416	753	1570	233
2	330	306	528	260	820	914	3130	686	384	364	2070	397
3	301	303	422	270	760	734	1660	566	330	268	999	312
4	284	498	352	260	600	685	1110	538	298	232	527	246
5	268	459	320	220	500	1170	819	440	275	201	415	230
6	247	353	355	240	450	1700	705	383	258	180	373	212
7	232	321	445	280	420	1240	640	403	306	210	606	195
8	218	467	316	240	400	784	570	519	271	203	912	186
9	211	574	310	220	360	606	512	413	238	362	552	183
10	204	485	452	230	350	562	470	359	219	227	4060	253
11	371	795	489	240	370	517	479	329	206	203	4100	456
12	1300	566	360	230	330	448	444	899	261	2200	2200	312
13	1180	1160	322	200	330	497	405	758	215	2280	1000	240
14	797	1300	319	480	315	524	389	511	192	795	1300	202
15	576	977	357	370	300	449	392	1370	199	496	850	183
16	631	692	453	290	400	392	440	903	187	364	1050	174
17	536	592	340	260	600	368	470	656	231	366	700	209
18	1640	570	310	230	500	352	450	614	210	298	520	249
19	2080	569	231	215	1100	357	396	1540	176	255	430	243
20	2050	515	230	205	670	548	351	2280	174	223	380	202
21	1630	671	300	193	506	1310	317	2390	276	253	340	192
22	1050	940	290	192	1460	1730	290	2260	247	262	310	195
23	723	630	270	190	1920	1100	323	1650	238	209	290	205
24	592	526	250	190	1190	735	285	1120	195	412	265	177
25	529	477	230	200	799	826	331	830	264	337	240	165
26	540	437	320	260	777	949	628	696	249	232	226	180
27	476	448	420	800	1010	1040	489	602	200	198	355	976
28	426	480	360	1800	1110	2440	520	521	179	198	596	569
29	393	409	310	2000	862	1670	624	458	163	197	405	360
30	369	380	280	1200	---	995	500	417	312	997	289	289
31	339	---	310	700	---	882	---	388	---	900	246	---
TOTAL	20889	17219	10802	12955	19759	27644	20519	25928	7369	14675	28176	8225
MEAN	674	574	348	418	681	892	684	836	246	473	909	274
MAX	2080	1300	551	2000	1920	2440	3130	2390	416	2280	4100	976
MIN	204	303	230	190	300	352	285	329	163	180	226	165
CFSM	4.43	3.78	2.29	2.75	4.48	5.87	4.50	5.50	1.62	3.11	5.98	1.80
IN.	5.11	4.21	2.64	3.17	4.84	6.77	5.02	6.35	1.80	3.59	6.90	2.01

CAL YR 1975 TOTAL 175477 MEAN 481 MAX 2080 MIN 123 CFSM 3.16 IN 42.95
WTR YR 1976 TOTAL 214160 MEAN 585 MAX 4100 MIN 163 CFSM 3.85 IN 52.41

NOTE.--No gage-height record Dec. 20 to Jan. 20, Jan. 23 to Feb. 20.

01334000 WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT

LOCATION.--Lat 42°54'47", long 73°15'25", Bennington County, Hydrologic Unit 02020003, on left bank 0.6 mi (1.0 km) downstream from Paran Creek and 1.4 mi (2.3 km) south of North Bennington.
DRAINAGE AREA.--111 mi² (287 km²).
PERIOD OF RECORD.--Discharge: June 1931 to current year.
Chemical analyses: Water years 1953-54 (partial-record station).
Water temperatures: Water year 1954 (partial-record station).
REVISED RECORDS.--WSP 781: 1933(M).
GAGE.--Water-stage recorder. Altitude of gage is 525 ft (160 m), from topographic map.
REMARKS.--Records good except those for January, which are fair. Occasional diurnal fluctuation at low flow caused by mills upstream; diurnal fluctuation greater prior to 1960. Diversion upstream for municipal supply of Bennington and North Bennington since 1961. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--45 years, 221 ft³/s (6.259 m³/s).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,450 ft³/s (239 m³/s) Sept. 21, 1938, gage height, 12.04 ft (3.670 m), from rating curve extended above 2,800 ft³/s (79.3 m³/s) on basis of contracted-opening measurements at gage heights 10.13 ft (3.088 m), 10.49 ft (3.197 m), 11.50 ft (3.505 m), and 12.04 ft (3.670 m) and slope-area measurement and computation of flow over dam at gage height 12.04 ft (3.670 m); minimum, 4 ft³/s (0.11 m³/s) Sept. 27, 1932; minimum daily, 21 ft³/s (0.59 m³/s) Sept. 22, 23, 1964, July 12, 1965.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (56.6 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 28	0600	2,360	66.8	6.07	1.850	June 30	0130	2,580	73.1	6.36	1.939
Apr. 1	1745	2,760	78.2	6.59	2.009	June 30	2115	3,330	94.3	7.29	2.222
May 19	0945	2,510	71.1	6.27	1.911	Aug. 1	1415	2,150	60.9	5.78	1.762
May 20	2045	2,380	67.4	6.10	1.859	Aug. 10	1430	†*6,510	184	*10.42	3.176
May 21	1815	2,190	62.0	5.84	1.780						

† From rating curve extended as explained above.

Minimum discharge, 14 ft³/s (0.40 m³/s) July 11; minimum daily, 105 ft³/s (2.97 m³/s) July 29, Sept. 9, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	284	226	445	219	344	633	1430	309	286	1310	1030	146
2	258	219	377	180	576	491	1030	564	270	463	576	209
3	233	212	308	192	504	421	655	422	236	328	292	170
4	216	281	266	186	406	432	511	408	217	255	219	144
5	199	244	240	150	332	809	434	325	204	216	180	144
6	183	212	269	170	300	927	388	285	201	170	164	130
7	173	199	328	200	288	573	358	307	272	173	356	117
8	167	230	244	170	273	441	330	373	214	164	428	112
9	161	255	237	150	247	370	300	287	179	206	262	105
10	155	237	364	160	240	352	280	254	162	152	3470	244
11	352	292	352	170	262	335	298	233	163	133	1330	428
12	986	281	273	160	230	297	276	786	179	364	591	216
13	654	681	247	140	230	336	252	516	148	826	607	161
14	552	747	251	340	223	337	240	376	137	385	753	138
15	410	514	273	262	199	291	233	728	161	273	481	122
16	428	419	356	206	262	256	233	460	137	216	622	114
17	352	377	266	180	402	241	229	387	273	206	410	135
18	1180	372	240	160	324	237	218	464	194	170	308	138
19	860	368	183	150	719	256	204	1650	144	149	258	158
20	1030	352	185	140	437	410	192	1860	131	133	226	127
21	670	528	223	135	340	857	181	1820	173	180	202	114
22	523	643	212	130	908	899	171	1460	142	173	183	125
23	437	428	202	125	703	490	172	1060	121	130	167	130
24	377	364	185	125	468	444	163	826	115	173	152	110
25	356	332	175	130	415	514	221	630	200	144	138	105
26	368	304	260	170	437	553	412	528	156	114	130	114
27	320	332	368	681	566	622	323	461	124	112	266	410
28	292	344	273	1570	561	1450	394	387	111	117	459	255
29	273	292	219	820	455	652	443	346	200	105	277	183
30	262	273	202	532	---	535	342	319	1420	233	216	155
31	240	---	240	385	---	507	---	299	---	161	167	---
TOTAL	12951	10558	8263	8488	11651	15968	10913	19130	6670	7934	14920	4959
MEAN	418	352	267	274	402	515	364	617	222	256	481	165
MAX	1180	747	445	1570	908	1450	1430	1860	1420	1310	3470	428
MIN	155	199	175	125	199	237	163	233	111	105	130	105

CAL YR 1975 TOTAL 121282 MEAN 332 MAX 2400 MIN 68
WTR YR 1976 TOTAL 132405 MEAN 362 MAX 3470 MIN 105

04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT

LOCATION.--Lat 43°37'40", long 73°18'50", Rutland County, Hydrologic Unit 02010001, on right bank 0.3 mi (0.5 km) downstream from Carver Falls, 1.9 mi (3.1 km) upstream from Hubbardton River, and 3.2 mi (5.1 km) northwest of Fair Haven.

DRAINAGE AREA.--187 mi^2 (484 km^2).

PERIOD OF RECORD.--Discharge: October 1928 to current year.
Chemical analyses: Water year 1954 (partial-record station).

REVISED RECORDS.--WSP 1114: 1929(M), 1932-35.

GAGE.--Water-stage recorder. Altitude of gage is 105 ft (32 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by powerplant upstream and by Lake Bomoseen. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--48 years, 244 ft^3/s (6.910 m^3/s), 17.72 in/yr (450 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft^3/s (419 m^3/s) July 20, 1945, gage height, 24.36 ft (7.425 m), from high-water mark in well, from rating curve extended above 2,400 ft^3/s (68.0 m^3/s) on basis of computations of flow over dam at gage heights 16.10 ft (4.907 m), 21.40 ft (6.523 m), and 24.36 ft (7.425 m); minimum daily, 2.1 ft^3/s (0.059 m^3/s) Aug. 8, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,600 ft^3/s (73.6 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1700	3,430	97.1	13.00	3.962	May 20	1145	2,810	79.6	11.86	3.615
Mar. 22	1230	2,600	73.6	11.44	3.487	July 12	1830	4,530	128	14.72	4.487
Apr. 2	0800	2,800	79.3	11.83	3.606	Aug. 11	0500	*4,570	129	*14.77	4.502

Minimum daily discharge, 73 ft^3/s (2.07 m^3/s) June 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	401	347	490	260	550	1100	1280	276	463	465	1200	98
2	355	324	450	250	690	899	2370	482	496	421	1430	181
3	309	300	370	250	600	749	1480	481	351	339	958	259
4	304	354	330	230	510	801	1160	533	180	310	774	100
5	284	387	300	220	450	854	961	436	159	208	492	116
6	242	337	340	230	420	1260	835	337	149	134	407	113
7	214	322	390	240	380	1180	768	318	228	111	277	93
8	196	313	290	230	360	959	691	346	239	111	487	88
9	187	386	320	210	340	842	635	348	197	175	489	87
10	179	348	410	220	330	803	578	297	161	108	1560	87
11	176	498	430	220	320	730	544	266	127	137	2130	223
12	428	404	350	210	310	595	460	497	162	2790	765	275
13	517	667	300	200	300	512	353	668	144	2690	1170	193
14	555	921	310	230	290	490	280	545	132	1450	1250	95
15	463	869	360	230	320	450	254	613	73	1220	1030	96
16	438	705	243	220	450	418	202	608	86	1030	1050	91
17	405	642	210	200	520	373	206	422	272	963	865	92
18	1120	638	191	190	530	343	194	736	265	842	653	110
19	1840	590	174	190	720	339	179	1470	177	688	409	111
20	2760	520	224	180	780	367	168	2630	160	516	305	102
21	1750	660	300	180	700	1020	132	1820	166	324	221	88
22	1120	810	270	180	950	2370	122	1440	288	393	214	90
23	854	600	260	180	1790	1530	144	1150	211	408	195	99
24	733	470	240	180	1350	1250	138	927	180	443	159	75
25	640	420	240	190	999	1300	135	803	192	507	144	78
26	636	400	280	210	986	1310	263	736	291	397	109	78
27	537	410	330	1100	1270	1250	416	659	200	260	107	261
28	490	430	310	1680	1660	1650	388	567	155	749	192	517
29	453	370	280	1550	1150	1540	404	481	122	491	245	523
30	407	390	260	1100	---	1150	328	407	169	579	120	408
31	367	---	270	650	---	1010	---	355	---	545	105	---
TOTAL	19360	14832	9522	11610	20025	29444	16068	21654	6195	19804	19512	4827
MEAN	625	494	307	375	691	950	536	699	207	639	629	161
MAX	2760	921	490	1680	1790	2370	2370	2630	496	2790	2130	523
MIN	176	300	174	180	290	339	122	266	73	108	105	75
CFSM	3.34	2.64	1.64	2.01	3.70	5.08	2.87	3.74	1.11	3.42	3.36	.86
IN.	3.85	2.95	1.89	2.31	3.98	5.86	3.20	4.31	1.23	3.94	3.88	.96

CAL YR 1975 TOTAL 113787.0 MEAN 312 MAX 2760 MIN 4.2 CFSM 1.67 IN 22.64
WTR YR 1976 TOTAL 192853.0 MEAN 527 MAX 2790 MIN 73 CFSM 2.82 IN 38.36

04281500 EAST CREEK AT RUTLAND, VT

LOCATION.--Lat 43°37'43", long 72°59'22", Rutland County, Hydrologic Unit 02010002, 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 mi^2 (132.3 km^2).

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

REVISED RECORDS.--WSP 1307: 1941-42(M).

GAGE.--Water-stage recorder. Altitude of gage is 570 ft (174 m), from topographic map.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Diversion upstream 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 ft^3 (23,220,000 m^3); prior to June 3, 1947, also regulated by East Pittsford Reservoir, usable capacity, 150,000,000 ft^3 (4,250,000 m^3). See table below for figures of diversion and monthend contents in Chittenden Reservoir. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--36 years, 96.4 ft^3/s (2.730 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,500 ft^3/s (1,030 m^3/s) June 3, 1947, gage height, 20.3 ft (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 ft^3/s (0.088 m^3/s) Nov. 8, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,120 ft^3/s (60.0 m^3/s) Aug. 10, gage height, 5.22 ft (1.591 m) from rating curve extended above 940 ft^3/s (26.6 m^3/s) on basis of slope-area measurements at gage heights 7.10 ft (2.164 m) and 20.3 ft (6.187 m), and computation of flow over dam at gage height 7.10 ft (2.164 m); minimum daily, 32 ft^3/s (0.91 m^3/s) June 13, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	130	267	130	300	242	520	79	243	217	284	82
2	150	130	236	120	280	196	700	211	187	149	221	209
3	140	170	220	115	251	197	500	134	167	98	216	63
4	115	250	210	115	231	203	370	146	163	73	204	59
5	105	270	190	120	212	363	300	117	51	39	194	61
6	110	180	230	105	205	357	260	107	55	104	192	35
7	110	137	300	120	197	228	230	128	175	110	83	50
8	105	209	190	105	197	196	200	100	148	92	121	35
9	100	202	190	115	197	177	170	77	136	88	153	60
10	100	188	300	105	197	170	160	97	130	41	929	150
11	86	117	260	96	203	170	150	92	130	46	579	200
12	300	157	230	105	197	160	145	216	57	333	259	93
13	350	278	170	120	201	180	140	144	32	201	275	127
14	310	265	200	160	186	200	130	124	114	177	256	130
15	260	144	240	135	185	170	130	173	81	152	256	120
16	250	137	200	140	200	150	150	72	100	151	304	103
17	240	170	180	145	205	130	170	110	174	124	227	134
18	350	199	140	140	201	140	150	183	67	63	206	108
19	600	208	110	130	364	150	130	573	32	114	195	89
20	700	228	80	105	251	270	120	500	36	127	187	130
21	580	310	110	105	183	300	116	434	217	200	85	146
22	350	230	130	105	286	540	92	283	208	153	60	141
23	290	106	130	130	244	500	95	234	165	128	148	138
24	270	173	120	120	184	400	58	238	138	220	174	89
25	240	169	120	110	190	350	73	260	204	106	156	39
26	240	165	140	130	240	380	165	268	123	122	145	54
27	220	101	170	600	351	420	153	259	67	198	127	221
28	200	98	150	750	218	560	157	230	119	197	129	170
29	190	78	140	540	141	560	152	211	113	152	110	146
30	180	85	135	450	---	450	124	82	187	249	132	135
31	170	---	135	360	---	350	---	86	---	116	145	---
TOTAL	7571	5284	5623	5826	6497	8859	6010	5968	3819	4340	6752	3317
MEAN	244	176	181	188	224	286	200	193	127	140	218	111
MAX	700	310	300	750	364	560	700	573	243	333	929	221
MIN	86	78	80	96	141	130	58	72	32	39	60	35
(†)	4.61	4.31	4.34	4.69	4.98	4.71	4.41	4.48	4.74	4.81	4.86	4.51
(‡)	622.2	610.5	563.3	469.6	350.0	431.8	544.8	652.1	625.3	672.8	594.1	594.1

CAL YR 1975 TOTAL 45228.1 MEAN 124 MAX 700 MIN 4.8
WTR YR 1976 TOTAL 69866.0 MEAN 191 MAX 929 MIN 32

† 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 Corps.
NOTE.--No gage-height record Oct. 1 to Nov. 6, Dec. 3 to Feb. 3, Mar. 11 to Apr. 21.

04282000 OTTER CREEK AT CENTER RUTLAND, VT

LOCATION.--Lat 43°36'13", long 73°00'49", Rutland County, Hydrologic Unit 02010002, on right bank 500 ft (150 m) upstream from bridge on U.S. Highway 4 at Center Rutland, 200 ft (60 m) downstream from dam, 1.2 mi (1.9 km) downstream from East Creek, and 1.5 mi (2.4 km) west of Rutland.
DRAINAGE AREA.--307 mi^2 (795 km^2).
PERIOD OF RECORD.--Discharge: May 1928 to current year.
Chemical analyses: Water years 1955, 1971 (partial-record station).
REVISED RECORDS.--WSP 1084: 1929.
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.
REMARKS.--Records good except those for period 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 ft^3 (23,220,000 m^3); prior to June 3, 1947, also regulated by East Pittsford Reservoir, usable capacity, 150,000,000 ft^3 (4,250,000 m^3). See table with station 04281500 for monthend contents in Chittenden Reservoir. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--48 years, 549 ft^3/s (15.55 m^3/s), 24.29 in/yr (617 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,700 ft^3/s (388 m^3/s) Sept. 22, 1938, gage height, 13.45 ft (4.100 m), present datum, from rating curve extended above 7,400 ft^3/s (210 m^3/s) on basis of computation of peak flow over dam; minimum daily, 45 ft^3/s (1.27 m^3/s) Sept. 21, 1947, Aug. 7, 1965.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,400 ft^3/s (96.3 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 20	1330	4,790	136	9.19	2.801	May 20	0830	4,390	124	8.76	2.670
Jan. 28	1615	5,600	159	9.99	3.045	July 12	1930	6,240	177	10.54	3.213
Mar. 22	0030	3,590	102	7.81	2.381	Aug. 2	-	4,500	127	-	-
Mar. 28	2145	3,550	101	7.76	2.365	Aug. 11	0215	*9,420	267	*12.70	3.871
Apr. 2	0715	5,790	164	10.16	3.097						

Minimum daily discharge, 274 ft^3/s (7.76 m^3/s) Dec. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	545	482	1100	459	1540	1550	3100	747	1300	1680	2500	402
2	530	443	1170	448	1380	1470	5320	1430	1070	1160	4000	969
3	493	485	892	390	1350	1150	3210	1400	773	679	2000	725
4	400	835	755	379	1110	1110	2090	1100	669	559	1200	487
5	344	931	653	375	924	1520	1490	858	530	465	800	425
6	378	658	691	400	809	2590	1170	734	457	434	760	375
7	376	597	1010	356	732	2230	1050	737	691	446	1200	356
8	358	715	677	396	672	1630	962	821	633	429	1800	327
9	341	934	611	351	664	1210	862	668	519	520	1070	305
10	348	797	804	380	637	1010	745	604	468	368	4600	415
11	287	1100	1080	349	661	880	730	558	442	414	7930	1130
12	1030	887	798	327	718	761	705	1090	438	5210	4320	749
13	1180	1610	684	383	671	815	654	1300	435	5000	2240	530
14	1090	1870	555	431	720	942	624	936	410	2880	1960	462
15	881	1690	695	532	619	828	612	1710	400	1660	1640	427
16	882	1240	838	453	695	735	701	1530	385	1100	1730	390
17	806	1060	637	471	805	619	801	1020	470	910	1420	413
18	2290	1030	621	469	786	666	771	1050	435	690	1010	553
19	3400	1000	460	442	1320	683	678	2730	375	600	832	783
20	4450	939	333	348	1460	1010	591	4220	365	495	726	566
21	3450	1090	274	352	1060	2130	562	3360	560	465	580	551
22	1930	1600	397	343	1610	3450	500	2520	510	500	500	503
23	1240	1190	419	419	2730	2540	524	2110	470	420	509	491
24	975	962	447	434	2430	1770	477	1620	410	650	517	413
25	795	867	405	346	1490	1620	484	1310	540	800	466	388
26	814	783	403	398	1370	1840	963	1170	510	510	438	313
27	776	734	581	3090	1810	1950	1050	1080	475	430	419	1020
28	699	811	562	4990	1880	3160	1050	928	450	400	591	1010
29	656	683	488	4410	1370	3100	1120	810	403	490	510	782
30	614	642	488	3500	---	1990	934	632	582	750	574	623
31	568	---	460	2750	---	1600	---	570	---	1350	492	---
TOTAL	32926	28665	19988	29171	34023	48559	34530	41353	16175	32464	49334	16883
MEAN	1062	956	645	941	1173	1566	1151	1334	539	1047	1591	563
MAX	4450	1870	1170	4990	2730	3450	5320	4220	1300	5210	7930	1130
MIN	287	443	274	327	619	619	477	558	365	368	419	305
CFSM	3.46	3.11	2.10	3.07	3.82	5.10	3.75	4.35	1.76	3.41	5.18	1.83
IN.	3.99	3.47	2.42	3.53	4.12	5.88	4.18	5.01	1.96	3.93	5.98	2.05

CAL YR 1975 TOTAL 263834 MEAN 723 MAX 4450 MIN 88 CFSM 2.36 IN 31.97
WTR YR 1976 TOTAL 384071 MEAN 1049 MAX 7930 MIN 274 CFSM 3.42 IN 46.54

NOTE.--No gage-height record July 16 to Aug. 10.

04282500 OTTER CREEK AT MIDDLEBURY, VT

LOCATION.--Lat 44°00'47", long 73°10'06", Addison County, Hydrologic Unit 02010002, on right bank 150 ft (46 m) upstream from highway bridge in Middlebury and 3.5 mi (5.6 km) downstream from Middlebury River.

DRAINAGE AREA.--628 mi^2 (1,627 km^2).

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).

REVISED RECORDS.--WSP 434: 1903-4. WSP 684: 1913(M), drainage area. WSP 1114: 1913. WSP 1207: 1929, 1931.

GAGE.--Water-stage recorder. Datum of gage is 335.75 ft (102.337 m) 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.

REMARKS.--Records good. Some regulation by Chittenden Reservoir, usable capacity, 819,800,000 ft^3 (23,220,000 m^3) on East Creek; see table with station 04281500 for monthend contents. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--60 years (water years 1904-06, 1911-19, 1929-76), 979 ft^3/s (27.73 m^3/s), 21.17 in/yr (538 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft^3/s (312 m^3/s) Mar. 20, 21, 1936, gage height, 10.3 ft (3.14 m); minimum daily, 92 ft^3/s (2.61 m^3/s) Aug. 9, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 13,600 ft^3/s (385 m^3/s) Nov. 4, 1927, gage height, 13.3 ft (4.05 m), present datum, at site 1,800 ft (550 m) upstream, from rating curve extended above 9,000 ft^3/s (255 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,120 ft^3/s (145 m^3/s) Apr. 5, gage height, 6.54 ft (1.993 m); minimum daily, 572 ft^3/s (16.2 m^3/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1660	2120	1900	853	2210	3480	4450	1670	2700	1470	2510	954
2	1540	1920	1860	775	2450	3480	4930	1700	2510	1640	2400	1010
3	1390	1700	1810	697	2590	3350	4750	1700	2360	1740	2310	1220
4	1200	1540	1790	683	2630	3240	4950	1760	2240	1700	2290	1150
5	963	1500	1720	672	2650	3290	5100	1800	2110	1530	2300	910
6	752	1490	1650	669	2630	3520	4940	1780	1940	1260	2320	760
7	615	1430	1670	678	2580	3430	4500	1740	1750	1010	2310	695
8	594	1330	1550	690	2490	3360	4040	1670	1560	897	2470	680
9	593	1390	1480	680	2390	3310	3580	1560	1390	864	2310	658
10	580	1450	1490	670	2270	3270	3230	1440	1170	901	2660	648
11	572	1630	1570	670	2160	3240	2950	1290	1110	766	2930	1090
12	872	1620	1570	660	2040	3100	2710	1520	989	1080	2710	1270
13	1310	1720	1540	680	1940	2940	2510	1610	866	1650	2760	1200
14	1480	1910	1450	700	1850	2780	2310	1650	756	1840	3070	1040
15	1530	2010	1340	720	1770	2610	2130	1690	741	1990	3440	884
16	1530	2060	1360	730	1680	2420	1970	1710	766	2130	3870	720
17	1500	2100	1350	710	1620	2240	1840	1750	996	2350	3930	677
18	1750	2150	1300	700	1610	2040	1740	1860	1210	2410	3830	733
19	1860	2180	1110	670	1690	1850	1640	2240	1130	2440	3660	836
20	2250	2170	1160	660	1770	1870	1500	2560	930	2410	3480	1000
21	2290	2220	1170	633	1770	2270	1320	2560	763	2380	3280	966
22	2350	2380	1230	649	2020	2590	1130	2660	1030	2270	3060	890
23	2520	2290	1250	670	2200	2520	1050	2830	1270	2130	2840	814
24	2760	2230	1100	650	2170	2620	953	3050	1260	2270	2610	772
25	2970	2190	880	622	2230	2880	883	3240	1260	2090	2400	680
26	3020	2150	721	621	2400	3150	1070	3350	1400	1950	2180	596
27	2960	2100	734	1790	2720	3340	1420	3360	1340	1810	1930	1020
28	2820	2060	780	2030	2990	3810	1590	3260	1200	1690	1690	1360
29	2660	1980	820	1910	3190	3820	1640	3110	1040	1600	1480	1380
30	2470	1890	846	1950	---	3820	1660	2940	1020	1500	1220	1300
31	2290	---	840	2070	---	3970	---	2760	---	1640	1100	---
TOTAL	53651	56910	41041	27562	64710	93610	78486	67820	40807	53408	81350	27913
MEAN	1731	1897	1324	889	2231	3020	2616	2188	1360	1723	2624	930
MAX	3020	2380	1900	2070	3190	3970	5100	3360	2700	2440	3930	1380
MIN	572	1330	721	621	1610	1850	883	1290	741	766	1100	596
CFSM	2.76	3.02	2.11	1.42	3.55	4.81	4.17	3.48	2.17	2.74	4.18	1.48
IN.	3.18	3.37	2.43	1.63	3.83	5.55	4.65	4.02	2.42	3.16	4.82	1.65

CAL YR 1975 TOTAL 441934 MEAN 1211 MAX 3080 MIN 171 CFSM 1.93 IN 26.18
WTR YR 1976 TOTAL 687268 MEAN 1878 MAX 5100 MIN 572 CFSM 2.99 IN 40.71

04284000 JAIL BRANCH AT EAST BARRE, VT

LOCATION.--Lat 44°09'30", long 72°26'44", Washington County, Hydrologic Unit 02010003, on right bank 1,400 ft (430 m) upstream from highway bridge, at East Barre, 1,400 ft (430 m) downstream from East Barre Detention Reservoir, and 4.2 mi (6.8 km) upstream from mouth.
DRAINAGE AREA.--38.9 mi^2 (100.8 km^2).
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.
REVISED RECORDS.--WSP 564: 1922. WSP 1034: Drainage area. WSP 1307: 1921-23(M).
GAGE.--Water-stage recorder. Datum of gage is 1,107.25 ft (337.490 m) 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).
REMARKS.--Records good except those for winter period and periods of no gage-height record, which are poor. Discharge affected by East Barre Detention Reservoir since 1935 (Reservoirs in Winooski River basin). Prior to 1964, occasional diurnal fluctuation at low flow caused by mill upstream. Diversion from reservoir on Orange Brook, a tributary upstream, for city of Barre. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--46 years, 54.3 ft^3/s (1.538 m^3/s), 18.96 in/yr (482 mm/yr), adjusted for storage.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,820 ft^3/s (51.5 m^3/s) Oct. 1, 1920, gage height, 9.50 ft (2.896 m), from graph based on gage readings, site and datum then in use, from rating curve extended above 900 ft^3/s (25.5 m^3/s); minimum, 0.1 ft^3/s (0.003 m^3/s) Aug. 18, 1950, Aug. 3, 4, 31, Sept. 1, 3, 1953. Maximum discharge since construction of East Barre Detention Reservoir in 1935, 634 ft^3/s (18.0 m^3/s) Apr. 19, 1969, gage height, 3.31 ft (1.009 m), site and datum then in use; maximum gage height, 9.48 ft (2.890 m) Jan. 7, 1973, ice jam.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 600 ft^3/s (17.0 m^3/s) Apr. 2; maximum gage height not determined; minimum discharge, 8.9 ft^3/s (0.25 m^3/s) July 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	43	177	25	45	114	450	367	243	83	93	26
2	19	43	135	24	60	100	580	257	110	39	63	87
3	19	43	79	23	54	97	400	235	88	43	31	73
4	15	51	58	22	50	89	280	150	98	49	21	41
5	14	48	61	21	48	118	220	140	79	33	16	33
6	14	39	63	21	46	250	180	120	69	15	13	31
7	14	38	80	20	44	170	150	150	75	13	20	26
8	13	40	64	20	42	150	140	120	80	26	74	21
9	11	55	60	19	41	130	130	110	62	20	42	19
10	11	53	90	19	40	110	120	100	55	15	389	18
11	14	83	80	19	39	95	110	90	68	11	508	17
12	150	56	70	18	39	85	105	200	95	34	449	138
13	93	123	55	18	39	75	100	130	63	14	194	93
14	85	231	70	20	39	68	100	140	54	11	130	54
15	58	162	100	25	40	60	125	120	49	10	125	37
16	49	97	70	24	45	55	150	110	51	15	86	27
17	39	87	60	21	42	70	200	100	139	40	70	23
18	221	102	58	20	40	65	175	200	71	20	53	21
19	176	95	52	19	80	75	150	300	52	15	41	20
20	299	79	48	19	70	100	130	260	68	14	37	21
21	270	104	44	18	60	320	120	230	192	14	32	25
22	105	252	40	18	100	220	117	200	188	13	30	22
23	77	130	37	20	120	190	106	170	85	9.5	25	20
24	65	86	35	19	80	200	101	160	61	171	21	19
25	61	76	33	18	60	230	151	150	216	56	20	18
26	85	61	31	18	100	280	210	150	145	26	18	18
27	63	59	30	19	199	350	239	151	104	36	80	17
28	58	61	29	90	224	400	176	109	77	66	238	15
29	54	61	28	80	153	350	137	95	61	31	52	161
30	51	63	27	60	---	310	109	86	61	53	37	64
31	45	---	26	50	---	300	---	84	---	41	29	---
TOTAL	2273	2521	1890	827	2039	5226	5461	4984	2859	1036.5	3037	1205
MEAN	73.3	84.0	61.0	26.7	70.3	169	182	161	95.3	33.4	98.0	40.2
MAX	299	252	177	90	224	400	580	367	243	171	508	161
MIN	11	38	26	18	39	55	100	84	49	9.5	13	15
MEAN†	73.6	85.9	59.5	28.6	70.7	176	175	157	95.4	33.4	97.8	40.2
CFSM†	1.89	2.21	1.53	.74	1.82	4.52	4.50	4.04	2.45	.86	2.51	1.03
IN.†	2.18	2.46	1.76	.85	1.96	5.23	5.03	4.65	2.74	.99	2.90	1.15

CAL YR 1975 TOTAL 23132.5 MEAN 63.4 MAX 499 MIN 1.5 MEAN† 63.4 CFSM† 1.63 IN† 22.13
WTR YR 1976 TOTAL 33358.5 MEAN 91.1 MAX 580 MIN 9.5 MEAN† 91.1 CFSM† 2.34 IN† 31.90

† Adjusted for change in contents in East Barre Detention Reservoir.
NOTE.--No gage-height record Dec. 7 to Jan. 7, Jan. 28 to Feb. 25, Mar. 16 to Apr. 21, May 4-25. July 6-21.

04285500 NORTH BRANCH WINOOSKI RIVER AT WRIGHTSVILLE, VT

LOCATION.--Lat 44°17'58", long 72°34'45", Washington County, Hydrologic Unit 02010003, on right bank at Wrightsville, 0.8 mi (1.3 km) downstream from Wrightsville Detention Reservoir, and 3.5 mi (5.6 km) upstream from mouth.

DRAINAGE AREA.--69.2 mi^2 (179.2 km^2).

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).

REVISED RECORDS.--WSP 1237: 1937: 1934-39.

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.

REMARKS.--Records good except those for winter period, which are fair, and those for period of no gage-height record, which are poor. Discharge affected since 1935 by Wrightsville Detention Reservoir (Reservoirs in Winooski River basin). Occasional diurnal fluctuation at low flow caused by small mill upstream; more frequent diurnal fluctuation prior to 1968. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--43 years, 133 ft^3/s (3.767 m^3/s), 26.10 in/yr (663 mm/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,170 ft^3/s (61.5 m^3/s) Apr. 12, 1934, gage height, 6.53 ft (1.990 m), from rating curve extended above 920 ft^3/s (26.1 m^3/s); minimum daily, 0.2 ft^3/s (0.006 m^3/s) Aug. 13, 1941. Maximum discharge since construction of Wrightsville Detention Reservoir in 1935, 1,040 ft^3/s (29.5 m^3/s) Mar. 21, 1936, gage height, 4.32 ft (1.317 m); maximum gage height, 5.43 ft (1.655 m) Mar. 12, 1936, ice jam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 17,200 ft^3/s (487 m^3/s) Nov. 3, 1927, by computation of peak flow over dam 0.8 mi (1.3 km) above gage.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 925 ft^3/s (26.2 m^3/s) Apr. 2, gage height, 3.90 ft (1.189 m); minimum daily, 20 ft^3/s (0.57 m^3/s) June 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	323	80	242	69	155	220	754	188	80	127	283	71
2	132	79	298	66	145	160	899	327	64	100	322	121
3	83	77	197	63	165	148	894	366	49	71	170	77
4	69	83	154	60	150	137	874	334	53	71	71	59
5	60	81	119	58	135	174	857	246	41	49	47	58
6	54	70	161	56	125	323	832	148	35	40	43	51
7	54	65	232	54	110	326	813	228	59	35	43	44
8	49	73	137	52	100	294	794	287	66	58	92	39
9	45	89	138	51	92	183	773	186	45	318	76	35
10	42	83	206	49	85	155	750	147	33	205	376	34
11	46	346	250	48	76	135	727	127	29	66	614	178
12	289	311	156	47	72	130	705	273	49	58	602	104
13	347	341	118	48	69	115	677	328	35	53	560	71
14	331	447	138	50	80	133	648	270	29	50	536	53
15	287	476	201	48	100	114	617	179	25	49	507	44
16	192	446	314	47	75	128	599	139	23	67	488	40
17	151	401	150	47	75	109	614	126	24	227	438	39
18	301	358	140	46	74	105	639	353	23	119	384	46
19	431	342	150	45	101	98	650	619	20	69	62	45
20	492	263	180	45	142	92	627	696	49	52	69	43
21	544	279	230	45	136	261	595	698	173	47	58	41
22	523	439	170	45	165	416	553	688	80	36	41	41
23	482	439	135	45	322	489	499	662	47	29	35	45
24	428	396	110	45	340	468	441	626	35	271	34	39
25	357	316	96	46	238	455	368	583	279	221	31	33
26	301	163	100	48	177	465	320	535	322	67	30	35
27	161	149	90	220	259	501	301	454	192	58	100	306
28	126	146	80	368	317	631	290	386	100	111	90	339
29	110	130	84	303	315	701	298	294	84	62	275	216
30	99	125	72	195	---	709	277	80	66	82	271	102
31	86	---	70	175	---	719	---	62	---	71	100	---
TOTAL	6995	7093	4918	2584	4395	9094	18685	10635	2209	2939	6848	2449
MEAN	226	236	159	83.4	152	293	623	343	73.6	94.8	221	81.6
MAX	544	476	314	368	340	719	899	698	322	318	614	339
MIN	42	65	70	45	69	92	277	62	20	29	30	33
MEAN†	217	237	158	83.8	153	381	534	339	73.8	94.8	221	81.8
CFSM†	3.14	3.42	2.28	1.21	2.21	5.51	7.72	4.90	1.07	1.37	3.19	1.18
IN.†	3.61	3.82	2.63	1.40	2.38	6.35	8.62	5.65	1.19	1.58	3.68	1.32

CAL YR 1975 TOTAL 54584.5 MEAN 150 MAX 689 MIN 4.6 MEAN† 150 CFSM† 2.17 IN† 29.34
WTR YR 1976 TOTAL 78844.0 MEAN 215 MAX 899 MIN 20 MEAN† 215 CFSM† 3.11 IN† 42.23

† Adjusted for change in contents in Wrightsville Detention Reservoir.
NOTE.--No gage-height record May 28 to Sept. 1.

RESERVOIRS IN WINOOSKI RIVER BASIN ABOVE MONTPELIER, VT

04283500 EAST BARRE DETENTION RESERVOIR.--Lat 44°09'18", long 72°26'42", Washington County, Hydrologic Unit 02010003, at dam on Jail Branch at East Barre, 4.5 mi (7.2 km) upstream from mouth. DRAINAGE AREA, 38.8 mi^2 (100.5 km^2). PERIOD OF RECORD, February 1936 (in WSP 1307), March and April 1936 (in WSP 798), May 1936 to August 1938 (in WSP 1307), September 1938 (in WSP 867), October 1938 to current year. GAGE, water-stage recorder. Datum of gage is 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.

Reservoir is formed by earthfill dam completed by Corps of Engineers in 1935 for flood control. Usable capacity, 525,000,000 ft^3 (14,900,000 m^3) between elevation 1,124.9 ft (342.87 m, bottom of outlet opening) and 1,165.0 ft (355.09 m, crest of spillway). Dam has no gates; below elevation 1,165.0 ft (355.09 m), outflow from reservoir is dependent on capacity of outlet opening near base of dam. Outlet-opening enlargement and reservoir-construction modifications completed in November 1959. Size of opening since enlargement, height, 7 ft (2.1 m) and average width, 3.7 ft (1.13 m). Figures given herein represent usable contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,163.9 ft (354.76 m), present datum, Mar. 22, 1936; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,147.28 ft (349.691 m) Apr. 2; minimum, 1,128.58 ft (343.991 m) Oct. 11.

04285000 WRIGHTSVILLE DETENTION RESERVOIR.--Lat 44°18'38", long 72°34'31", Washington County, Hydrologic Unit 02010003, at dam on North Branch Winooski River at Wrightsville, 0.3 mi (0.5 km) downstream from Long Meadow Brook, and 4.2 mi (6.8 km) upstream from mouth. DRAINAGE AREA, 66.5 mi^2 (172.2 km^2). PERIOD OF RECORD, November 1935 to February 1936 (in WSP 1307), March to May 1936 (in WSP 798), June 1936 to August 1938 (in WSP 1307), September 1938 (in WSP 867), October 1938 to current year. GAGE, water-stage recorder. Datum of gage is 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 km) above mean sea level.

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 ft^3 (620,000 m^3) between elevations 612.75 ft (186.766 m, bottom of outlet opening) and 620.00 ft (188.976 m); for flood control, 851,500,000 ft^3 (24,110,000 m^3) between elevations 620.00 ft (188.976 m) and 685.00 ft (208.788 m, crest of spillway); total usable capacity, 873,500,000 ft^3 (24,740,000 m^3). Dam has no gates; below elevation 685.00 ft (208.788 m), outflow from reservoir is dependent on capacity of outlet opening, 5.25 ft (1.600 m) square near base of dam. Figures given herein represent usable contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 676.4 ft (206.17 m), present datum, Mar. 22, 1936, from graph based on gage readings; minimum observed, 613.00 ft (186.84 m) Aug. 17, 1949, and Aug. 17-19, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 669.44 ft (204.045 m) Apr. 3; minimum, 618.62 ft (188.555 m) May 3.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

Date	Elevation (feet)	Contents (millions of cubic feet)	Change in contents: Millions of cubic feet	Change in contents: Equivalent, cubic feet per second
		04283500 East Barre Detention Reservoir		
Sept. 30	1129.48	4.9	-	-
Oct. 31	1130.05	5.6	+0.7	+0.26
Nov. 30	1133.40	10.4	+4.8	+1.85
Dec. 31	1130.65	6.4	-4.0	-1.49
CAL YR 1975	-	-	+.8	+.03
Jan. 31	1134.13	11.6	+5.2	+1.94
Feb. 28	1134.74	12.7	+1.1	+.44
Mar. 31	1139.85	33.9	+21.2	+7.92
Apr. 30	1136.25	16.2	-17.7	-6.83
May 31	1129.80	5.3	-10.9	-4.07
June 30	1130.03	5.6	+.3	+.12
July 31	1129.89	5.4	-.2	-.07
Aug. 31	1129.48	4.9	-.5	-.19
Sept. 30	1129.59	5.1	+.2	+.08
WTR YR 1976	-	-	+.2	+.01
		04285000 Wrightsville Detention Reservoir		
Sept. 30	*626.1	49.3		
Oct. 31	620.76	25.0	-24.3	-9.07
Nov. 30	620.89	25.5	+.5	+.19
Dec. 31	620.47	23.9	-1.6	-.60
CAL YR 1975	-	-	0	0
Jan. 31	620.77	25.0	+1.1	+.41
Feb. 28	621.61	28.5	+3.5	+1.40
Mar. 31	650.42	263.7	+235.2	+87.8
Apr. 30	622.95	34.3	-229.4	-88.5
May 31	620.52	24.1	-10.2	-3.81
June 30	620.60	24.4	+.3	+.12
July 31	620.63	24.5	+.1	+.04
Aug. 31	620.62	24.4	-.1	-.04
Sept. 30	620.68	24.7	+.3	+.12
WTR YR 1976	-	-	-24.6	-.78

*Estimated.

04286000 WINOOSKI RIVER AT MONTPELIER, VT

LOCATION.--Lat 44°15'23", long 72°35'36", Washington County, Hydrologic Unit 02010003, on right bank 0.4 mi (0.6 km) upstream from Dog River and 1 mi (1.6 km) downstream from depot at Montpelier.
DRAINAGE AREA.--397 mi^2 (1,028 km^2).
PERIOD OF RECORD.--Discharge: May 1909 to June 1914 (fragmentary), July 1914 to September 1923, August 1928 to current year.
REVISED RECORDS.--WSP 424: 1915. WSP 894: Drainage area. WSP 1437: 1912-14(M), 1915-18, 1919(M), 1920, 1921(M), 1922-23, 1929, 1933, 1934(M), 1936, 1937(M), 1938, 1946(M). WRD MA, NH, RI, VT, 1972: 1969(M), 1970(P), 1971(M).
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.
REMARKS.--Records good except those for winter period, which are fair. Flow regulated by several small powerplants upstream, by Peacham Pond and, since 1926, by Mollys Falls Reservoir, combined usable capacity, 492,000,000 ft^3 (13,900,000 m^3), which regulate runoff from 24 mi^2 (62 km^2), and by East Barre and Wrightsville Detention Reservoirs since 1935 (Reservoirs in Winooski River basin). See table below for monthend contents in Peacham Pond and Mollys Falls Reservoir. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--57 years (water years 1915-23, 1929-76), 588 ft^3/s (16.65 m^3/s).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,200 ft^3/s (487 m^3/s) Apr. 7, 1912, gage height, 17.31 ft (5.276 m), from floodmarks, present datum, from rating curve extended above 6,900 ft^3/s (195 m^3/s); maximum gage height, 17.55 ft (5.349 m) June 30, 1973; minimum daily discharge, 17 ft^3/s (0.48 m^3/s) Sept. 3, 1933.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 57,000 ft^3/s (1,610 m^3/s) Nov. 3, 1927, gage height, 27.1 ft (8.26 m), from rating curve extended above 6,900 ft^3/s (195 m^3/s).
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,900 ft^3/s (110 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	0100	4,410	125	9.03	2.752	May 19	2000	5,020	142	9.79	2.984
Mar. 28	0645	6,600	187	11.32	3.450	Aug. 10	1830	7,600	215	12.31	3.752
Apr. 1	2100	*10,500	297	*14.97	4.563						

Minimum daily discharge, 192 ft^3/s (5.44 m^3/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	624	457	1240	470	760	1400	6430	827	1280	609	861	354
2	432	439	1200	410	820	1100	6910	1530	930	534	916	637
3	375	466	905	370	830	1000	4320	1310	738	460	719	499
4	331	513	741	350	840	1300	3420	1300	732	534	484	366
5	296	481	636	340	740	2000	2930	1020	666	441	379	326
6	301	419	700	380	640	2400	2650	795	587	346	330	299
7	303	402	874	500	600	1400	2360	909	637	287	334	269
8	293	419	604	490	620	1000	2100	1010	701	266	671	249
9	289	513	708	400	590	950	1900	775	514	1030	581	231
10	288	509	842	400	580	890	1760	666	418	654	3970	219
11	340	1030	1000	360	560	840	1710	637	441	375	3500	701
12	1220	761	777	370	540	800	1600	1450	631	358	2020	587
13	934	1180	676	350	520	750	1550	1430	460	375	1630	405
14	927	1870	644	330	540	700	1500	1020	383	346	1780	322
15	765	1490	838	330	510	660	1530	868	371	334	1520	269
16	713	1140	969	340	520	640	1710	677	346	405	1430	243
17	635	1080	664	330	570	630	1890	625	414	1100	1180	231
18	1910	1100	683	310	600	630	1880	2020	409	654	989	234
19	1480	1050	579	340	740	655	1730	3990	326	427	888	246
20	2750	902	530	360	880	789	1600	3940	318	338	677	240
21	2060	1070	450	340	800	2270	1420	2710	1010	299	549	228
22	1470	1820	470	290	1400	3380	1280	2460	854	280	479	219
23	1230	1290	540	300	2100	1990	1200	2030	474	246	427	222
24	1090	1070	530	300	1700	1920	1090	1790	346	1420	379	216
25	911	976	500	300	1400	2390	943	1640	1070	1050	338	202
26	891	721	440	310	1200	2670	1180	1560	1270	609	306	192
27	712	652	390	600	1600	3270	1370	1460	775	494	474	854
28	658	676	430	1800	2000	5720	1330	1240	587	732	795	814
29	610	627	420	1600	1800	3680	1150	1080	460	549	504	625
30	575	636	450	1200	---	3370	1000	834	465	555	571	427
31	523	---	490	900	---	3410	---	744	---	565	427	---
TOTAL	25936	25759	20920	15470	27000	54604	63443	44347	18613	16672	30108	10926
MEAN	837	859	675	499	931	1761	2115	1431	620	538	971	364
MAX	2750	1870	1240	1800	2100	5720	6910	3990	1280	1420	3970	854
MIN	288	402	390	290	510	630	943	625	318	246	306	192
(†)	389.2	407.7	272.9	217.7	156.1	192.5	365.0	383.3	277.4	383.3	373.7	376.8

CAL YR 1975 TOTAL 244008 MEAN 669 MAX 4660 MIN 99
WTR YR 1976 TOTAL 353798 MEAN 967 MAX 6910 MIN 192

† Monthend contents, in millions of cubic feet, in Peacham Pond and Mollys Falls Reservoir; records furnished by Green Mountain Power Corp.

04287000 DOG RIVER AT NORTHFIELD FALLS, VT

LOCATION.--Lat 44°10'58", long 72°38'27", Washington County, Hydrologic Unit 02010003, on right bank 1 mi (1.6 km) downstream from Northfield Falls and 1.2 mi (1.9 km) downstream from Cox Branch.

DRAINAGE AREA.--76.1 mi^2 (197.1 km^2).

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).

REVISED RECORDS.--WSP 1237: 1935-37.

GAGE.--Water-stage recorder. Datum of gage is 603.00 ft (183.794 m) above mean sea level (levels by Corps of Engineers).

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. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--42 years, 122 ft^3/s (3.455 m^3/s), 21.77 in/yr (553 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft^3/s (300 m^3/s) June 30, 1973, gage height, 11.57 ft (3.527 m), from rating curve extended above 1,500 ft^3/s (42.5 m^3/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 ft^3/s (0.12 m^3/s) Aug. 31, Sept. 7, 1942.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft^3/s (45.3 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	2115	1,840	52.1	4.92	1.500	May 18	2045	1,790	50.7	4.86	1.481
Mar. 28	0115	2,980	84.4	6.16	1.878	Aug. 10	1400	5,930	168	8.56	2.609
Apr. 1	1615	*6,680	189	*9.13	2.783						

Minimum discharge, 40 ft^3/s (1.13 m^3/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	116	246	62	120	307	3540	183	194	117	299	65
2	89	110	213	60	150	257	2150	548	134	84	216	101
3	80	112	177	57	140	241	850	302	113	84	123	66
4	72	119	151	55	135	217	530	234	104	92	96	56
5	66	107	154	53	125	382	420	198	93	74	81	55
6	63	98	172	52	120	587	360	175	84	62	77	50
7	59	95	198	51	115	350	310	211	91	56	78	46
8	56	97	157	50	110	266	285	199	84	53	182	44
9	52	106	140	48	105	245	260	166	73	59	130	44
10	51	131	229	47	105	233	240	148	66	50	2150	57
11	58	275	220	46	100	194	240	135	66	48	677	185
12	444	181	160	46	100	178	220	319	87	118	318	85
13	289	331	136	45	100	170	205	235	65	74	266	66
14	237	474	143	48	100	158	210	185	60	66	295	57
15	176	323	240	50	105	145	230	198	55	59	245	51
16	158	259	261	52	110	128	280	158	51	87	245	49
17	132	236	160	50	111	137	395	147	64	167	183	50
18	633	239	150	48	104	131	430	565	54	92	142	56
19	420	224	135	47	189	138	250	1200	48	72	119	51
20	928	195	120	46	178	227	205	725	46	61	105	46
21	477	244	115	45	164	861	184	496	64	62	93	47
22	318	341	105	47	404	862	164	420	83	55	84	48
23	246	240	97	50	505	457	160	330	59	49	76	51
24	205	204	91	48	339	475	140	273	49	248	69	46
25	193	181	86	47	248	657	144	236	174	132	64	42
26	246	157	81	46	271	811	211	229	126	89	60	45
27	187	157	76	54	499	1160	227	208	85	82	70	190
28	164	151	72	240	445	1750	245	170	70	87	76	99
29	150	136	69	180	324	776	240	146	61	70	64	76
30	137	137	67	145	---	728	208	127	67	93	55	70
31	124	---	64	125	---	742	---	118	---	87	51	---
TOTAL	6605	5776	4485	2040	5621	13970	13533	8984	2470	2629	6789	1994
MEAN	213	193	145	65.8	194	451	451	290	82.3	84.8	219	66.5
MAX	928	474	261	240	505	1750	3540	1200	194	248	2150	190
MIN	51	95	64	45	100	128	140	118	46	48	51	42
CFSM	2.80	2.54	1.91	.86	2.55	5.93	5.93	3.81	1.08	1.11	2.88	.87
IN.	3.23	2.82	2.19	1.00	2.75	6.83	6.62	4.39	1.21	1.29	3.32	.97

CAL YR 1975 TOTAL 51034 MEAN 140 MAX 1510 MIN 12 CFSM 1.84 IN 24.95
WTR YR 1976 TOTAL 74896 MEAN 205 MAX 3540 MIN 42 CFSM 2.69 IN 36.61

04288000 MAD RIVER NEAR MORETOWN, VT

LOCATION.--Lat 44°16'42", long 72°44'37", Washington County, Hydrologic Unit 02010003, on left bank at downstream side of highway bridge, 2.4 mi (3.9 km) downstream from Moretown, and 3.8 mi (6.1 km) upstream from mouth.
DRAINAGE AREA.--139 mi^2 (360 km^2).
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).
REVISED RECORDS.--WSP 744: Drainage area. WSP 854: 1934(M). WSP 1114: 1929, 1930(M), 1936-37.
GAGE.--Water-stage recorder. Concrete control since Oct. 13, 1933. Datum of gage is 543.93 ft (165.790 m) 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.
REMARKS.--Records good except those for winter period, which are fair. Occasional diurnal fluctuation at low flow; much greater regulation prior to 1958. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--48 years (water years 1928-76), 254 ft^3/s (7.193 m^3/s), 24.82 in/yr (630 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft^3/s (521 m^3/s) Sept. 22, 1938, gage height, 16.34 ft (4.980 m), from floodmarks, from rating curve extended above 2,700 ft^3/s (76.5 m^3/s) on basis of computations of flow over dam at gage heights 9.98 ft (3.042 m), 11.51 ft (3.508 m), 16.34 ft (4.980 m), and 19.4 ft (5.91 m); minimum, 1.4 ft^3/s (0.040 m^3/s) Oct. 1, 1930.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 23,000 ft^3/s (651 m^3/s) Nov. 3, 1927, gage height, 19.4 ft (5.91 m), from floodmarks, by computation of peak flow over dam.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,400 ft^3/s (96.3 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 28	-	5,500	156	-	-	May 19	1845	4,040	114	7.56	2.304
Apr. 1	1730	7,240	205	9.84	2.999	Aug. 10	1600	*†13,400	379	*13.47	4.106

† From rating curve extended as explained above.

Minimum discharge, 64 ft^3/s (1.81 m^3/s) Sept. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	192	176	813	110	220	600	4700	448	508	258	1270	103
2	181	168	522	105	290	500	1990	1060	293	159	629	252
3	165	195	395	100	275	450	1110	617	225	175	361	123
4	137	245	331	98	270	410	802	472	202	159	260	100
5	122	202	328	96	240	700	650	379	167	120	199	97
6	113	169	447	94	225	1010	590	336	144	93	227	86
7	111	158	565	91	210	700	539	502	273	83	225	76
8	99	175	428	89	200	550	478	478	188	110	670	71
9	92	257	360	87	195	490	424	362	137	379	367	67
10	87	250	577	85	190	460	390	309	117	133	6200	214
11	92	643	494	84	190	379	407	273	120	140	3400	671
12	887	361	359	83	190	336	341	725	167	533	1600	230
13	539	638	493	82	190	336	330	496	113	244	896	151
14	484	816	446	86	190	346	341	379	101	197	961	116
15	340	567	335	94	200	288	373	407	93	169	1130	97
16	346	457	275	96	215	239	584	315	83	343	1010	90
17	278	422	260	91	210	248	738	362	167	939	625	95
18	1210	495	240	88	220	278	663	980	110	341	440	114
19	777	475	230	85	300	379	533	2250	85	226	337	100
20	1970	404	215	83	350	704	430	1440	95	164	274	87
21	908	695	200	86	330	1800	336	1000	95	230	226	87
22	570	936	185	91	580	1400	304	876	104	169	189	99
23	428	532	175	95	950	900	341	657	88	127	161	110
24	351	422	165	88	600	1000	278	508	73	947	140	85
25	312	358	150	86	500	1200	268	442	571	429	126	76
26	403	300	145	88	620	1800	436	419	336	259	113	86
27	311	292	140	100	900	2500	472	384	184	229	234	803
28	269	287	130	440	850	3300	539	309	137	336	150	325
29	241	253	130	330	800	1700	558	253	107	210	136	212
30	218	264	120	270	---	1400	533	220	117	309	110	164
31	193	---	115	230	---	3000	---	211	---	266	99	---
TOTAL	12426	11612	9768	3731	10700	29403	20478	17869	5200	8476	22765	4987
MEAN	401	387	315	120	369	948	683	576	173	273	734	166
MAX	1970	936	813	440	950	3300	4700	2250	571	947	6200	803
MIN	87	158	115	82	190	239	268	211	73	83	99	67
CFSM	2.88	2.78	2.27	.86	2.65	6.82	4.91	4.14	1.24	1.96	5.28	1.19
IN.	3.33	3.11	2.61	1.00	2.86	7.87	5.48	4.78	1.39	2.27	6.09	1.33

CAL YR 1975 TOTAL 106549 MEAN 292 MAX 3400 MIN 21 CFSM 2.10 IN 28.52
WTR YR 1976 TOTAL 157415 MEAN 430 MAX 6200 MIN 67 CFSM 3.09 IN 42.13

NOTE.--No gage-height record Dec. 27 to Mar. 9, Mar. 22-31.

04288500 WATERBURY RESERVOIR NEAR WATERBURY, VT

LOCATION.--Lat 44°22'54", long 72°46'13", Washington County, Hydrologic Unit 02010003, at dam on Little River 2.7 mi (4.3 km) upstream from mouth and 3.5 mi (5.6 km) north of Waterbury.

DRAINAGE AREA.--109 mi^2 (282 km^2).

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 ft^3 (44,822,000 m^3) between elevations 500.0 ft (152.40 m) and 592.0 ft (180.44 m), sill of taintor gate; for flood control, 1,229,000,000 ft^3 (34,822,000 m^3) between elevations 592.0 ft (180.44 m) and 617.5 ft (188.21 m), crest of spillway; total usable capacity, 2,812,300,000 ft^3 (79,644,000 m^3).

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

570.0	891.9
580.0	1,168.5
590.0	1,505.0
600.0	1,913.4
610.0	2,398.0

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 613.45 ft (186.980 m) May 4, 1940; minimum observed, 501.3 ft (152.80 m) Oct. 16, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 601.75 ft (183.413 m) Apr. 4; minimum, 570.03 ft (173.745 m) Mar. 20.

ELEVATION, IN FEET ABOVE MEAN SEA LEVEL, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	591.16	590.11	591.01	587.20	583.23	581.07	598.50	589.70	583.52	587.64	590.98	593.00
2	591.05	590.37	591.01	586.99	583.02	580.23	600.81	590.10	582.94	587.38	591.71	592.98
3	590.71	590.05	590.81	587.20	582.89	579.32	601.56	589.50	582.74	587.77	592.07	592.82
4	590.96	589.88	590.40	587.11	582.81	579.19	601.70	588.50	582.54	588.10	592.28	592.75
5	591.15	589.69	590.01	586.43	582.68	580.08	601.53	588.30	582.83	588.30	592.36	592.70
6	590.91	589.42	590.44	585.76	582.53	581.74	599.97	588.10	583.10	587.70	592.48	592.64
7	590.58	589.17	591.21	585.49	582.39	581.64	597.65	587.90	583.81	587.20	592.56	592.60
8	590.02	589.41	590.95	585.16	582.21	581.00	595.61	587.60	583.77	587.20	592.58	592.55
9	589.48	589.68	590.58	584.61	581.75	581.02	593.94	587.20	583.55	587.14	592.62	592.52
10	588.82	589.47	590.74	584.48	581.54	580.28	592.85	586.70	583.28	586.45	598.30	593.67
11	588.88	590.06	590.65	584.04	581.31	579.36	592.28	586.40	583.02	585.75	597.70	594.28
12	589.90	590.50	590.54	583.46	581.03	578.71	591.66	586.10	583.39	585.05	595.69	593.70
13	590.54	590.76	590.40	583.54	580.80	577.78	591.01	586.10	583.62	584.30	594.68	593.29
14	590.87	591.06	590.26	583.55	580.66	576.81	590.48	585.40	583.30	583.66	594.01	593.03
15	590.89	590.67	590.99	583.36	580.47	575.69	590.24	586.10	582.92	583.61	593.71	592.86
16	590.92	591.11	591.21	583.14	580.35	574.48	591.34	586.82	582.60	583.50	593.50	592.76
17	590.85	591.02	591.00	582.90	580.20	573.28	592.81	586.72	582.57	583.89	593.25	592.72
18	591.79	591.10	590.84	582.30	579.78	572.00	593.16	586.90	582.50	584.13	593.05	592.70
19	591.54	591.12	590.18	581.72	579.71	570.72	592.96	588.80	582.72	584.32	592.87	592.69
20	593.46	591.05	589.70	581.54	579.82	570.33	592.69	590.10	582.91	584.50	592.74	592.65
21	593.60	592.03	589.58	581.54	579.73	575.65	592.40	590.53	583.09	584.75	592.66	592.62
22	593.17	592.49	589.12	581.22	580.81	578.84	592.10	590.70	583.30	584.96	592.60	592.67
23	592.49	592.03	588.64	580.76	581.52	579.08	591.80	590.49	583.48	585.15	592.54	592.67
24	591.90	591.40	588.07	580.47	581.55	579.29	591.40	590.13	583.61	586.04	592.49	592.62
25	591.47	591.08	587.83	580.46	581.40	580.43	591.10	589.55	585.21	586.32	592.45	592.58
26	590.97	590.80	587.79	580.42	581.40	582.17	591.50	588.91	585.85	586.54	592.46	592.71
27	590.80	590.98	587.90	582.08	582.18	584.83	591.10	588.20	586.32	587.30	593.36	594.01
28	590.65	590.86	587.80	583.41	582.18	589.28	590.50	587.34	586.76	587.90	593.09	593.58
29	590.44	590.58	587.22	583.62	581.62	590.13	590.00	586.40	587.08	588.25	593.67	593.24
30	590.22	590.53	586.87	583.34	---	590.81	589.60	585.39	587.41	588.58	593.32	593.04
31	589.98	---	586.90	583.28	---	591.69	---	584.42	---	589.04	593.07	---
MEAN	590.97	590.62	589.70	583.57	581.43	579.90	593.81	587.91	583.79	586.21	593.25	592.96
MAX	593.60	592.49	591.21	587.20	583.23	591.69	601.70	590.70	587.41	589.04	598.30	594.28
MIN	588.82	589.17	586.87	580.42	579.71	570.33	589.60	584.42	582.50	583.50	590.98	592.52
(†)	1504.3	1525.5	1395.2	1273.3	1220.1	1570.6	1490.8	1309.7	1413.3	1471.0	1624.4	1623.3
(‡)	-15.5	+8.18	-48.6	-45.5	-21.2	+131	-30.8	-67.6	+40.0	+21.5	+57.3	-.42

CAL YR 1975 MEAN 581.59 MAX 593.60 MIN 536.80 (‡) +1.90
WTR YR 1976 MEAN 587.85 MAX 601.70 MIN 570.33 (‡) +2.45

† Contents, in millions of cubic feet, at end of month.
‡ Change in contents, equivalent in cubic feet per second.

04289000 LITTLE RIVER NEAR WATERBURY, VT

LOCATION.--Lat 44°22'12", long 72°46'11", Washington County, Hydrologic Unit 02010003, on right bank 1 mi (1.6 km) downstream from Waterbury Reservoir, 1.7 mi (2.7 km) upstream from mouth, and 2.5 mi (4.0 km) north of Waterbury.

DRAINAGE AREA.--111 mi^2 (287 km^2).

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.

REVISED RECORDS.--WSP 824: 1936.

GAGE.--Water-stage recorder. Concrete control since Dec. 8, 1937. Datum of gage is 428.00 ft (130.454 m) 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.

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. Flow completely regulated by Waterbury Reservoir (station 04288500). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--41 years, 236 ft^3/s (6.684 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,520 ft^3/s (185 m^3/s) Mar. 18, 1936, gage height, 19.38 ft (5.907 m); minimum daily, 0.6 ft^3/s (0.017 m^3/s) several times during summers of 1938-39, 1941, and 1944. Maximum discharge since construction of Waterbury Reservoir in 1937, 4,080 ft^3/s (116 m^3/s) Dec. 9, 1937, gage height, 14.88 ft (4.535 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,200 ft^3/s (62.3 m^3/s) Aug. 11, gage height not determined; minimum daily, 30 ft^3/s (0.85 m^3/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	115	426	86	330	704	1220	899	769	213	100	357
2	216	54	434	246	370	712	1180	935	667	248	92	356
3	302	294	439	157	340	731	1080	947	309	69	84	323
4	37	263	440	180	330	629	1030	924	294	55	80	280
5	30	261	436	415	320	486	971	906	85	52	80	255
6	208	258	325	415	303	747	1460	891	65	341	90	229
7	246	256	280	555	298	766	1740	892	264	335	90	206
8	329	49	429	493	317	767	1670	896	280	348	110	188
9	333	44	433	394	390	608	1510	886	271	426	110	171
10	349	331	456	276	300	557	1330	875	269	488	560	177
11	66	250	499	320	316	756	1140	867	273	481	2000	896
12	82	111	431	300	309	618	1010	893	87	486	1500	761
13	35	397	331	180	302	748	955	902	67	578	810	554
14	246	587	385	160	258	787	953	738	265	430	600	450
15	244	595	481	190	261	781	982	125	286	275	470	354
16	245	269	444	200	269	772	1040	95	272	255	360	298
17	233	376	450	260	291	771	1090	375	268	175	300	268
18	388	424	408	380	373	759	1240	486	186	79	230	256
19	584	408	438	440	393	758	1260	803	59	65	210	244
20	617	390	460	250	327	760	1160	924	55	44	200	233
21	627	436	566	200	325	789	1020	896	78	47	190	229
22	630	681	556	290	345	833	944	868	49	42	170	224
23	607	654	424	280	421	842	926	845	48	40	160	234
24	572	611	428	230	422	843	909	826	49	70	150	223
25	403	504	466	130	444	858	902	810	70	65	146	207
26	576	389	397	160	418	876	918	800	69	61	135	196
27	311	255	183	120	478	915	938	793	64	64	325	562
28	279	326	266	120	682	1040	931	784	64	76	439	669
29	278	354	397	300	691	961	919	776	63	92	484	534
30	279	317	504	400	---	949	908	770	63	105	547	451
31	266	---	209	260	---	982	---	766	---	110	456	---
TOTAL	9719	10259	12821	8387	10623	24105	33336	24193	5708	6215	11278	10385
MEAN	314	342	414	271	366	778	1111	780	190	200	364	346
MAX	630	681	566	555	691	1040	1740	947	769	578	2000	896
MIN	30	44	183	86	258	486	902	95	48	40	80	171

CAL YR 1975 TOTAL 101587 MEAN 278 MAX 714 MIN 22
WTR YR 1976 TOTAL 167029 MEAN 456 MAX 2000 MIN 30

NOTE.--No gage-height record Jan. 12 to Feb. 5, July 29 to Aug. 24.

04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT

LOCATION.--Lat 44°28'44", long 73°08'21", Chittenden County, Hydrologic Unit 02010003, on right bank 0.5 mi (0.8 km) downstream from Muddy Brook and 2 mi (3 km) southwest of Essex Junction.
DRAINAGE AREA.--1,044 mi^2 (2,704 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year.
REVISED RECORDS.--WSP 714: 1930(M). WSP 894: Drainage area. WSP 1307: 1929(M).
GAGE.--Water-stage recorder. Altitude of gage is 185 ft (56 m), from topographic map; prior to Oct. 1, 1964, datum was 1.00 ft (0.305 m) higher.
REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Flow regulated by powerplants upstream, by Peacham Pond and Mollys Falls Reservoir, combined usable capacity, 492,000,000 ft^3 (13,900,000 m^3), by Waterbury Reservoir (station 04288500) since 1937, and by East Barre and Wrightsville Detention Reservoirs (Reservoirs in Winooski River basin) since 1935. See table with station 04286000 for monthend contents in Peacham Pond and Mollys Falls Reservoir. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--48 years, 1,691 ft^3/s (47.89 m^3/s), 22.00 in/yr (559 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,300 ft^3/s (1,280 m^3/s) Mar. 19, 1936, gage height, 24.54 ft (7.480 m), present datum, from rating curve extended above 27,000 ft^3/s (765 m^3/s) on basis of computations of flow over dam at gage heights 19.72 (6.011 m), 24.54 (7.480 m), and 51.4 ft (15.67 m) and slope-area measurement at gage height 51.4 ft (15.67 m), all at present datum; minimum daily, 24 ft^3/s (0.68 m^3/s) Sept. 7, 1968.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 113,000 ft^3/s (3,200 m^3/s) Nov. 4, 1927, gage height, 51.4 ft (15.67 m), present datum, from floodmarks, from rating curve extended above 27,000 ft^3/s (765 m^3/s) by method explained above.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 12,500 ft^3/s (354 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	0630	19,200	544	12.83	3.911	May 20	0445	16,200	459	11.30	3.444
Mar. 28	1500	18,700	530	12.61	3.844	Aug. 11	0745	25,400	719	15.91	4.849
Apr. 2	1030	*27,900	190	*17.09	5.209						

Minimum daily discharge, 442 ft^3/s (12.5 m^3/s) June 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1380	1080	2640	1100	2000	3200	12600	2980	2930	1240	3280	1270
2	1350	1070	4100	1000	2200	2700	24700	4550	2770	1600	3720	1450
3	1300	1070	2850	960	2200	2500	11400	4480	1860	1170	2170	1440
4	1060	1380	2330	900	2000	2800	7990	3720	1670	1280	1490	1150
5	980	1280	2010	870	1600	4400	6570	3060	1530	1160	1110	937
6	870	1190	1890	980	1600	5800	6310	2590	1220	1050	973	848
7	880	1130	2970	1200	1600	3400	6640	2850	1510	1080	1130	691
8	830	1020	2100	1200	1500	2400	5880	3370	1870	923	1490	747
9	940	1010	2000	1100	1600	2300	5120	2730	1460	2090	1920	665
10	990	1200	2400	1000	1500	2100	4490	2340	1160	2510	7260	935
11	880	2600	3600	930	1400	2200	4110	2210	1150	1710	19500	2780
12	1250	2200	2520	970	1400	2000	3650	4350	1250	1600	7090	2540
13	2540	2700	1970	920	1400	1900	3460	4510	1140	1800	5270	1800
14	2900	5330	1830	870	1500	2000	3390	3140	967	1600	7750	1250
15	2250	4960	2300	840	1300	1900	3420	2410	971	1400	5410	1000
16	1870	3300	3460	900	1400	1800	4150	1980	971	1200	5750	892
17	1780	2770	2360	860	1500	1600	5040	1790	1070	2200	3980	804
18	3790	3080	1940	820	1600	1700	5260	3410	1140	2500	2970	818
19	6060	3260	1600	900	1800	2000	4600	10100	943	1700	2340	755
20	7520	2820	1200	930	2100	2940	4030	13100	442	1250	1900	824
21	7740	3330	1200	870	2000	9400	3340	7720	1010	833	1480	720
22	4540	7210	1300	730	2900	15000	2930	7010	1390	925	1310	761
23	3430	4530	1400	770	4800	6460	2920	5670	1350	803	1150	748
24	2900	3300	1400	800	3400	5410	2710	4640	700	1780	1120	764
25	2330	2810	1300	760	3100	6850	2400	4070	1040	3180	935	697
26	2520	2300	1100	1200	3000	8310	2780	3740	3780	1730	715	574
27	2160	2050	1000	2500	3600	8380	3700	3640	2010	1350	1110	2550
28	1760	1930	1100	4200	4700	16200	3910	3110	1470	1340	1850	3010
29	1740	1700	1100	3400	4500	9900	3750	2730	1200	1300	2060	2070
30	1500	1820	1200	2300	---	7760	3510	2380	963	1190	2070	1560
31	1360	---	1300	1900	---	7830	---	2120	---	1260	1490	---
TOTAL	73400	75430	61470	38680	65200	153140	164760	126500	42937	46754	101793	37050
MEAN	2368	2514	1983	1248	2248	4940	5492	4081	1431	1508	3284	1235
MAX	7740	7210	4100	4200	4800	16200	24700	13100	3780	3180	19500	3010
MIN	830	1010	1000	730	1300	1600	2400	1790	442	803	715	574

CAL YR 1975 TOTAL 665263 MEAN 1823 MAX 19200 MIN 56
WTR YR 1976 TOTAL 987114 MEAN 2697 MAX 24700 MIN 442

NOTE.--No gage-height record Oct. 1-15, Jan. 31 to Mar. 2.

04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1953, June 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
JUN 29...	0730	1180	205	6.4	29.0	21.5	7	3	5.4	17	350	5500

DATE	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	SUSPENDED SOLIDS (MG/L)	TOTAL RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)
JUN 29...	20	2.0	62	0	51	39	10	9.4	11	110	.27	.09

DATE	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL ALUMINUM IN BOTTOM MATERIAL (UG/G)	TOTAL BARIUM (BA) (UG/L)	TOTAL BARIUM IN BOTTOM MATERIAL (UG/G)	TOTAL BERYLLIUM (BE) (UG/L)	TOTAL BERYLLIUM IN BOTTOM MATERIAL (UG/G)	TOTAL BISMUTH (BI) (UG/L)	TOTAL BORON (B) (UG/L)
JUN 29...	.21	.30	.57	.04	230	2100	10	20	<1	0	<3	10

DATE	TOTAL BORON IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM MATERIAL (UG/G)	TOTAL COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM MATERIAL (UG/G)	TOTAL GALLIUM (GA) (UG/L)	TOTAL GERMANIUM (GE) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD (PB) (UG/L)
JUN 29...	7	<2	4	<2	4	2	12	<1	<4	420	4100	<2

DATE	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MANGANESE IN BOTTOM MATERIAL (UG/G)	TOTAL MOLYBDENUM (MO) (UG/L)	TOTAL MOLYBDENUM IN BOTTOM MATERIAL (UG/G)	TOTAL NICKEL (NI) (UG/L)	TOTAL NICKEL IN BOTTOM MATERIAL (UG/G)	TOTAL SILVER (AG) (UG/L)	TOTAL SILVER IN BOTTOM MATERIAL (UG/G)	TOTAL STRONTIUM (SR) (UG/L)	TOTAL STRONTIUM IN BOTTOM MATERIAL (UG/G)
JUN 29...	13	100	170	<2	1	3	10	<0	0	100	15

DATE	TOTAL TIN (SN) (UG/L)	TOTAL TITANIUM (TI) (UG/L)	TOTAL TITANIUM IN BOTTOM MATERIAL (UG/G)	TOTAL VANADIUM (V) (UG/L)	TOTAL VANADIUM IN BOTTOM MATERIAL (UG/G)	TOTAL ZIRCONIUM (ZR) (UG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)
JUN 29...	<2	10	130	<2.0	4.0	<4	0	5	.976	.000

04292000 LAMOILLE RIVER AT JOHNSON, VT

LOCATION.--Lat 44°37'22", long 72°40'50", Lamoille County, Hydrologic Unit 02010005, on right bank above falls, 0.7 mi (1.1 km) upstream from bridge in Johnson and 0.8 mi (1.3 km) upstream from Gihon River.

DRAINAGE AREA.--310 mi^2 (803 km^2).

PERIOD OF RECORD.--Discharge: July to December 1910, June 1911 to December 1913 (monthly discharge only, January to March 1912, Feburary 1913), September 1928 to current year.
Chemical analyses: Water year 1953 (partial-record station).
Water temperatures: Water year 1953 (partial-record station).

REVISIED RECORDS.--WSP 894: Drainage area. WSP 1114: 1933, 1934(M). WSP 1237: 1912(M), 1930, 1932(M).

GAGE.--Water-stage recorder. Altitude of gage is 495 ft (151 m), from topographic map. Prior to Dec. 31, 1913, nonrecording gage at bridge 0.7 mi (1.1 km) downstream at different datum.

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

AVERAGE DISCHARGE.--50 years (water years 1912-13, 1929-76), 531 ft^3/s (15.04 m^3/s), 23.26 in/yr (591 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,400 ft^3/s (408 m^3/s) July 1, 1973, gage height, 17.33 ft (5.282 m), from rating curve extended above 8,500 ft^3/s (241 m^3/s) on basis of computation of flow over dam at gage height 16.48 ft (5.023 m); minimum, 11 ft^3/s (0.31 m^3/s) Sept. 2, 1935; minimum daily, 16 ft^3/s (0.45 m^3/s) Oct. 26, 1947.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,400 ft^3/s (153 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 28	0600	7,000	198	12.13	3.697	May 20	0130	5,950	169	11.15	3.399
Apr. 2	0200	*11,400	323	*15.51	4.727						

Minimum discharge, 40 ft^3/s (1.13 m^3/s) Sept. 26; minimum daily, 54 ft^3/s (1.53 m^3/s) Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	383	337	1090	320	710	1030	6410	693	481	311	894	472
2	320	337	1200	300	760	760	8210	1630	463	269	989	378
3	311	299	785	290	890	660	3760	1270	378	273	494	366
4	299	261	655	280	800	609	2380	1110	329	277	370	277
5	290	290	703	270	750	1000	1830	845	345	273	353	54
6	277	299	665	260	720	1910	1740	660	345	261	391	174
7	197	240	889	250	680	1330	1740	1070	451	253	253	329
8	143	240	605	245	650	899	1490	1210	628	277	72	391
9	143	249	498	240	630	620	1250	840	434	325	366	329
10	200	316	623	235	600	590	1110	660	303	277	1140	282
11	189	989	889	230	580	550	1260	564	232	265	2610	805
12	516	632	628	230	620	530	1030	1800	212	261	1290	780
13	651	944	476	230	560	516	909	1710	236	265	835	632
14	669	1810	425	230	547	587	974	989	232	261	969	481
15	547	1330	651	230	542	614	1180	979	216	257	919	362
16	569	864	864	240	591	525	2050	790	212	208	1300	307
17	516	731	569	270	756	383	2880	596	282	273	949	240
18	1350	840	451	250	717	370	2460	859	240	408	651	224
19	1520	919	395	240	810	350	1890	5210	212	286	468	228
20	2130	717	277	230	974	538	1470	4350	197	261	421	391
21	2030	1040	208	230	840	2140	1080	2080	1070	257	325	391
22	1060	2320	250	250	979	3860	879	1930	542	245	316	378
23	780	1130	280	230	1430	2200	864	1390	400	220	358	383
24	596	780	330	230	1100	1670	780	1190	282	193	329	374
25	511	641	270	240	840	2090	623	969	362	485	261	286
26	520	555	250	300	736	2520	800	825	934	358	236	106
27	494	511	280	700	1080	3070	1200	707	582	944	446	909
28	400	516	310	1450	1440	6290	1320	609	434	1270	529	959
29	345	502	340	1100	1090	3200	1120	511	349	655	944	582
30	345	481	400	820	---	2520	879	468	320	425	1020	413
31	341	---	350	770	---	2790	---	421	---	383	655	---
TOTAL	18642	21120	16606	11390	23422	46721	55568	38935	11703	10976	21153	12283
MEAN	601	704	536	367	808	1507	1852	1256	390	354	682	409
MAX	2130	2320	1200	1450	1440	6290	8210	5210	1070	1270	2610	959
MIN	143	240	208	230	542	350	623	421	197	193	72	54
CFSM	1.94	2.27	1.73	1.18	2.61	4.86	5.97	4.05	1.26	1.14	2.20	1.32
IN.	2.24	2.53	1.99	1.37	2.81	5.61	6.67	4.67	1.40	1.32	2.54	1.47

CAL YR 1975 TOTAL 183748 MEAN 503 MAX 5880 MIN 27 CFSM 1.62 IN 22.05
WTR YR 1976 TOTAL 288519 MEAN 788 MAX 8210 MIN 54 CFSM 2.54 IN 34.62

04292500 LAMOILLE RIVER AT EAST GEORGIA, VT

LOCATION.--Lat 44°40'45", long 73°04'23", Franklin County, Hydrologic Unit 02010005, on right bank at East Georgia, 0.5 mi (0.8 km) upstream from railroad bridge, and 1 mi (1.6 km) downstream from Beaver Meadow Brook.

DRAINAGE AREA.--686 mi^2 (1,777 km^2).

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).

REVISED RECORDS.--WSP 894: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 285 ft (86.9 m), from topographic map. Prior to Dec. 1, 1937, at site 3.5 mi (5.6 km) downstream at different datum.

REMARKS.--Records good except those for winter period and period of no gage-height record, which are fair. Low flow regulated by powerplants upstream. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--47 years, 1,223 ft^3/s (34.64 m^3/s), 24.21 in/yr (615 mm/yr), adjusted to present drainage area.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,200 ft^3/s (657 m^3/s) Mar. 19, 1936, gage height, 12.52 ft (3.816 m), site and datum then in use, by computation of peak flow over dam; maximum gage height, 18.81 ft (5.733 m) Apr. 3, 1959, ice jam; minimum daily discharge, 74 ft^3/s (2.10 m^3/s) Sept. 26, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,400 ft^3/s (295 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 6	1400	ice jam		*12.81	3.904	Apr. 2		*17,400	493	†10.90	3.322
Mar. 22	0030	14,400	408	10.14	3.091	Aug. 11	1630	11,300	320	9.33	2.844
Mar. 28		14,000	396								

† From floodmarks.

Minimum daily discharge, 355 ft^3/s (10.1 m^3/s) Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	951	666	1670	730	1600	2400	13000	1720	1000	698	3200	922
2	922	671	2750	680	1700	1700	17000	2400	1030	692	3400	790
3	943	687	1800	650	1800	1500	8000	3020	828	667	1540	706
4	760	675	1360	620	1700	1400	5500	2540	701	648	973	654
5	685	662	1100	600	1700	2200	4200	1950	662	602	781	525
6	627	664	1610	580	1600	3600	3900	1550	650	514	753	355
7	563	501	2630	560	1500	3000	3800	1710	636	434	819	459
8	477	566	1580	540	1400	2000	2780	2700	1110	516	663	528
9	364	873	1380	530	1400	1500	2450	1950	896	1190	485	582
10	357	936	1570	510	1400	1300	2150	1510	677	864	3080	449
11	478	2050	2410	500	1300	1200	2230	1300	540	526	9980	2630
12	484	1780	1610	500	1400	1200	2100	4100	492	599	5360	2110
13	1260	1780	1350	500	1300	1100	1780	4380	542	530	2060	1240
14	1320	3450	1250	500	1200	1300	1780	2510	421	529	2390	1100
15	1330	3580	1620	500	1200	1300	1960	2840	443	590	2650	735
16	1170	2260	2550	520	1300	1100	2930	2240	370	499	4380	636
17	1270	1870	1370	570	1600	920	4670	1660	933	422	2640	585
18	1850	2000	1100	560	1600	820	4950	1310	734	545	1810	507
19	3410	2450	920	540	1800	900	3740	4620	567	537	1240	454
20	4290	1970	680	520	2100	2500	2870	8740	447	428	927	490
21	5190	2630	540	500	1900	9500	2140	5370	727	416	803	626
22	2820	6590	540	540	2300	10300	1690	3710	1030	437	701	640
23	1870	3730	620	520	3100	6040	1570	3070	699	379	662	809
24	1300	2180	700	510	2400	4060	1530	2780	616	378	659	727
25	1150	1650	600	520	2000	4500	1290	2260	497	564	562	639
26	1050	1340	550	570	1700	5800	1370	1940	1160	637	473	548
27	1090	1200	600	1500	2200	8700	2320	1890	1150	1970	584	2650
28	927	1230	670	3000	2600	13000	2710	1460	953	3130	1150	2930
29	803	1150	770	2300	3100	8000	2550	1220	772	1540	835	1550
30	792	1080	810	1800	---	6100	2160	1040	678	1040	1770	1030
31	697	---	780	1600	---	7000	---	945	---	805	1120	---
TOTAL	41200	52871	39490	24570	51900	115940	111120	80435	21961	23326	58450	28606
MEAN	1329	1762	1274	793	1790	3740	3704	2595	732	752	1885	954
MAX	5190	6590	2750	3000	3100	13000	17000	8740	1160	3130	9980	2930
MIN	357	501	540	500	1200	820	1290	945	370	378	473	355
CFSM	1.94	2.57	1.86	1.16	2.61	5.45	5.40	3.78	1.07	1.10	2.75	1.39
IN.	2.23	2.87	2.14	1.33	2.81	6.29	6.03	4.36	1.19	1.26	3.17	1.55

CAL YR 1975 TOTAL 433455 MEAN 1188 MAX 14500 MIN 136 CFSM 1.73 IN 23.51
WTR YR 1976 TOTAL 649869 MEAN 1776 MAX 17000 MIN 355 CFSM 2.59 IN 35.24

NOTE.--No gage-height record Mar. 25 to Apr. 8.

04293000 MISSISQUOI RIVER NEAR NORTH TROY, VT

LOCATION.--Lat 44°58'22", long 72°23'15", Orleans County, Hydrologic Unit 02010007, on right bank 200 ft (60 m) upstream from Big Falls, 1.5 mi (2.4 km) downstream from Jay Branch, and 2.2 mi (3.5 km) upstream from North Troy.

DRAINAGE AREA.--131 mi^2 (339 km^2).

PERIOD OF RECORD.--Discharge: August 1931 to current year.

REVISED RECORDS.--WSP 924: 1940. WSP 1114: 1933(M), 1936-39.

GAGE.--Water-stage recorder. Altitude of gage is 580 ft (177 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Occasional regulation at low flow caused by small powerplant upstream; greater regulation prior to 1967. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--45 years, 270 ft^3/s (7.646 m^3/s), 27.99 in/yr (711 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,980 ft^3/s (226 m^3/s) May 3, 1940, gage height, 12.87 ft (3.923 m), from rating curve extended above 5,500 ft^3/s (156 m^3/s) on basis of computation of flow over dam at gage height 11.70 ft (3.566 m); minimum, 9.4 ft^3/s (0.27 m^3/s) Aug. 28, 1949; minimum daily, 11 ft^3/s (0.31 m^3/s) Aug. 28, 1949, Aug. 30, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,300 ft^3/s (93.5 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 28	-	3,600	102	ice jam		Aug. 11	0045	*6,370	180	*11.47	3.496
Apr. 2	0115	5,930	168	11.07	3.374						

Minimum discharge, 52 ft^3/s (1.47 m^3/s) July 23, 24; minimum daily, 55 ft^3/s (1.56 m^3/s) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	231	153	695	72	175	350	3170	353	218	1170	1570	143
2	319	215	469	70	170	300	3740	885	158	653	717	230
3	275	198	307	68	250	260	1380	570	135	368	254	133
4	210	247	213	66	220	240	889	466	115	261	153	105
5	177	216	174	64	200	500	634	339	108	183	112	103
6	156	166	415	62	170	900	642	275	101	131	139	116
7	145	155	542	60	155	600	676	521	132	99	141	90
8	121	156	236	58	145	370	561	593	186	172	145	95
9	116	415	223	57	140	300	451	373	134	244	137	74
10	107	292	306	56	135	270	417	281	95	149	2420	71
11	124	737	381	56	150	220	522	234	91	107	3100	697
12	382	365	190	58	150	190	358	981	210	108	470	336
13	332	595	140	62	140	220	325	620	127	99	269	188
14	468	1030	224	66	145	260	381	364	95	120	309	121
15	364	657	553	63	130	210	503	551	87	121	388	94
16	632	449	575	60	200	160	1100	348	72	90	720	83
17	420	407	188	58	240	150	1400	265	159	80	447	82
18	902	534	150	56	180	150	1050	405	113	77	270	73
19	705	501	130	56	300	150	715	1660	87	69	168	80
20	1400	385	125	60	360	270	514	1430	74	63	131	93
21	992	743	115	64	250	1400	353	593	64	63	109	112
22	510	1430	105	62	350	2000	293	505	74	62	95	99
23	354	539	100	58	600	1000	323	544	69	55	90	176
24	280	356	96	56	450	700	316	622	64	115	73	127
25	246	287	92	58	320	1000	240	423	165	117	71	91
26	274	228	88	60	300	1300	297	319	1210	76	67	87
27	230	212	85	85	600	1600	485	293	410	419	651	850
28	205	222	82	370	700	3200	709	225	256	459	332	404
29	180	205	80	270	450	1300	634	185	183	175	222	238
30	182	212	76	220	---	1000	511	160	500	184	168	171
31	159	---	74	190	---	1250	---	151	---	156	134	---
TOTAL	11198	12307	7229	2721	7775	21820	23589	15534	5492	6245	14072	5362
MEAN	361	410	233	87.8	268	704	786	501	183	201	454	179
MAX	1400	1430	695	370	700	3200	3740	1660	1210	1170	3100	850
MIN	107	153	74	56	130	150	240	151	64	55	67	71
CFSM	2.76	3.13	1.78	.67	2.05	5.37	6.00	3.82	1.40	1.53	3.47	1.37
IN.	3.18	3.49	2.05	.77	2.21	6.20	6.70	4.41	1.56	1.77	4.00	1.52

CAL YR 1975 TOTAL 103310 MEAN 283 MAX 3460 MIN 20 CFSM 2.16 IN 29.34
WTR YR 1976 TOTAL 133344 MEAN 364 MAX 3740 MIN 55 CFSM 2.78 IN 37.87

04293500 MISSISQUOI RIVER NEAR RICHFORD, VT

LOCATION.--Lat 44°57'30", long 72°41'55", Franklin County, Hydrologic Unit 02010007, 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 mi^2 (1,241 km^2).
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).
REVISED RECORDS.--WSP 784: Drainage area. WSP 1237: 1913-14(M), 1922(M), 1923, 1929-30. WSP 1307: 1916(M). WSP 1437: 1912.
GAGE.--Water-stage recorder. Altitude of gage is 410 ft (125 m), from topographic map. Prior to Aug. 1, 1915, nonrecording gage at site 0.2 mi (0.3 km) downstream at datum 4.35 ft (1.326 m) lower. Aug. 1, 1915, to Sept. 30, 1923, water-stage recorder at present site and datum. Oct. 1, 1928, to Sept. 30, 1929, nonrecording gage at former site at datum 4.6 ft (1.40 m) lower.
REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Diurnal fluctuation at low flow prior to 1934. Several observations of water temperature were made during the year.
AVERAGE DISCHARGE.--60 years, 922 ft^3/s (26.11 m^3/s), 26.14 in/yr (664 mm/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,200 ft^3/s (487 m^3/s) May 4, 1940, gage height, 15.15 ft (4.618 m), from rating curve extended above 9,300 ft^3/s (263 m^3/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 ft^3/s (0.23 m^3/s) July 14, 1911.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 45,000 ft^3/s (1,270 m^3/s) during flood of November 1927, gage height, 23.1 ft (7.04 m), from floodmarks, from rating curve extended above 9,300 ft^3/s (263 m^3/s) as explained above.
EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,600 ft^3/s (215 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 22	-	ice jam		*Unknown		Apr. 2		*13,000	368	Unknown	
Mar. 28	-	9,000	255	ice jam							

Minimum discharge, 172 ft^3/s (4.87 m^3/s) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	800	551	2100	285	620	1700	8000	1220	644	1810	2720	418
2	980	627	1300	275	620	1400	11900	1610	701	1950	3240	633
3	820	656	1000	260	800	1150	7950	2080	535	1390	1630	541
4	700	694	740	255	960	1100	4980	1760	470	1060	808	391
5	620	788	660	245	820	2000	3530	1360	413	714	541	422
6	540	656	1500	240	720	4000	3720	1120	363	510	535	441
7	500	562	1750	235	640	2500	2380	1750	336	375	515	383
8	460	567	900	230	600	1300	2130	2600	387	1020	470	310
9	440	1060	830	225	560	1100	1770	1890	427	1160	451	285
10	390	1060	1000	225	540	900	1500	1380	383	747	3140	264
11	500	2020	1350	220	520	800	1530	1110	321	500	6330	1010
12	1180	1780	800	225	510	750	1320	2520	436	650	5240	1540
13	1100	1710	540	230	500	800	1130	2880	460	707	2340	924
14	1330	2740	800	230	500	950	1130	1850	336	714	2030	616
15	1170	3090	1500	225	500	850	1260	2610	264	616	2190	460
16	1650	2280	1700	220	700	700	2080	1990	241	485	3310	379
17	1200	1800	800	215	860	600	2940	1380	303	383	2630	340
18	2600	2000	660	210	750	550	2920	1170	332	355	1740	336
19	2200	1800	620	215	1000	520	2240	3390	254	285	1100	321
20	4800	1650	560	225	1600	1300	1630	4430	212	237	740	336
21	4330	2500	500	220	1400	3000	1190	3230	212	234	572	383
22	3000	3800	480	215	1200	6500	969	2260	192	212	475	441
23	1890	3000	450	210	2300	3500	977	2070	197	186	413	475
24	1330	1400	420	205	2400	2300	1010	2110	221	887	359	510
25	1100	1100	400	200	1800	3500	851	1790	515	1170	296	455
26	1020	900	370	195	1500	4500	836	1340	3300	520	261	367
27	939	800	350	300	2200	7000	1390	1150	1610	427	451	2100
28	781	800	335	1500	2500	8500	1880	977	851	1090	1100	2100
29	707	800	320	1000	2000	6000	1830	760	583	720	740	1220
30	669	1000	310	820	---	3500	1590	616	535	727	562	855
31	611	---	300	720	---	5000	---	525	---	681	436	---
TOTAL	40357	44191	25345	10275	31620	78270	78563	56928	16034	22522	47365	19256
MEAN	1302	1473	818	331	1090	2525	2619	1836	534	727	1528	642
MAX	4800	3800	2100	1500	2500	8500	11900	4430	3300	1950	6330	2100
MIN	390	551	300	195	500	520	836	525	192	186	261	264
CFSM	2.72	3.08	1.71	.69	2.28	5.27	5.47	3.83	1.11	1.52	3.19	1.34
IN.	3.13	3.43	1.97	.80	2.46	6.08	6.10	4.42	1.25	1.75	3.68	1.50

CAL YR 1975 TOTAL 357667 MEAN 980 MAX 10700 MIN 46 CFSM 2.05 IN 27.78
WTR YR 1976 TOTAL 470726 MEAN 1286 MAX 11900 MIN 186 CFSM 2.68 IN 36.56

NOTE.--No gage-height record Oct. 20, Nov. 18 to Dec. 9, Dec. 11-17, Mar. 21-28, Mar. 30 to Apr. 2, Apr. 4-6.

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT

LOCATION.--Lat 44°28'52", long 73°13'27", Chittenden County, Hydrologic Unit 02010003, 50 ft (15 m) south of Gulf Oil Co. dock at Burlington, 0.1 mi (0.2 km) north of Burlington Water Department pumping station, and 0.5 mi (0.8 km) north of railroad station.

PERIOD OF RECORD.--Gage heights: May 1907 to current year.
Chemical analyses: Water year 1971 (partial-record station).

REVISED RECORDS.--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

GAGE.--Water-stage recorder. Datum of gage is 92.86 ft (28.304 m) 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.

REMARKS.--Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.80 ft (2.682 m) Apr. 4, 1976; minimum observed, -0.25 ft (-0.076 m) Dec. 4, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 8.80 ft (2.682 m) Apr. 4, affected by seiche; minimum, 2.41 ft (0.735 m) Oct. 11, affected by seiche.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.57	3.60	4.21	3.61	3.70	5.20	7.86	6.51	6.34	4.40	4.19	4.77
2	2.63	3.61	4.29	3.56	3.81	5.29	8.32	6.49	6.28	4.40	4.31	4.71
3	2.61	3.60	4.31	3.48	3.87	5.34	8.65	6.47	6.16	4.40	4.31	4.68
4	2.63	3.57	4.30	3.50	3.93	5.39	8.76	6.44	6.07	4.38	4.28	4.54
5	2.61	3.53	4.20	3.46	3.98	5.42	8.73	6.34	5.96	4.37	4.26	4.52
6	2.56	3.48	4.11	3.38	4.00	5.65	8.68	6.27	5.85	4.33	4.27	4.48
7	2.57	3.43	4.21	3.35	4.02	5.85	8.64	6.33	5.73	4.30	4.27	4.44
8	2.56	3.41	4.22	3.35	4.01	5.96	8.56	6.34	5.68	4.27	4.24	4.37
9	2.56	3.43	4.21	3.31	4.03	5.98	8.46	6.32	5.60	4.30	4.24	4.29
10	2.52	3.43	4.23	3.29	4.00	5.97	8.34	6.28	5.47	4.28	4.35	4.24
11	2.47	3.43	4.24	3.26	4.01	5.96	8.25	6.20	5.40	4.27	4.61	4.24
12	2.52	3.46	4.25	3.25	4.01	5.90	8.14	6.32	5.34	4.26	4.82	4.25
13	2.54	3.54	4.21	3.20	3.98	5.85	8.00	6.36	5.21	4.27	5.02	4.21
14	2.60	3.72	4.08	3.22	3.98	5.85	7.88	6.35	4.96	4.27	5.09	4.17
15	2.64	3.82	4.09	3.19	3.93	5.81	7.72	6.34	4.95	4.30	5.19	4.15
16	2.65	3.89	4.15	3.15	3.94	5.77	7.64	6.31	4.91	4.28	5.33	4.13
17	2.66	3.93	4.12	3.13	3.95	5.76	7.58	6.23	4.86	4.27	5.40	4.08
18	2.80	3.98	4.11	3.12	3.96	5.70	7.52	6.21	4.78	4.26	5.43	4.05
19	2.97	4.04	4.06	3.10	4.01	5.63	7.45	6.27	4.66	4.26	5.42	3.99
20	3.21	4.08	4.00	3.09	4.07	5.60	7.38	6.51	4.65	4.25	5.40	3.96
21	3.45	4.11	3.98	3.08	4.11	5.75	7.28	6.69	4.60	4.23	5.36	3.93
22	3.65	4.25	3.93	3.08	4.20	6.18	7.12	6.77	4.56	4.20	5.35	3.86
23	3.75	4.36	3.90	3.04	4.35	6.45	7.03	6.78	4.50	4.13	5.31	3.77
24	3.75	4.42	3.85	3.02	4.46	6.55	6.94	6.78	4.45	4.12	5.26	3.72
25	3.76	4.44	3.79	3.00	4.56	6.69	6.85	6.75	4.44	4.11	5.18	3.67
26	3.80	4.41	3.81	2.97	4.63	6.86	6.80	6.72	4.45	4.10	5.12	3.64
27	3.79	4.40	3.81	3.08	4.73	6.96	6.74	6.65	4.48	4.08	5.05	3.72
28	3.77	4.40	3.77	3.31	4.95	7.25	6.69	6.60	4.46	4.10	5.05	3.79
29	3.78	4.38	3.73	3.48	5.05	7.55	6.64	6.53	4.43	4.11	4.95	3.76
30	3.78	4.18	3.65	3.60	---	7.67	6.59	6.45	4.41	4.10	4.91	3.79
31	3.72	---	3.64	3.66	---	7.68	---	6.37	---	4.11	4.81	---
MEAN	3.03	3.88	4.05	3.27	4.15	6.11	7.71	6.45	5.12	4.24	4.86	4.13
MAX	3.80	4.44	4.31	3.66	5.05	7.68	8.76	6.78	6.34	4.40	5.43	4.77
MIN	2.47	3.41	3.64	2.97	3.70	5.20	6.59	6.20	4.41	4.08	4.19	3.64

CAL YR 1975 MEAN 3.35 MAX 6.15 MIN 1.64
WTR YR 1976 MEAN 4.75 MAX 8.76 MIN 2.47

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, Hydrologic Unit 02010006, on left bank at outlet of Lake Champlain in Rouses Point and 1.0 mi (1.6 km) south of Fort Montgomery ruins. Water-quality sampling site at stage station.

DRAINAGE AREA.--8,277 mi^2 (21,437 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1863 to December 1870 (maximum and minimum monthly gage heights at St. Johns, Quebec, published in WSP 97) and March 1871 to current year (daily gage heights prior to October 1970, elevations thereafter: those for 1871-1907 published in WSP 894). Gage heights prior to Oct. 1, 1925, published as "Richelieu River at Fort Montgomery, Rouses Point." Discharge records for January 1875 to September 1916 at "Chambly, Quebec," published in WSP 65, 82, 97, 129, 170, 206, 424, and 1307 have been found to be unreliable and should not be used. Daily discharge record for "Richelieu River at Fryers Rapids, Quebec," published in Water Survey of Canada annual reports.

GAGE.--Water-stage recorder. Datum of gage is 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 mi^2 (1,269 km^2). Total volume below 92.5 ft (28.19 m) elevation, reported by Lake Champlain Studies Center, 902.2 bil ft^3 (25,600 hm^3).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.80 ft (31.029 m) Mar. 30, 1903; minimum observed, 92.17 ft (28.093 m) Oct. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since at least 1827, 102.1 ft (31.12 m) May 4, 1869, from marks at railroad bridge near present gage, according to data published on p. 428 of the Report of the Board of Engineers on Deep Waterways, 1900: U.S. 56th Cong., 2d sess. H. Doc. 149.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 101.64 ft (30.98 m) Apr. 5; minimum, 95.19 ft (29.01 m) Oct. 7, 12.

ELEVATION, IN FEET ABOVE MEAN SEA LEVEL, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95.55	96.80	97.22	96.41	96.56	97.98	100.74	99.39	99.07	97.34	96.99	97.79
2	95.43	96.49	97.20	96.42	96.64	98.07	101.17	99.36	99.08	97.34	97.09	97.62
3	95.60	96.50	97.14	96.45	96.75	98.20	101.40	99.39	99.02	97.34	97.24	97.66
4	95.41	96.47	97.14	96.32	96.79	98.22	101.51	99.33	98.90	97.30	97.28	97.74
5	95.56	96.34	97.39	96.30	96.81	98.30	101.51	99.46	98.82	97.29	97.27	97.46
6	95.56	96.43	97.11	96.36	96.85	98.45	101.51	99.17	98.74	97.26	97.13	97.35
7	95.38	96.42	96.98	96.29	96.86	98.70	101.44	99.12	98.67	97.26	97.12	97.30
8	95.40	96.39	97.07	96.15	96.88	98.76	101.35	99.22	98.54	97.25	97.19	97.23
9	95.36	96.30	97.05	96.21	96.85	98.82	101.28	99.22	98.44	97.20	97.15	97.22
10	95.41	96.37	97.05	96.12	96.89	98.83	101.21	99.18	98.42	97.22	97.09	97.24
11	95.47	96.36	97.05	96.10	96.83	98.78	100.92	99.13	98.28	97.25	97.50	97.26
12	95.28	96.54	97.06	96.08	96.84	98.79	100.87	99.16	98.12	97.17	97.80	97.16
13	95.40	96.40	97.15	96.10	96.84	98.73	100.84	99.28	98.27	97.19	97.88	97.19
14	95.42	96.47	97.37	96.09	96.79	98.68	100.72	99.30	98.16	97.16	97.94	97.16
15	95.44	96.75	97.00	96.04	96.86	98.61	100.66	99.18	97.97	97.21	98.04	97.08
16	95.48	96.82	96.89	96.05	96.92	98.60	100.49	99.22	97.87	97.28	98.17	97.01
17	95.49	96.91	97.11	95.95	97.10	98.58	100.40	99.20	97.75	97.25	98.23	96.97
18	95.53	96.86	96.88	95.96	97.57	98.54	100.37	99.01	97.70	97.24	98.26	96.94
19	95.82	96.90	96.84	95.98	97.82	98.52	100.33	99.15	97.71	97.21	98.30	96.89
20	96.14	96.92	96.81	95.98	97.96	98.49	100.18	99.36	97.56	97.22	98.31	96.83
21	96.44	97.02	96.77	95.91	96.99	98.63	100.11	99.55	97.53	97.07	98.26	96.75
22	96.52	97.11	96.71	95.89	97.01	98.99	100.11	99.61	97.50	97.06	98.20	96.78
23	96.62	97.23	96.68	95.86	97.17	99.37	99.86	99.60	97.43	97.19	98.09	96.87
24	96.78	97.21	96.67	95.83	97.37	99.50	99.75	99.61	97.37	97.01	98.08	96.61
25	96.79	97.21	96.70	95.82	97.41	99.61	99.62	99.61	97.35	96.97	98.07	96.61
26	96.64	97.26	96.63	95.85	97.49	99.71	99.53	99.58	97.37	97.05	98.02	96.55
27	96.73	97.31	96.63	95.88	97.58	99.95	99.53	99.54	97.37	97.05	97.99	96.54
28	96.73	97.26	96.61	96.14	97.74	100.09	99.52	99.47	97.40	96.99	98.02	96.63
29	96.62	97.27	96.58	96.34	97.96	100.38	99.50	99.42	97.34	97.02	97.90	96.79
30	96.44	97.75	96.61	96.40	---	100.52	99.42	99.33	97.28	97.00	97.78	96.62
31	96.58	---	96.49	96.51	---	100.68	---	99.23	---	96.99	97.78	---
MEAN	95.90	96.80	96.92	96.12	97.11	98.97	100.53	99.33	98.03	97.17	97.75	97.06
MAX	96.79	97.75	97.39	96.51	97.96	100.68	101.51	99.61	99.08	97.34	98.31	97.79
MIN	95.28	96.30	96.49	95.82	96.56	97.98	99.42	99.01	97.28	96.97	96.99	96.54

CAL YR 1975 MEAN 96.23 MAX 98.99 MIN 94.56
WTR YR 1976 MEAN 97.64 MAX 101.51 MIN 95.28

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-72, 1974 to current year.

COOPERATION.--Pesticide samples were collected by the U.S. Geological Survey and were analyzed by the Environmental Protection Agency.

WATER QUALITY DATA, WATER YEAR, OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	ELEVATION ABOVE MEAN SEA LEVEL (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT										
15...	1000	95.39	148	7.2	12.0	1	10.2	94	B19	B15
NOV										
04...	1000	96.36	153	6.9	10.0	1	11.6	104	B12	B6
APR										
27...	1000	99.51	150	7.1	6.0	1	12.9	104	46	<1
MAY										
25...	1000	99.62	140	7.6	10.0	1	10.0	89	B4	<1
JUN										
08...	1000	98.59	146	7.0	17.0	1	9.4	98	B3	B2
JUL										
07...	0930	97.28	140	7.5	23.0	0	8.5	100	B10	B14
AUG										
18...	1030	98.27	140	7.3	20.0	0	7.8	86	B2	<1
SEP										
14...	0900	97.22	138	6.8	17.5	2	9.3	99	B2	B1

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT										
15...	62	15	18	4.2	4.5	1.2	58	0	48	13
NOV										
04...	67	19	20	4.1	4.9	1.3	58	0	48	14
APR										
27...	53	8	15	3.8	4.3	1.1	55	0	45	12
MAY										
25...	55	14	16	3.7	4.1	1.2	50	0	41	12
JUN										
08...	55	11	15	4.3	4.0	.9	54	0	44	11
JUL										
07...	51	10	15	3.3	4.6	1.0	50	0	41	11
AUG										
18...	67	22	20	4.2	5.1	1.1	55	0	45	15
SEP										
14...	55	10	16	3.6	4.6	1.0	55	0	45	12

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT									
15...	7.5	.1	1.0	86	78	.05	.30	.35	.03
NOV									
04...	6.6	.1	.8	82	80	.11	.28	.39	.02
APR									
27...	6.4	.1	1.2	77	71	.26	.30	.56	.03
MAY									
25...	6.2	.1	.7	73	69	.20	.28	.48	.02
JUN									
08...	6.4	.1	.6	85	69	.15	.33	.48	.02
JUL									
07...	6.8	.1	.4	84	67	.08	.20	.28	.02
AUG									
18...	8.7	.1	.8	86	82	.10	.48	.58	.03
SEP									
14...	6.8	.1	.7	78	72	.09	.38	.47	.03

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)
APR											
27...	0	0	0	0	0	0	10	0	<10	0	0
JUN											
08...	1	1	0	1	1	0	10	0	10	0	0
JUL											
07...	0	0	0	0	0	--	10	0	<10	0	0

DATE	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	SUS-PENDED MAN-GANESE (MN) (UG/L)
APR											
27...	0	0	0	0	90	10	4	3	1	0	0
JUN											
08...	0	10	10	0	50	0	6	5	1	0	0
JUL											
07...	0	0	0	0	40	0	8	1	7	10	7

DATE	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)
APR										
27...	0	<.5	.0	<.5	0	0	0	0	0	0
JUN										
08...	0	<.5	.0	<.5	10	10	0	0	0	0
JUL										
07...	3	<.5	.0	<.5	10	0	10	0	0	0

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA-TERIAL (UG/KG)
NOV											
04...	--	ND	ND	ND	ND	ND	--	ND	--	ND	ND
APR											
27...	4.8	--	ND	--	ND	--	--	--	8.0	ND	ND
MAY											
25...	--	ND	ND	ND	ND	ND	ND	ND	2.0	ND	.8
JUN											
08...	3.8	--	--	--	--	--	--	--	--	--	--
JUL											
07...	4.4	--	--	--	--	--	--	--	--	--	--
SEP											
14...	--	ND	--	ND	--	ND	--	ND	--	ND	--

ND MATERIAL SPECIFICALLY ANALYZED FOR, BUT NOT DETECTED.

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL DI-AZINON (UG/L)	DI-AZINON IN BOTTOM MATERIAL (UG/KG)	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)
NOV 04...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR 27...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 25...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
JUN 08...	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	--	--	--	--	--	--	--	--	--	--	--
SEP 14...	ND	--	ND	--	ND	--	ND	--	ND	--	ND

DATE	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	MALATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL METHOXYCHLOR (UG/L)	TOTAL METHYL PARATHION (UG/L)	METHYL PARATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL METHYL TRITHION (UG/L)	METHYL TRITHION IN BOTTOM MATERIAL (UG/KG)	TOTAL PARATHION (UG/L)
NOV 04...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR 27...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 25...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
JUN 08...	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	--	--	--	--	--	--	--	--	--	--	--
SEP 14...	--	ND	--	ND	--	ND	ND	--	ND	--	ND

DATE	PARATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	TRITHION IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4,5-T (UG/L)	2,4,5-T IN BOTTOM MATERIAL (UG/KG)	TOTAL SILVEX (UG/L)	SILVEX IN BOTTOM MATERIAL (UG/KG)
NOV 04...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
APR 27...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 25...	ND	ND	ND	ND	ND	ND	--	ND	--	ND	--
JUN 08...	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	--	--	--	--	--	--	--	--	--	--	--
SEP 14...	--	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	TIME	SUSPENDED SEDIMENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
NOV 04...	1000	3	50
APR 27...	1000	6	59
MAY 25...	1000	8	34
JUN 08...	1000	6	35
JUL 07...	0930	73	26
AUG 18...	1030	14	34
SEP 14...	0900	1	82

ND MATERIAL SPECIFICALLY ANALYZED FOR, BUT NOT DETECTED.

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY --Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total
Oct. 15	1000	CHLOROPHYTA		
		CHLOROPHYCEAE		
		CHLOROCOCCALES		
		SCENEDESMACEAE		
		SCENEDESMUS	L	0
		CHRYSOPHYTA		
		BACILLARIOPHYCEAE		
		CENTRALES		
		COSCINODISCACEAE		
		CYCLOTELLA	15	5
		PENNALES		
		ACHNANTHACEAE		
		COCCONEIS	15	5
		NAVICULACEAE		
		NAVICULA	15	5
		NITZSCHIACEAE		
		NITZSCHIA	44	15
		CYANOPHYTA		
		MYXOPHYCEAE		
		OSCILLATORIALES		
		NOSTOCACEAE		
		ANABAENA	210	70
		EUGLENOPHYTA		
		EUGLENOPHYCEAE		
		EUGLENALES		
		EUGLENACEAE		
		TRACHELOMONAS	L	0
		PYRRHOPHYTA		
		DINOPHYCEAE		
		PERIDINIALES		
		GLENODINIACEAE		
		GLENODINIUM	L	0
		TOTAL	290	
Apr. 27	1000	CHRYSOPHYTA		
		BACILLARIOPHYCEAE		
		CENTRALES		
		COSCINODISCACEAE		
		CYCLOTELLA	5,000	88
		PENNALES		
		FRAGILARIACEAE		
		ASTERIONELLA	670	12
		TOTAL	5,700	
June 8	1000	CHLOROPHYTA		
		CHLOROPHYCEAE		
		CHLOROCOCCALES		
		OCCYSTACEAE		
		ANKISTRODESMUS	69	4
		CHRYSOPHYTA		
		BACILLARIOPHYCEAE		
		PENNALES		
		FRAGILARIACEAE		
		ASTERIONELLA	140	8
		FRAGILARIA	990	58
		NITZSCHIACEAE		
		NITZSCHIA	34	2
		CHRYSOPHYCEAE		
		CHRYSOMONADALES		
		OCHROMONADACEAE		
		OCHROMONAS	450	26
		PYRRHOPHYTA		
		DINOPHYCEAE		
		PERIDINIALES		
		GLENODINIACEAE		
		GLENODINIUM	34	2
		TOTAL	1,700	
Nov. 4	1000	CHLOROPHYTA		
		CHLOROPHYCEAE		
		CHLOROCOCCALES		
		OCCYSTACEAE		
		ANKISTRODESMUS	18	2
		DICTYOSPHAERIUM	140	15
		SCENEDESMACEAE		
		SCENEDESMUS	73	8
		CHRYSOPHYTA		
		BACILLARIOPHYCEAE		
		CENTRALES		
		COSCINODISCACEAE		
		CYCLOTELLA	18	2
		STEPHANODISCUS	9	1
		PENNALES		
		ACHNANTHACEAE		
		COCCONEIS	18	2
		CYMBELLACEAE		
		AMPHORA	9	1
		FRAGILARIACEAE		
		ASTERIONELLA	37	4
		NAVICULACEAE		
		NAVICULA	64	7
		NITZSCHIACEAE		
		NITZSCHIA	55	6
		ACHNANTHACEAE		
		RHOICOSPHENIA	9	1
		CYANOPHYTA		
		MYXOPHYCEAE		
		CHROOCOCCALES		
		CHROOCOCCACEAE		
		GOMPHOSPHAERIA	380	43
		PYRRHOPHYTA		
		DINOPHYCEAE		
		PERIDINIALES		
		PERIDINIACEAE		
		PERIDINIUM	64	7
		TOTAL	900	
May 25	1000	CHRYSOPHYTA		
		BACILLARIOPHYCEAE		
		PENNALES		
		FRAGILARIACEAE		
		FRAGILARIA	4,000	99
		SYNEDRA	56	1
		TOTAL	4,000	
July 7	0930	CHLOROPHYTA		
		CHLOROPHYCEAE		
		CHLOROCOCCALES		
		OCCYSTACEAE		
		ANKISTRODESMUS	63	9
		CHRYSOPHYTA		
		BACILLARIOPHYCEAE		
		CENTRALES		
		COSCINODISCACEAE		
		CYCLOTELLA	12	2
		PENNALES		
		ACHNANTHACEAE		
		ACHNANTHES	6	1
		COCCONEIS	6	1
		NITZSCHIACEAE		
		NITZSCHIA	6	1
		CYANOPHYTA		
		MYXOPHYCEAE		
		CHROOCOCCALES		
		CHROOCOCCACEAE		
		ANACYSTIS	580	85
		PYRRHOPHYTA		
		DINOPHYCEAE		
		PERIDINIALES		
		CERATIACEAE		
		CERATIUM	12	2
		TOTAL	680	

L - less than 1%, may not have been actually counted.

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY --Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total
Aug. 18	1030	CHLOROPHYTA		
		CHLOROPHYCEAE		
		CHLOROCOCCALES		
		CHARACIACEAE		
		SCHROEDERIA	50	4
		TETRASPORALES		
		PALMELLACEAE		
		SPHAEROCYSTIS	150	11
		CHRYSOPHYTA		
		BACILLARIOPHYCEAE		
		CENTRALES		
		COSCINODISCACEAE		
		CYCLOTELLA	25	2
		PENNALES		
		ACHNANTHACEAE		
		ACHNANTHES	25	2
		COCCONEIS	25	2
		CHRYSOPHYCEAE		
		CHRYSOMONADALES		
		OCHROMONADACEAE		
		OCHROMONAS	50	4
		CYANOPHYTA		
		MYXOPHYCEAE		
		CHROOCOCCALES		
		CHROOCOCCACEAE		
		ANACYSTIS	800	57
		EUGLENOPHYTA		
		CRYPTOPHYCEAE		
		CRYPTOMONIDALES		
		CRYPTOMONODACEAE		
		CRYPTOMONAS	250	18
		PYRRHOPHYTA		
		DINOPHYCEAE		
		PERIDINIALES		
		CERATIACEAE		
		CERATIUM	25	2
		TOTAL	1,400	
Sep. 14	0900	CHRYSOPHYTA		
		BACILLARIOPHYCEAE		
		PENNALES		
		DIATOMACEAE		
		DIATOMA	11	22
		FRAGILARIACEAE		
		SYNEDRA	17	33
		NAVICULACEAE		
		GYROSIGMA	6	11
		NAVICULA	11	22
		NITZSCHIACEAE		
		NITZSCHIA	6	11
		TOTAL	52	

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m^2) Dry weight	Biomass (g/m^2) Ash weight	Chlorophyll a (mg/m^2)	Chlorophyll b (mg/m^2)	Biomass pigment ratio	Sampling method
June 24	30	1.92	0.303	3.27	0.077	500	Polyethylene strip
Aug. 18	42	12.8	5.85	40.7	1.54	170	Polyethylene strip
Sept. 14	27	3.00	1.31	6.15	.861	280	Polyethylene strip

04295500 LAKE MEMPHREMAGOG AT NEWPORT, VT

LOCATION.--Lat 44°56'15", long 72°12'21", Orleans County, Hydrologic Unit 01110000, on west side of bridge on U.S. Highway 5 at Newport.

PERIOD OF RECORD.--Gage heights: May 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 673.00 ft (205.130 m) 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 FOR PERIOD OF RECORD.--Maximum gage height observed, 12.92 ft (3.938 m) Apr. 20, 1933; minimum recorded, 6.48 ft (1.975 m) Nov. 2, 1968 (affected by seiche), but may have been lower during period of use of nonrecording gage.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 11.76 ft (3.584 m) Apr. 4 (affected by seiche); minimum not determined; minimum daily, 7.59 ft (2.313 m) Jan. 27.

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.04	9.28	9.71	8.48	7.93	8.10	10.82	9.74	9.00	8.90	9.13	8.68
2	9.13	9.28	9.70	8.42	8.00	8.06	11.51	9.79	9.00	9.03	9.28	8.71
3	9.08	9.24	9.67	8.41	8.01	8.01	11.70	9.83	9.00	9.10	9.17	8.63
4	9.11	9.22	9.60	8.40	8.03	7.98	11.71	9.79	8.98	9.11	9.05	8.54
5	9.04	9.24	9.46	8.36	8.08	7.95	11.62	9.66	8.94	9.09	8.94	8.56
6	9.03	9.10	9.45	8.32	8.09	8.02	11.49	9.61	8.91	9.06	8.94	8.53
7	9.00	9.05	9.45	8.28	8.10	8.12	11.36	9.52	8.86	9.05	8.87	8.48
8	8.92	9.03	9.33	8.27	8.10	8.16	11.21	9.46	8.87	9.10	8.83	8.45
9	8.86	9.07	9.23	8.21	8.09	8.15	10.99	9.41	8.89	9.11	8.79	8.42
10	8.78	9.05	9.15	8.16	8.07	8.13	10.79	9.33	8.84	9.06	8.95	8.38
11	8.71	9.13	9.10	8.11	8.05	8.09	10.62	9.22	8.82	9.03	9.35	8.49
12	8.78	9.13	8.98	8.07	8.02	8.03	10.39	9.28	8.85	9.01	9.52	8.52
13	8.73	9.24	8.91	8.02	8.00	7.99	10.18	9.35	8.69	8.98	9.52	8.57
14	8.71	9.44	8.90	8.05	7.95	7.95	10.01	9.35	8.64	8.99	9.50	8.56
15	8.70	9.53	8.95	8.04	7.90	7.90	9.83	9.40	8.63	8.95	9.45	8.56
16	8.72	9.62	8.98	7.99	7.89	7.86	9.74	9.40	8.59	8.90	9.50	8.54
17	8.72	9.66	8.94	7.96	7.86	7.85	9.71	9.36	8.60	8.91	9.45	8.48
18	8.84	9.76	8.93	7.93	7.88	7.79	9.67	9.33	8.55	8.84	9.35	8.44
19	8.93	9.79	8.88	7.89	7.91	7.73	9.64	9.47	8.47	8.79	9.20	8.44
20	9.11	9.81	8.85	7.84	7.93	7.68	9.61	9.61	8.46	8.75	9.10	8.45
21	9.28	9.81	8.83	7.82	7.90	7.77	9.54	9.63	8.49	8.76	8.95	8.45
22	9.41	9.94	8.78	7.79	7.96	8.07	9.47	9.65	8.52	8.71	9.00	8.43
23	9.45	10.03	8.73	7.75	8.00	8.29	9.58	9.68	8.55	8.62	8.90	8.41
24	9.46	10.06	8.69	7.72	8.00	8.43	9.65	9.64	8.56	8.67	8.90	8.39
25	9.47	10.03	8.63	7.65	8.02	8.60	9.70	9.57	8.59	8.72	8.85	8.36
26	9.52	9.95	8.61	7.62	8.00	8.85	9.77	9.46	8.71	8.66	8.75	8.35
27	9.49	9.89	8.60	7.59	7.98	9.13	9.76	9.35	8.79	8.65	8.80	8.43
28	9.47	9.84	8.57	7.75	8.01	9.79	9.76	9.22	8.82	8.78	8.90	8.55
29	9.50	9.77	8.55	7.79	8.05	10.19	9.78	9.14	8.85	8.86	8.85	8.51
30	9.52	9.63	8.53	7.81	---	10.40	9.77	9.06	8.87	8.91	8.75	8.53
31	9.38	---	8.50	7.87	---	10.52	---	9.02	---	8.93	8.71	---
MEAN	9.09	9.52	9.01	8.01	7.99	8.37	10.31	9.46	8.74	8.90	9.07	8.49
MAX	9.52	10.06	9.71	8.48	8.10	10.52	11.71	9.83	9.00	9.11	9.52	8.71
MIN	8.70	9.03	8.50	7.59	7.86	7.68	9.47	9.02	8.46	8.62	8.71	8.35

CAL YR 1975 MEAN 8.60 MAX 10.06 MIN 6.74
WTR YR 1976 MEAN 8.92 MAX 11.71 MIN 7.59

NOTE.--No gage-height record Jan. 8 to Feb. 4.

04296000 BLACK RIVER AT COVENTRY, VT

LOCATION.--Lat 44°52'08", long 72°16'14", Orleans County, Hydrologic Unit 01110000, on right bank 15 ft (5 m) downstream from highway bridge, 800 ft (250 m) upstream from Stony Brook, and 0.4 mi (0.6 km) northwest of Coventry.

DRAINAGE AREA.--122 mi^2 (316 km^2).

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 good except those for winter period and periods of no gage-height record, which are fair. Occasional diurnal fluctuation at low flow by mill upstream; greater regulation prior to 1960. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--25 years, 202 ft^3/s (5.721 m^3/s), 22.48 in/yr (571 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,740 ft^3/s (106 m^3/s) Apr. 2, 1976, gage height, 7.91 ft (2.411 m); minimum, 11 ft^3/s (0.31 m^3/s) Aug. 29 to Sept. 1, 1953; minimum daily, 11 ft^3/s (0.31 m^3/s) Aug. 29 to Sept. 1, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft^3/s (48.1m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 28	0845	2,260	64.0	6.73	2.051	Aug. 10	1645	2,360	66.8	6.82	2.079
Apr. 2	0200	*3,740	106	*7.91	2.411						

Minimum discharge, 48 ft^3/s (1.36 m^3/s) July 23, 24; minimum daily, 50 ft^3/s (1.42 m^3/s) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	110	350	66	210	300	2500	244	201	259	601	145
2	147	170	280	64	200	250	3300	352	183	346	441	165
3	142	160	220	62	230	225	2300	392	145	308	234	145
4	121	180	180	60	200	210	1300	344	135	202	133	110
5	102	150	150	58	180	250	900	264	125	145	102	100
6	91	140	200	56	160	450	800	213	110	110	106	97
7	84	130	300	55	140	400	730	281	192	90	114	88
8	78	140	200	54	130	350	659	377	237	105	111	80
9	73	270	150	53	125	300	573	310	158	125	108	73
10	69	240	165	52	125	270	494	224	115	130	1140	70
11	70	400	214	52	135	240	478	191	102	93	1220	295
12	181	300	180	54	135	210	402	528	129	81	718	320
13	238	500	117	57	130	190	341	502	105	85	643	250
14	233	700	127	60	120	200	344	406	90	90	516	140
15	208	500	213	58	120	190	404	366	82	88	491	100
16	240	400	262	56	160	170	589	312	77	79	555	80
17	224	350	172	54	210	180	719	239	89	71	407	75
18	389	400	130	53	170	180	755	438	88	70	270	70
19	433	350	115	54	250	175	677	1110	76	66	186	70
20	727	300	110	57	320	170	581	1080	84	59	151	75
21	631	500	100	60	260	535	453	958	246	55	134	90
22	506	800	98	59	320	1200	332	786	195	53	119	80
23	411	400	94	54	450	907	292	637	111	50	100	130
24	260	300	90	52	390	752	272	494	87	54	95	100
25	195	230	86	54	340	859	224	386	98	79	90	75
26	193	200	82	56	330	1030	253	317	605	79	85	70
27	180	180	79	90	500	1380	395	317	379	277	440	500
28	155	200	76	350	500	2130	449	242	219	512	330	320
29	139	180	74	300	425	1750	412	201	157	351	245	225
30	131	200	70	250	---	1500	328	173	274	242	265	143
31	121	---	68	230	---	2000	---	155	---	147	210	---
TOTAL	6940	9080	4752	2690	6965	18953	22256	12839	4894	4501	10360	4281
MEAN	224	303	153	86.8	240	611	742	414	163	145	334	143
MAX	727	800	350	350	500	2130	3300	1110	605	512	1220	500
MIN	69	110	68	52	120	170	224	155	76	50	85	70
CFSM	1.84	2.48	1.25	.71	1.97	5.01	6.08	3.39	1.34	1.19	2.74	1.17
IN.	2.12	2.77	1.45	.82	2.12	5.78	6.79	3.91	1.49	1.37	3.16	1.31

CAL YR 1975 TOTAL 70127 MEAN 192 MAX 1930 MIN 22 CFSM 1.57 IN 21.38
WTR YR 1976 TOTAL 108511 MEAN 296 MAX 3300 MIN 50 CFSM 2.43 IN 33.09

NOTE.--No gage-height record Nov. 1 to Dec. 9, Dec. 20 to Jan. 21, Jan. 24 to Mar. 2, Sept. 13-28.

04296500 CLYDE RIVER AT NEWPORT, VT

LOCATION.--Lat 44°56'22", long 72°11'23", Orleans County, Hydrologic Unit 01110000, on right bank in Newport, just downstream from small right-bank tributary, and 1 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--142 mi^2 (368 km^2).

WATER-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."

REVISED RECORDS.--WSP 744: 1913(M), drainage area. WSP 924: 1940. WSP 1307: 1913-15(M).

GAGE.--Water-stage recorder and, since Mar. 6, 1957, records of power generation. Datum of gage is 682.36 ft (207.983 m) 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.

REMARKS.--Records fair except those for winter period, which are poor. Flow regulated by powerplant and reservoirs upstream and, since Mar. 6, 1957, by diversion around station through canal and penstock of Newport No. 11 powerplant. Diversion computed from relation of kilowatt-hour output and measured discharge; discharge computed by adding flow over control to flow diverted through powerplant.

AVERAGE DISCHARGE.--57 years (water years 1910-19, 1921, 1923-24, 1929-35, 1939-76), 257 ft^3/s (7.278 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,900 ft^3/s (110 m^3/s) Mar. 20, 1936, gage height, 5.76 ft (1.756 m), site and datum then in use, from rating curve extended above 2,800 ft^3/s (79.3 m^3/s) on basis of computation of peak flow over dam; maximum daily, 2,680 ft^3/s (75.9 m^3/s) May 4, 1940; minimum daily, 2.6 ft^3/s (0.074 m^3/s) June 18, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,910 ft^3/s (54.1 m^3/s) Apr. 3; minimum daily, 31 ft^3/s (0.88 m^3/s) June 19, July 11, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	426	241	420	89	235	395	1510	521	452	242	384	313
2	417	35	401	180	389	341	1720	503	401	254	446	400
3	421	338	277	142	356	349	1910	500	391	235	404	308
4	433	221	315	129	347	333	1870	512	401	92	339	261
5	346	250	416	319	391	405	1620	519	291	223	361	296
6	259	252	426	277	391	402	1370	546	109	268	338	135
7	279	238	388	281	309	300	1170	549	297	197	323	322
8	251	242	286	226	356	415	1030	543	293	195	106	276
9	247	162	321	136	301	418	924	524	276	126	415	269
10	255	301	288	67	445	408	821	504	292	34	405	260
11	141	334	309	97	291	406	757	493	261	31	452	34
12	98	302	322	299	282	385	686	503	77	182	450	79
13	155	336	287	123	264	321	634	537	93	182	449	318
14	250	415	263	299	131	317	600	546	278	196	447	291
15	254	412	312	268	48	260	581	550	259	194	449	261
16	242	418	292	295	627	287	579	539	239	191	442	256
17	244	450	273	150	455	282	614	527	247	31	440	260
18	406	489	271	123	245	249	785	522	241	32	441	41
19	361	488	283	328	268	233	1060	596	31	183	438	40
20	331	481	200	277	434	303	1170	670	37	151	438	287
21	461	481	63	270	411	289	1100	802	303	63	427	236
22	464	540	305	258	300	512	975	898	205	58	420	261
23	467	536	331	97	193	571	848	857	197	60	417	180
24	470	520	274	115	297	666	745	780	193	109	403	152
25	468	514	52	47	300	776	648	709	176	167	320	32
26	460	503	230	213	300	898	922	653	33	162	297	32
27	469	493	202	354	303	1080	594	616	32	184	294	256
28	401	484	159	387	397	1400	589	573	235	181	207	262
29	298	472	313	482	312	1480	567	529	222	242	67	250
30	296	415	265	393	---	1480	546	515	242	268	307	237
31	272	---	246	274	---	1410	---	482	---	242	312	---
TOTAL	10342	11363	8790	6995	9378	17371	28945	18118	6804	4975	11438	6605
MEAN	334	379	284	226	323	560	965	584	227	160	369	220
MAX	470	540	426	482	627	1480	1910	898	452	268	452	400
MIN	98	35	52	47	48	233	546	482	31	31	67	32

CAL YR 1975 TOTAL 93511.8 MEAN 256 MAX 1070 MIN 7.8
WTR YR 1976 TOTAL 141124.0 MEAN 386 MAX 1910 MIN 31

04296500 CLYDE RIVER AT NEWPORT, VT--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.
PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
WATER TEMPERATURES: October 1974 to current year.
INSTRUMENTATION.--Water-quality monitor since October 1974.
REMARKS.--Interruptions in record were due to malfunctions of the instrument.
EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 309 micromhos Aug. 31, 1975; minimum recorded, 84 micromhos May 9, 1976.
WATER TEMPERATURES: Maximum, 26.5°C July 8, 19, 20, 1975; minimum, 0.0°C on many days during winter periods.
EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 207 micromhos July 24; minimum recorded, 84 micromhos May 9.
WATER TEMPERATURES: Maximum recorded, 24.0°C June 20, 24, 25, July 10; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA,MG) (MG/L)
OCT											
07...	1100	138	--	--	10.5	--	10.4	180	B55	B8	--
NOV											
25...	0715	125	6.8	1.0	3.8	2	13.4	530	B110	280	51
JAN											
07...	0700	149	6.6	-2.0	.0	--	--	400	B100	B24	--
FEB											
24...	1300	149	6.5	--	.0	--	--	920	70	120	--
MAR											
25...	0800	147	6.6	--	.0	--	14.6	1000	120	2300	--
APR											
23...	0700	83	6.8	--	9.5	1	--	160	B20	B10	32
28...	1000	--	--	--	--	--	--	--	--	--	--
MAY											
28...	0800	--	--	--	--	--	--	--	--	--	--
JUN											
04...	0615	102	6.8	8.0	15.5	--	9.8	440	B20	14	--
25...	1030	132	6.2	--	23.0	--	--	590	190	78	--
AUG											
06...	0900	--	--	--	--	--	--	--	--	--	--
27...	1200	--	--	--	--	--	--	--	--	--	--
31...	0800	129	6.4	25.0	19.5	2	8.4	740	B40	B64	44
SEP											
22...	0900	110	5.9	15.0	17.0	--	15.0	160	65	B5	--

DATE	NONCARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT											
07...	--	--	--	--	--	--	--	--	--	--	--
NOV											
25...	12	18	1.5	3.3	1.3	48	0	39	12	9.8	5.5
JAN											
07...	--	--	--	--	--	--	--	--	--	--	--
FEB											
24...	--	--	--	--	--	--	--	--	--	--	--
MAR											
25...	--	--	--	--	--	--	--	--	--	--	--
APR											
23...	8	11	1.1	2.2	.8	29	0	24	7.4	6.2	4.1
28...	--	--	--	--	--	--	--	--	--	--	--
MAY											
28...	--	--	--	--	--	--	--	--	--	--	--
JUN											
04...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
31...	6	15	1.6	3.2	.9	46	0	38	29	8.2	5.2
SEP											
22...	--	--	--	--	--	--	--	--	--	--	--

B NON-IDEAL COLONY COUNT.

04296500 CLYDE RIVER AT NEWPORT, VT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (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)	TOTAL ORGANIC CARBON (C) (MG/L)	SUS-PENDED SEDI-MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT											
07...	--	--	--	--	.13	.36	.49	.03	--	--	--
NOV											
25...	.0	5.4	64	69	.19	.33	.52	.04	10	--	--
JAN											
07...	--	--	--	--	.41	.25	.66	.03	--	--	--
FEB											
24...	--	--	--	--	.52	.39	.91	.05	--	4	100
MAR											
25...	--	--	--	--	.50	.34	.84	.06	--	--	--
APR											
23...	.1	3.9	52	44	.32	.35	.67	.02	4.2	1	100
28...	--	--	--	--	--	--	--	--	--	11	100
MAY											
28...	--	--	--	--	--	--	--	--	--	28	100
JUN											
04...	--	--	--	--	.13	.38	.51	.03	--	1	100
25...	--	--	--	--	.15	.28	.43	.04	--	4	100
AUG											
06...	--	--	--	--	--	--	--	--	--	15	100
27...	--	--	--	--	--	--	--	--	--	36	100
31...	.1	5.0	76	62	.12	.25	.37	.03	11	1	100
SEP											
22...	--	--	--	--	.12	.30	.42	.04	--	1	100

DATE	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	SUS-PENDED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)
NOV											
25...	0	0	0	1	1	0	0	0	0	1	0
APR											
23...	0	0	0	0	0	0	10	0	<10	0	0
AUG											
31...	1	1	0	0	0	1	<10	0	<10	1	0

DATE	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)
NOV											
25...	1	0	0	0	190	70	4	2	2	<.5	.0
APR											
23...	0	0	0	0	180	30	3	1	2	<.5	.0
AUG											
31...	3	0	0	10	200	60	0	0	0	<.5	.0

DATE	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	SUS-PENDED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV										
25...	<.5	20	10	10	0	0	0	9	0	10
APR										
23...	<.5	20	10	10	0	0	0	0	0	(
AUG										
31...	<.5	30	30	0	0	0	0	10	10	0

04296500 CLYDE RIVER AT NEWPORT, VT--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

OCT. 7, 1975
1100 HOURS

IDENTIFICATION OF PHYTOPLANKTON

1,600 CELLS/ML

	ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		110	7
D	....MELOSIRA		550	34
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....COCCONEIS		29	2
	...CYMBELLACEAE			
	....AMPHORA		58	4
	...FRAGILARIACEAE			
	....ASTERIONELLA		58	4
D	....FRAGILARIA		380	23
	...GOMPHONEMATACEAE			
	....GOMPHONEMA		29	2
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		140	9
	...NITZSCHIACEAE			
	....NITZSCHIA		230	14
	.CHRYSOPHYCEAE	YELLOW-BROWN ALGAE		
	..CHRYSOMONADALES			
	...OCHROMONADACEAE			
	....DINOBRYON		29	2
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...NOSTOCACEAE			
L	....ANABAENA			

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
CLASS 0.129
ORDER 1.092
FAMILY 2.231
GENERA 2.657
USED DEPTH-INTEGRATED SAMPLING METHOD.

NOV. 25, 1975
0715 HOURS
IDENTIFICATION OF PHYTOPLANKTON
730 CELLS/ML

	_ORGANISM__NAME	_COMMON__NAME	CELLS/ML	PER_CENT
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
L	....MELOSIRA			
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		100	14
	....COCCONEIS		10	1
	...CYMBELLACEAE			
L	....CYMBELLA			
	...DIATOMACEAE			
	....DIATOMA		10	1
	...FRAGILARIACEAE			
L	....ASTERIONELLA			
	...GOMPHONEMATACEAE			
	....GOMPHONEMA		20	3
	...NAVICULACEAE	NAVICULOID		
L	....DIPLONEIS			
	....NAVICULA		20	3
	...NITZSCHIACEAE			
	....NITZSCHIA		50	7
	...SURIRELLACEAE			
	....SURIRELLA		10	1
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...OSCILLATORIACEAE			
D	....OSCILLATORIA		500	68
	PYRRHOPHYTA			
	.DINOPHYCEAE	DINOFLAGELLATES		
	..GYMNODINIALES			
	...GYMNODINIACEAE			
	....GYMNODINIUM		10	1

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
PHYL/DIV 0.980
CLASS 0.980
ORDER 0.980
FAMILY 1.589
GENERA 1.655
USED DEPTH-INTEGRATED SAMPLING METHOD.

JAN. 7, 1976
0700 HOURS
IDENTIFICATION OF PHYTOPLANKTON
120 CELLS/ML

	_ORGANISM__NAME	_COMMON__NAME	CELLS/ML	PER_CENT
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...CYMBELLACEAE			
	....CYMBELLA		6	5
	...DIATOMACEAE			
	....DIATOMA		6	5
	...FRAGILARIACEAE			
D	....FRAGILARIA		31	26
	....SYNEDRA		6	5
	...GOMPHONEMATACEAE			
D	....GOMPHONEMA		18	16
	...NAVICULACEAE	NAVICULOID		
D	....NAVICULA		25	21
	...NITZSCHIACEAE			
D	....NITZSCHIA		25	21

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
FAMILY 2.339
GENERA 2.545
USED DEPTH-INTEGRATED SAMPLING METHOD.

04296500 CLYDE RIVER AT NEWPORT, VT--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

FEB. 24, 1976
1300 HOURS

IDENTIFICATION OF PHYTOPLANKTON

5,100 CELLS/ML

	_ORGANISM__NAME	_COMMON__NAME	CELLS/ML	PER_CENT
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...DIATOMACEAE			
L	....DIATOMA			0
	...GOMPHONEMATACEAE			
L	....GOMPHONEMA			0
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		37	1
	...NITZSCHIACEAE			
	....NITZSCHIA		74	1
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...OSCILLATORIACEAE			
D	....OSCILLATORIA		5,000	98

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
PHYL/DIV 0.151
CLASS 0.151
ORDER 0.151
FAMILY 0.171
GENERA 0.171
USED DEPTH-INTEGRATED SAMPLING METHOD.

MAR. 25, 1976
0800 HOURS

IDENTIFICATION OF PHYTOPLANKTON

1,100 CELLS/ML

	_ORGANISM__NAME	_COMMON__NAME	CELLS/ML	PER_CENT
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		33	3
	...CYMBELLACEAE			
	....CYMBELLA		11	1
	...FRAGILARIACEAE			
	....FRAGILARIA		88	8
	...GOMPHONEMATACEAE			
	....GOMPHONEMA		11	1
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		44	4
	...NITZSCHIACEAE			
	....NITZSCHIA		44	4
	...ACHNANTHACEAE			
L	....RHOICOSPHENIA			0
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...OSCILLATORIACEAE			
D	....OSCILLATORIA		880	79

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
PHYL/DIV 0.737
CLASS 0.737
ORDER 0.737
FAMILY 1.208
GENERA 1.208
USED DEPTH-INTEGRATED SAMPLING METHOD.

04296500 CLYDE RIVER AT NEWPORT, VT--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

APR. 23, 1976
0700 HOURS

IDENTIFICATION OF PHYTOPLANKTON

1,400 CELLS/ML

	ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
L	....CYCLOTELLA			0
	....MELOSIRA		64	5
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		64	5
	...CYMBELLACEAE			
	....CYMBELLA		64	5
	...FRAGILARIACEAE			
	....FRAGILARIA		64	5
	....SYNEDRA		64	5
	...MERIDIONACEAE			
L	....MERIDION			0
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		190	14
	...NITZSCHIACEAE			
	....NITZSCHIA		130	9
	...SURIRELLACEAE			
L	....SURIRELLA			0
	.CHRYSOPHYCEAE	YELLOW-BROWN ALGAE		
	..CHRYSOMONADALES			
	...CHROMULINACEAE			
D	....CHRYSOCOCCUS		770	55

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
CLASS 0.994
ORDER 1.207
FAMILY 2.106
GENERA 2.197
USED DEPTH-INTEGRATED SAMPLING METHOD.

JUNE 4, 1976
0615 HOURS

IDENTIFICATION OF PHYTOPLANKTON

1,300 CELLS/ML

	ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		110	8
	...CYMBELLACEAE			
	....CYMBELLA		35	3
	...FRAGILARIACEAE			
	....FRAGILARIA		35	3
	....SYNEDRA		180	14
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		110	8
	...NITZSCHIACEAE			
D	....NITZSCHIA		350	28
	.CHRYSOPHYCEAE	YELLOW-BROWN ALGAE		
	..CHRYSOMONADALES			
	...OCHROMONADACEAE			
D	....DINOBRYON		460	36

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
CLASS 0.944
ORDER 0.944
FAMILY 2.216
GENERA 2.324
USED DEPTH-INTEGRATED SAMPLING METHOD.

04296500 CLYDE RIVER AT NEWPORT, VT--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

JUNE 25, 1976
1030 HOURS

IDENTIFICATION OF PHYTOPLANKTON

9,400 CELLS/ML

	ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT
	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...MICRACTINIACEAE			
	....GOLENKINIA		270	3
	...OOCYSTACEAE			
	....KIRCHNERIELLA		110	1
	...SCENEDESMACEAE			
	....SCENEDESMUS		210	2
	..VOLVOCALES			
	...CHLAMYDOMONADACEAE			
	....CHLAMYDOMONAS		210	2
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		270	3
L	....MELOSIRA			0
	..PENNALES	PENNATE		
	...FRAGILARIACEAE			
	....ASTERIONELLA		80	1
	...GOMPHONEMATACEAE			
	....GOMPHONEMA		80	1
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		80	1
	...NITZSCHIACEAE			
	....NITZSCHIA		110	1
	.CHRYSOPHYCEAE	YELLOW-BROWN ALGAE		
	..CHRYSOMONADALES			
	...OCHROMONADACEAE			
	....OCHROMONAS		160	2
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..CHROOCOCCALES	COCCOID		
	...CHROOCOCCACEAE			
D	....ANACYSTIS		1,500	16
	..OSCILLATORIALES	FILAMENTOUS		
	...NOSTOCACEAE			
	....ANABAENA		80	1
	...OSCILLATORIACEAE			
D	....OSCILLATORIA		6,000	64
	EUGLENOPHYTA	EUGLENOIDS		
	.CRYPTOPHYCEAE	CRYPTOMONADS		
	..CRYPTOMONIDALES			
	...CRYPTOMONODACEAE			
	....CRYPTOMONAS		190	2
	PYRRHOPHYTA			
	.DINOPHYCEAE	DINOFLAGELLATES		
	..PERIDINIALES			
	...PERIDINIACEAE			
L	....PERIDINIUM			0

NOTE: D - DOMINANT ORGANISM: GREATER OR EQUAL TO 15%
L - LESS THEN 1%: MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:

PHYL/DIV	0.990
CLASS	1.051
ORDER	1.773
FAMILY	2.005
GENERA	2.018

USED DEPTH-INTEGRATED SAMPLING METHOD.

04296500 CLYDE RIVER AT NEWPORT, VT--Continued

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

AUG. 31, 1976
0800 HOURS

IDENTIFICATION OF PHYTOPLANKTON

880 CELLS/ML

	ORGANISM NAME	COMMON NAME	CELLS/ML	PER CENT
	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...MICRACTINIACEAE			
	....MICRACTINIUM		55	6
	...OCCYSTACEAE			
	....ANKISTRODESMUS		14	2
	...SCENEDESMACEAE			
	....SCENEDESMUS		41	5
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		69	8
	....COCCONEIS		14	2
	...CYMBELLACEAE			
	....CYMBELLA		28	3
	...FRAGILARIACEAE			
	....ASTERIONELLA		41	5
	....SYNEDRA		28	3
	...NAVICULACEAE	NAVICULOID		
L	....DIPLONEIS			0
	....NAVICULA		96	11
	...NITZSCHIACEAE			
	....NITZSCHIA		28	3
	...SURIRELLACEAE			
	....SURIRELLA		14	2
	.CHRYSOPHYCEAE	YELLOW-BROWN ALGAE		
	..CHRYSOMONADALES			
	...OCHROMONADACEAE			
	....DINOBRYON		41	5
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..CHROOCOCCALES	COCCOID		
	...CHROOCOCCACEAE			
D	....ANACYSTIS		410	47
	..OSCILLATORIALES	FILAMENTOUS		
	...NOSTOCACEAE			
L	....ANABAENA			0
	PYRRHOPHYTA			
	.DINOPHYCEAE	DINOFLAGELLATES		
	..PERIDINIALES			
	...PERIDINIACEAE			
L	....PERIDINIUM			0

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
PHYL/DIV 1.415
CLASS 1.625
ORDER 1.625
FAMILY 2.633
GENERA 2.770
USED DEPTH-INTEGRATED SAMPLING METHOD.

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

SEP. 22, 1976
0900 HOURS

IDENTIFICATION OF PHYTOPLANKTON

1,600 CELLS/ML

	_ORGANISM__NAME_____	_COMMON__NAME_____	CELLS/ML	PER_CENT
	CHLOROPHYTA	GREEN ALGAE		
	.CHLOROPHYCEAE			
	..CHLOROCOCCALES			
	...OCCYSTACEAE			
	....ANKISTRODESMUS		8	1
L	....OOCYSTIS			0
	...SCENEDESMACEAE			
L	....SCENEDESMUS			0
	..VOLVOCALES			
	...CHLAMYDOMONADACEAE			
	....CHLAMYDOMONAS		40	3
	CHRYSOPHYTA			
	.BACILLARIOPHYCEAE	DIATOMS		
	..CENTRALES	CENTRIC		
	...COSCINODISCACEAE			
	....CYCLOTELLA		32	2
	..PENNALES	PENNATE		
	...ACHNANTHACEAE			
	....ACHNANTHES		8	1
	...CYMBELLACEAE			
	....CYMBELLA		8	1
	...FRAGILARIACEAE			
	....ASTERIONELLA		16	1
	...NAVICULACEAE	NAVICULOID		
	....NAVICULA		8	1
	...NITZSCHIACEAE			
	....NITZSCHIA		8	1
	...SURIRELLACEAE			
L	....SURIRELLA			0
	.CHRYSOPHYCEAE	YELLOW-BROWN ALGAE		
	..CHRYSOMONADALES			
	...OCHROMONADACEAE			
	....DINOBRYON		16	1
	CYANOPHYTA	BLUE-GREEN ALGAE		
	.MYXOPHYCEAE			
	..OSCILLATORIALES	FILAMENTOUS		
	...OSCILLATORIACEAE			
D	....OSCILLATORIA		1,400	91
	EUGLENOPHYTA	EUGLENOIDS		
	.EUGLENOPHYCEAE			
	..EUGLENALES			
	...EUGLENACEAE			
L	....TRACHELOMONAS			0
	PYRRHOPHYTA			
	.DINOPHYCEAE	DINOFLAGELLATES		
	..PERIDINIALES			
	...PERIDINIACEAE			
L	....PERIDINIUM			0

NOTE: D - DOMINANT ORGANISM; GREATER OR EQUAL TO 15%
L - LESS THEN 1%; MAY NOT HAVE BEEN ACTUALLY COUNTED
ANALYSIS METHOD: SEDGWICK-RAFTER CHAMBER , 200-X MICROSCOPE
DIVERSITY INDICES, BASED ON ACTUAL COUNTS:
PHYL/DIV 0.533
CLASS 0.573
ORDER 0.644
FAMILY 0.714
GENERA 0.714
USED DEPTH-INTEGRATED SAMPLING METHOD.

PERIPHYTON

DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS(G/SQ M) DRY WEIGHT	BIOMASS(G/SQ M) ASH WEIGHT	CHLOROPHYLL A (MG/SQ M)	CHLOROPHYLL B (MG/SQ M)	BIOMASS PIGMENT RATIO	SAMPLING METHOD
OCT 07	40	12	8.8	32	4.9	110	ARTIFICIAL SUBSTRATE

04296500 CLYDE RIVER AT NEWPORT, VT--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	144	140	141	146	132	138	129	124	125	149	144	146
2	143	140	141	152	143	149	131	125	126	153	137	145
3	142	139	141	152	129	135	140	125	130	149	138	144
4	144	139	140	148	130	136	138	125	129	151	140	147
5	151	140	142	142	130	135	127	124	126	151	139	143
6	160	139	146	142	130	135	139	126	130	150	140	143
7	156	139	145	142	131	136	141	126	131	149	140	143
8	155	139	145	143	132	138	138	126	130	150	140	144
9	155	139	145	147	135	143	139	127	130	149	140	146
10	156	138	145	145	130	136	137	127	130	153	149	151
11	157	139	149	140	131	134	140	128	131	152	150	151
12	161	139	155	141	129	133	138	128	131	150	140	147
13	154	140	147	143	130	133	137	129	131	152	145	149
14	153	139	145	131	130	131	141	129	133	153	141	146
15	153	140	145	134	130	131	141	132	134	151	143	146
16	160	141	149	131	129	130	141	130	134	152	142	146
17	154	139	145	135	128	130	141	131	134	158	147	153
18	163	138	144	129	127	128	141	130	134	162	158	160
19	146	137	139	129	126	128	142	131	135	162	143	150
20	161	137	143	128	126	127	143	132	136	152	144	147
21	138	135	137	129	127	127	148	139	144	151	144	147
22	139	135	136	127	126	127	151	133	140	153	144	148
23	139	136	138	127	125	126	141	132	135	160	152	156
24	139	134	136	128	125	127	140	133	136	163	151	159
25	134	133	133	128	124	125	149	140	146	158	154	156
26	136	133	134	125	123	124	150	134	141	155	141	148
27	136	131	132	125	124	125	145	136	140	164	146	152
28	140	130	132	125	124	124	147	139	144	163	152	158
29	151	131	137	125	124	124	149	135	140	163	149	153
30	143	131	136	126	124	125	145	137	139	154	146	148
31	144	130	135	---	---	---	148	137	141	156	146	150
MONTH	163	130	141	152	123	131	151	124	134	164	137	149

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	159	149	153	151	146	147	137	135	136	91	89	90
2	160	151	154	157	146	149	135	128	131	92	90	91
3	162	152	156	154	147	149	128	123	126	93	89	90
4	159	153	155	155	146	149	124	120	122	92	90	90
5	159	153	155	153	144	148	121	116	118	91	90	90
6	159	148	152	156	152	154	115	113	114	92	87	89
7	154	147	149	163	149	154	112	110	111	87	85	86
8	152	144	147	149	146	148	112	109	110	86	85	86
9	152	144	147	149	145	147	110	108	109	86	84	85
10	152	144	147	148	144	146	110	108	109	86	85	86
11	150	144	146	149	146	147	109	106	108	87	86	86
12	152	147	149	155	147	149	108	106	106	91	88	91
13	157	151	153	154	145	148	106	104	104	92	89	90
14	160	154	158	155	144	147	104	102	103	90	89	90
15	164	160	163	157	144	148	104	102	102	91	89	90
16	164	148	154	160	145	150	103	100	101	91	90	91
17	157	151	154	160	145	149	101	99	100	94	91	92
18	159	148	153	157	145	149	98	96	97	98	93	95
19	158	144	150	156	146	150	94	93	94	97	95	96
20	153	146	149	160	145	151	92	91	91	97	96	97
21	158	151	154	173	155	159	90	88	89	97	94	95
22	161	152	155	156	147	150	89	86	87	95	93	94
23	160	148	154	149	145	146	86	85	85	94	93	94
24	157	145	150	145	142	144	87	86	86	94	93	93
25	153	139	144	146	144	145	87	86	87	95	93	94
26	160	140	146	145	139	142	89	87	88	96	94	95
27	165	144	150	137	133	135	90	88	89	96	94	95
28	154	148	149	151	129	136	92	89	90	96	94	95
29	160	146	152	148	145	146	92	89	90	95	94	95
30	---	---	---	145	142	144	91	89	89	96	95	96
31	---	---	---	143	138	141	---	---	---	98	96	97
MONTH	165	139	152	173	129	147	137	85	102	98	84	92

04296500 CLYDE RIVER AT NEWPORT, VT--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	101	99	100	149	119	129	169	145	150	---	---	---
2	102	99	101	156	119	130	147	145	146	---	---	---
3	105	100	101	149	119	130	146	143	145	150	131	135
4	103	100	103	154	119	141	157	143	146	153	135	143
5	124	101	107	160	119	134	156	142	145	151	130	137
6	135	103	119	150	119	129	175	141	146	152	133	136
7	144	102	115	149	119	131	159	141	145	151	128	138
8	130	103	110	159	121	135	160	141	152	152	131	139
9	132	105	112	150	121	138	161	140	144	152	131	140
10	135	105	113	152	146	150	182	140	146	170	131	142
11	134	106	114	169	148	164	142	137	139	167	140	158
12	146	107	132	167	146	155	138	134	136	158	141	153
13	163	107	143	173	146	158	134	130	131	---	---	---
14	130	107	114	168	145	155	131	127	129	---	---	---
15	140	108	118	167	146	154	131	125	128	---	---	---
16	141	109	120	164	146	154	131	126	129	---	---	---
17	150	110	124	166	153	158	130	124	127	---	---	---
18	143	112	122	167	158	164	128	122	125	---	---	---
19	137	133	135	166	146	156	126	121	123	---	---	---
20	148	137	142	160	147	154	125	119	122	---	---	---
21	150	114	122	165	147	157	122	119	121	---	---	---
22	150	116	131	163	148	157	122	119	121	---	---	---
23	150	117	132	162	158	160	124	119	122	---	---	---
24	152	118	134	207	148	175	---	---	---	---	---	---
25	153	118	135	164	147	155	---	---	---	---	---	---
26	177	155	170	159	148	155	---	---	---	---	---	---
27	185	177	181	186	149	161	---	---	---	---	---	---
28	184	118	142	169	148	156	---	---	---	---	---	---
29	151	119	131	170	146	152	---	---	---	149	133	140
30	153	118	130	189	144	156	---	---	---	152	135	142
31	---	---	---	183	146	153	---	---	---	---	---	---
MONTH	185	99	125	207	119	150	---	---	---	---	---	---
YEAR	207	84	133									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.5	14.5	15.0	7.0	6.5	7.0	3.0	2.0	3.0	0.5	0.0	0.0
2	15.5	14.5	15.0	8.5	7.0	7.5	2.5	2.0	2.0	0.5	0.0	0.0
3	14.5	13.5	14.0	8.0	7.5	8.0	2.0	1.0	1.5	0.5	0.0	0.0
4	13.5	13.0	13.5	8.5	8.0	8.5	1.5	0.5	1.0	0.5	0.0	0.0
5	13.5	12.5	13.0	8.5	7.5	8.0	1.5	1.5	1.5	0.5	0.0	0.0
6	13.0	12.5	13.0	8.0	7.0	7.5	2.0	1.5	1.5	0.5	0.0	0.0
7	12.5	11.5	12.5	8.5	7.5	8.0	1.5	0.5	1.5	0.5	0.0	0.0
8	12.5	11.0	12.0	9.5	8.5	9.0	1.5	0.5	1.0	0.5	0.0	0.0
9	12.0	11.0	11.5	10.0	9.0	9.5	2.0	1.0	1.5	0.5	0.0	0.0
10	11.5	10.5	11.0	9.5	9.0	9.5	2.0	1.5	2.0	0.0	0.0	0.0
11	11.5	11.0	11.0	9.0	8.0	8.5	2.0	1.5	2.0	0.0	0.0	0.0
12	11.0	10.5	11.0	8.5	7.5	8.0	2.0	0.5	1.5	0.5	0.0	0.0
13	11.5	10.5	11.0	8.0	7.5	8.0	2.0	0.5	1.5	0.5	0.0	0.0
14	11.5	10.5	11.0	8.0	6.5	7.0	2.0	1.5	2.0	0.5	0.0	0.5
15	11.5	11.0	11.0	6.5	5.0	6.0	2.5	1.5	2.0	0.5	0.0	0.0
16	11.5	10.5	11.0	6.0	5.5	5.5	2.0	0.5	1.5	0.5	0.0	0.0
17	11.0	10.0	10.5	6.0	5.5	5.5	1.5	0.0	1.0	0.0	0.0	0.0
18	10.5	8.5	10.0	6.5	6.0	6.0	1.5	0.0	1.0	0.5	0.0	0.0
19	10.0	9.5	10.0	6.0	5.5	6.0	1.0	0.0	0.5	0.5	0.0	0.0
20	10.0	9.0	9.5	6.0	6.0	6.0	1.0	0.0	0.5	0.5	0.0	0.0
21	10.0	9.5	10.0	6.0	6.0	6.0	0.5	0.0	0.5	0.5	0.0	0.0
22	10.0	10.0	10.0	6.0	5.0	5.5	1.0	0.0	0.5	0.5	0.0	0.0
23	10.0	10.0	10.0	5.0	4.5	4.5	1.0	0.0	0.5	0.0	0.0	0.0
24	10.5	9.5	10.0	4.5	4.0	4.5	0.5	0.0	0.5	0.5	0.0	0.0
25	11.0	10.5	11.0	4.0	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
26	11.0	10.5	11.0	3.5	3.0	3.5	0.5	0.0	0.0	0.5	0.0	0.5
27	10.5	10.0	10.5	3.5	3.0	3.0	0.5	0.0	0.5	0.5	0.0	0.5
28	10.0	9.5	10.0	3.0	2.5	3.0	0.5	0.0	0.0	0.5	0.0	0.0
29	10.0	9.0	9.5	2.5	2.0	2.5	0.5	0.0	0.0	0.5	0.0	0.0
30	9.5	8.0	9.0	2.5	2.0	2.5	0.5	0.0	0.0	0.5	0.0	0.0
31	8.0	6.5	7.5	---	---	---	0.5	0.0	0.5	0.5	0.0	0.0
MONTH	15.5	6.5	11.0	10.0	2.0	6.5	3.0	0.0	1.0	0.5	0.0	0.0

04296500 CLYDE RIVER AT NEWPORT, VT--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.5	0.0	0.0	0.5	0.0	0.0	1.0	1.0	1.0	9.0	8.5	9.0
2	0.5	0.0	0.0	0.5	0.0	0.0	1.0	0.5	1.0	10.0	9.0	9.5
3	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	10.0	9.0	9.5
4	0.5	0.0	0.0	0.5	0.0	0.0	1.5	0.5	1.0	9.0	8.5	8.5
5	0.0	0.0	0.0	0.5	0.0	0.5	1.5	1.0	1.0	9.5	8.0	8.5
6	0.0	0.0	0.0	0.5	0.0	0.5	2.0	1.0	1.5	9.0	9.0	9.0
7	0.0	0.0	0.0	0.5	0.0	0.0	2.5	1.5	2.0	9.0	8.5	8.5
8	0.0	0.0	0.0	0.5	0.0	0.0	2.5	1.5	2.0	8.5	8.0	8.0
9	0.0	0.0	0.0	0.5	0.0	0.0	3.0	1.5	2.5	8.5	8.0	8.5
10	0.5	0.0	0.0	0.5	0.0	0.5	3.5	1.5	2.5	10.0	8.5	9.0
11	0.5	0.0	0.0	0.5	0.0	0.5	3.5	2.0	2.5	11.5	9.5	10.5
12	0.0	0.0	0.0	0.5	0.0	0.0	2.5	1.5	2.0	11.0	10.0	10.5
13	0.0	0.0	0.0	0.5	0.0	0.5	3.0	2.0	2.5	10.5	9.5	10.0
14	0.5	0.0	0.0	1.0	0.0	0.5	4.0	2.5	3.5	11.0	10.0	10.5
15	0.5	0.0	0.0	1.0	0.0	0.5	4.0	3.5	4.0	12.5	11.0	11.5
16	0.5	0.0	0.0	0.5	0.0	0.0	5.5	4.0	4.5	13.0	11.5	12.5
17	0.5	0.0	0.0	0.5	0.0	0.0	6.0	5.0	5.5	14.0	12.5	13.5
18	0.5	0.0	0.0	0.0	0.0	0.0	6.5	5.0	6.0	14.0	13.0	13.5
19	0.5	0.0	0.5	0.0	0.0	0.0	7.0	5.5	6.5	13.0	12.0	12.5
20	0.5	0.0	0.0	0.5	0.0	0.0	7.5	6.5	7.0	12.0	11.5	11.5
21	0.5	0.0	0.0	0.5	0.0	0.5	9.5	7.0	8.5	11.5	11.0	11.5
22	0.5	0.0	0.5	0.5	0.0	0.0	10.5	9.0	10.0	11.5	11.5	11.5
23	0.5	0.0	0.0	0.5	0.0	0.5	10.0	9.5	10.0	11.5	10.5	11.0
24	0.5	0.0	0.0	0.5	0.5	0.5	9.5	9.0	9.0	11.0	10.5	10.5
25	0.5	0.0	0.5	0.5	0.0	0.5	9.5	9.0	9.0	11.5	10.5	11.0
26	0.5	0.5	0.5	0.5	0.0	0.0	9.0	8.0	8.5	12.0	11.5	11.5
27	0.5	0.5	0.5	0.5	0.0	0.5	8.0	8.0	8.0	13.0	11.5	12.0
28	0.5	0.0	0.5	0.5	0.0	0.5	8.0	8.0	8.0	13.5	12.0	13.0
29	0.5	0.0	0.0	0.5	0.0	0.5	9.0	8.0	8.5	14.5	13.0	13.5
30	---	---	---	1.0	0.5	0.5	9.0	8.5	9.0	15.5	14.0	14.5
31	---	---	---	1.0	0.5	1.0	---	---	---	17.0	15.0	16.0
MONTH	0.5	0.0	0.0	1.0	0.0	0.5	10.5	0.5	5.0	17.0	8.0	11.0

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.5	16.5	17.0	22.5	19.0	21.5	20.0	17.5	19.5	---	---	---
2	17.0	15.5	16.5	22.5	19.5	21.5	19.5	19.0	19.0	---	---	---
3	17.0	16.0	16.5	22.0	20.5	21.5	19.5	18.5	19.0	18.5	17.5	18.0
4	17.5	15.5	16.0	23.0	20.5	21.5	20.0	18.0	19.0	18.0	16.5	17.5
5	18.0	15.0	17.0	22.5	20.5	21.5	20.5	18.5	20.0	18.0	17.0	17.5
6	19.0	16.0	17.5	23.5	21.0	22.5	20.5	18.5	20.0	17.5	16.5	17.0
7	18.5	15.5	17.5	23.5	22.0	22.5	20.0	18.0	19.5	17.5	16.0	16.5
8	20.0	17.0	18.5	23.0	20.0	22.0	20.0	18.0	19.0	17.5	15.5	16.5
9	21.0	18.5	20.0	23.5	21.5	22.5	19.5	18.5	19.0	17.5	15.5	16.5
10	21.5	18.5	20.0	24.0	20.0	22.0	19.5	18.0	19.0	17.5	14.5	16.5
11	21.5	19.0	20.5	23.5	21.0	22.0	19.5	18.5	19.0	17.5	14.5	16.0
12	20.5	17.5	19.0	23.0	21.0	22.0	20.0	19.0	19.5	17.5	15.5	16.0
13	20.5	16.5	18.5	22.0	20.0	21.0	20.5	20.0	20.0	---	---	---
14	19.5	17.5	18.5	21.0	19.5	20.5	21.0	20.0	20.5	---	---	---
15	20.5	18.5	20.0	21.5	18.5	20.0	20.5	19.5	20.0	---	---	---
16	22.0	19.5	21.0	21.5	19.0	20.5	19.5	17.5	18.5	---	---	---
17	22.0	19.5	21.0	22.0	19.5	21.0	18.5	17.5	18.0	---	---	---
18	22.5	20.0	21.5	22.0	18.5	20.0	18.5	17.0	18.0	---	---	---
19	23.0	20.5	22.0	22.0	18.5	20.5	18.5	17.0	18.0	---	---	---
20	24.0	20.0	21.5	22.5	20.0	21.0	19.0	17.5	18.5	---	---	---
21	23.0	20.5	22.0	23.5	20.5	21.5	20.5	18.5	19.5	---	---	---
22	23.0	21.0	22.0	23.0	19.5	21.0	21.0	19.5	20.5	---	---	---
23	23.5	21.5	22.5	23.0	19.0	21.0	22.0	20.0	21.0	---	---	---
24	24.0	22.0	23.0	21.5	19.0	20.5	20.0	20.0	20.0	---	---	---
25	24.0	19.5	22.5	21.0	19.0	20.0	---	---	---	---	---	---
26	23.5	19.5	21.5	20.5	18.5	19.5	---	---	---	---	---	---
27	23.5	20.5	21.5	21.0	17.5	19.0	---	---	---	---	---	---
28	23.0	20.0	22.0	20.5	18.0	19.5	---	---	---	---	---	---
29	22.5	21.0	22.0	21.0	18.5	19.5	---	---	---	13.0	12.0	13.0
30	22.5	21.0	22.0	20.5	18.0	19.5	---	---	---	14.0	12.5	13.0
31	---	---	---	21.0	17.5	20.0	---	---	---	---	---	---
MONTH	24.0	15.0	20.0	24.0	17.5	21.0	---	---	---	---	---	---
YEAR	24.0	0.0	8.5									

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited stramflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second, a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1976

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Saco River basin				
*01064250	Albany Brook tributary near Bartlett, NH	Lat 44°04'23", long 71°18'10", Carroll County, at culvert on U.S. Highway 302, 1 mi west of Bartlett.	0.20	1976	7-20-76	0.05
*01064750	Meadow Brook near Sandwich, NH	Lat 43°47'53", long 71°22'30", Carroll County, at culvert on Little Pond Road, 0.3 mi west of State Highway 25, and 1.9 mi east of Sandwich.	.67	1976	7-20-76	<.01
*01064780	Square Brook near Freedom, NH	Lat 43°49'55", long 71°04'35", Carroll County, at culvert on State Highway 153, 2.4 mi northwest of Freedom, and 2.7 mi north of Effingham Falls.	1.20	1976	7-16-76	.09
		Piscataqua River basin				
*01073750	Mill Brook at Stratham, NH	Lat 43°01'24", long 70°55'04", Rockingham County, at culvert on southbound lane of State Highway 101 and 108, 0.3 mi west of Stratham.	2.30	1976	7- 6-76	0.24
*01073850	Hampton Falls River near Hampton Falls, NH	Lat 42°54'35", long 70°52'58", Rockingham County, at culvert on NH Highway 150, 0.3 mi west of Interstate Highway 95, and 1.1 mi southwest of Hampton Falls.	4.73	1976	7- 6-76	.39
		Merrimack River basin				
*01074250	Hancock Branch tributary near Lincoln, NH	Lat 44°03'45", long 71°35'15", Grafton County, at culvert on State Highway 112 (Kancamagus Highway), 4.5 mi east of Lincoln and 700 ft east of highway bridge over East Branch Pemigewasset River.	.58	1976	8-26-76	0.11
*01078800	West Alton Brook near Alton, NH	Lat 43°32'10", long 71°19'22", Belkap 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	1976	7-16-76	.02
*01081900	Town Line Brook tributary near Peterborough, NH	Lat 42°51'09", long 71°54'14", Hillsborough County, at culvert on State Highway 101, 2.8 mi west of Peterborough, and 5 mi west of West Wilton.	.75	1976	8-24-76	.04
*01084290	Mud Pond tributary near Dublin, NH	Lat 42°54'08", long 72°01'52", Cheshire County, at culvert on secondary dead-end road, 0.1 mi south of State Highway 101, and 0.3 mi west of Bonds Corner.	1.39	1976	8-24-76	.10
01090480	Rays Brook at Manchester, NH	Lat 43°01'08", long 71°27'02", Hillsborough County, at culvert on Campbell St., 0.1 mi upstream from Dorrs Pond outlet at Manchester.	1.74	1976	8-25-76	.04
*01094006	McQuade Brook near Bedford, NH	Lat 42°55'45", long 71°33'20", Hillsborough County, at culvert on North Amherst Road, at junction with Hardy Road, 2.3 mi southwest of Bedford.	4.13	1976	8-25-76	.08

* Also a crest-stage partial-record station.

Discharge measurements made at low-flow partial-record stations during water year 1976--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		Connecticut River basin				
*01129850	Connecticut River tributary near Stratford, NH	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	1976	7- 8-76	0.16
*01137850	Ammonoosuc River tributary near Littleton, NH	Lat 44°18'58", long 71°47'45", Grafton County, at culvert on State Highway 18, 1 mi west of Littleton.	2.42	1976	8-26-76	.58

* Also a crest-stage partial-record station.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1976

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Androscoggin River basin					
01054120	Josh Brook near Gorham, NH	Lat 44°23'15", long 71°07'58", Coos County, at culvert on U.S. Highway 2, 2 mi east of Gorham.	0.67	1973-76	4- 2-76	17.05	145
		Saco River basin					
*01064250	Albany Brook tributary near Bartlett, NH	Lat 44°04'23", long 71°18'10", Carroll County, at culvert on U.S. Highway 302, 1 mi west of Bartlett.	0.20	1973-76	4- 1-76	6.57	95
01064310	Ellis River tributary near Jackson, NH	Lat 44°09'42", long 71°12'57", Carroll County, at culvert on State Highway 16, 2 mi northwest of Jackson.	.78	1974-76	4- 1-76	(a)	b70
01064380	East Branch Saco River near Lower Bartlett, NH	Lat 44°07'21", long 71°07'50", Carroll County, at bridge on gravel road, 1.7 mi northeast of Lower Bartlett.	32.0	1967-76	4- 1-76	1.53	1650
*01064750	Meadow Brook near Sandwich, NH	Lat 43°47'53", long 71°22'30", Carroll County, at culvert on Little Pond Rd., 0.3 mi west of State Highway 25 and 1.9 mi east of Sandwich.	.67	1973-76	4- 1-76	6.67	49
*01064780	Square Brook near Freedom, NH	Lat 43°49'55", long 71°04'35", Carroll County, at culvert on State Highway 153, 2.4 mi northwest of Freedom and 2.7 mi north of Effingham Falls.	1.20	1973-76	4- 1-76	8.57	51
		Piscataqua River basin					
*01073750	Mill Brook at Stratham, NH	Lat 43°01'24", long 70°55'04", Rockingham County, at culvert on southbound lane of State Highways 101 and 108, 0.3 mi west of Stratham.	2.30	1973-76	3-23-76	9.18	100
*01073850	Hampton Falls River near Hampton Falls, NH	Lat 42°54'35", long 70°52'58", Rockingham County, at culvert on N.H. Highway 150, 0.3 mi west of Interstate Highway 95 and 1.1 mi southwest of Hampton Falls.	4.73	1973-76	3-23-76	18.15	255
		Merrimack River basin					
*01074250	Hancock Branch tributary near Lincoln, NH	Lat 44°03'45", long 71°35'15", Grafton County, at culvert on State Highway 112, 4.5 mi east of Lincoln and 700 ft east of highway bridge over East Branch Pemigewasset River.	0.58	1975-76	4- 1-76	7.96	b35
*01078800	West Alton Brook near Alton, NH	Lat 43°32'10", long 71°19'22", Belknap County, at culvert on State Highway 11A, 1.2 mi west of junction with State Highway 11, and 1.3 mi south of West Alton.	2.39	1973-76	4- 1-76	4.52	56
*01081900	Town Line Brook tributary near Peterborough, NH	Lat 42°51'09", long 71°54'14", Hillsborough County, at culvert on State Highway 101, 2.8 mi west of Peterborough, and 5 mi west of West Wilton.	.75	1972-76	4- 1-76	7.15	78

* Also a low-flow partial-record station.
a Not determined.
b Estimated.

Annual maximum discharge at crest-stage partial-record stations during water year 1976--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Merrimack River basin--Continued					
*01082490	Mud Pond tributary near Dublin, NH	Lat 42°54'08", long 72°01'52", Cheshire County, at culvert on secondary dead-end road, 0.1 mi south of State Highway 101, and 0.3 mi west of Bonds Corner.	1.39	1972-76	4- 1-76	17.65	87
01084500	Beards Brook near Hillsboro, NH	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‡ 1971-76	4- 1-76	5.54	1600
01089500	Suncook River at North Chichester, NH	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‡, 1972-76	4- 2-76	11.00	3380
01089750	Marden Brook near Epsom, NH	Lat 43°12'13", long 71°23'16", Merrimack County, at culvert on State Highway 28, 2 mi south of Epsom.	1.16	1973-76	11-14-76	5.83	9.0
*01094006	McQuade Brook near Bedford, NH	Lat 42°55'45", long 71°33'20", Hillsborough County, at culvert on North Amherst Rd. at junction with Hardy Rd., 2.3 mi southwest of Bedford.	4.13	1972-76	4- 2-76	15.32	65
		Connecticut River basin					
01129210	Ad Chase Brook near Pittsburg, NH	Lat 45°02'20", long 71°27'10", Coos County, at culvert on U.S. Highway 3, 100 ft above mouth, 1 mi below Indian Stream, and 3 mi southwest of Pittsburg.	1.62	1973-76	4- 2-76	17.92	80
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	1964-76	4- 2-76	12.22	47
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	1966-76	4- 2-76	7.61	46
*01129850	Connecticut River tributary near Stratford, NH	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	1973-76	4- 1-76	11.43	b40
01129950	Upper Ammonoosuc River tributary near Stark, NH	Lat 44°35'48", long 71°25'30", Coos County, at culvert on State Highway 110, 1.1 mi west of Stark.	.58	1973-76	4- 1-76	15.97	15
01131250	Cherry Mountain Brook tributary near Twin Mountain, NH	Lat 44°18'40", long 71°31'40", Coos County, at culvert on State Highway 115, 1.1 mi north of junction with U.S. Highway 3, and 2.8 mi north of Twin Mountain.	1.31	1973-76	4- 2-76	17.63	170
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	1964-76	4- 2-76	12.30	90
*01137850	Ammonoosuc River tributary near Littleton, NH	Lat 44°18'58", long 71°47'45", Grafton County, at culvert on State Highway 18, 1 mi west of Littleton.	2.42	1975-76	4- 2-76	.65	b130
01138800	Keenan Brook at Groton, VT	Lat 44°12'10", long 72°12'05", Caledonia County, at culvert on macadam road, 0.6 mi south of Groton.	4.26	1964-76	4- 1-76	(a)	b170
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	1964-76	4- 2-76	11.83	105

* Also a low-flow partial-record station.
‡ Operated as a continuous-record gaging station.
a Not determined.
b Estimated.

Annual maximum discharge at crest-stage partial-record stations during water year 1976--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (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	1964-76	8-10-76	(a)	b367
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	1964-76	8-10-76	11.15	152
		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	1964-76	8-11-76	9.36	115
		St. Lawrence River basin					
04279400	Poultney River tributary at East Poultney, VT	Lat 43°32'17", long 73°12'36", Rutland County, at culvert 1.0 mi north of East Poultney.	1.13	1964-76	8-12-76	11.78	84
04280900	Moon Brook at Rutland, VT	Lat 43°36'33", long 72°57'25", Rutland County, at culvert on macadam road, 1.0 mi northeast of Rutland.	2.12	1964-76	7-12-76	11.63	115
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	1968-76	8-11-76	8.93	800
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	1963-76	8-11-76	12.78	165
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	1964-76	8-11-76	11.67	32
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	1964-76	8-11-76	12.64	59
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	1964-76	8-10-76	12.98	220
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	1964-76	4- 2-76	12.50	125
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	1963-76	8-11-76	10.07	76
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	1963-76	4- 2-76	12.69	72
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	1964-76	4- 2-76	14.37	340
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	1964-76	8-11-76	10.82	60

a Not determined.
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 1976

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Piscataqua River basin				
Lamprey River	Piscataqua River	Lat 43°06'24", long 71°14'34", Rockingham County, at culvert on State Highway 107A, 1.8 mi south of Deerfield Center, NH.	-	-	9- 9-76	0.35
Lamprey River tributary	Lamprey River	Lat 43°06'11", long 71°14'49", Rockingham County, on culvert on State Highway 107A, near Deerfield Fairgrounds, 2 mi south of Deerfield Center, NH.	-	-	9- 9-76	.02
do	do	Lat 43°06'15", long 71°14'14", Rockingham County, at culvert on State Highway 107, 2.0 mi south of Deerfield Center, NH.	-	-	9- 9-76	.04
Lamprey River	Piscataqua River	Lat 43°03'46", long 71°13'42", Rockingham County, at culvert on State Highway 101, 3.0 mi northeast of Raymond, NH.	-	-	9- 9-76	1.29
do	do	Lat 43°02'58", long 71°02'02", Rockingham County, near Camp Hedding, on town road, 2.2 mi northeast of Epping, NH.	-	-	9-10-76	7.83
Lamprey River tributary	Lamprey River	Lat 43°02'09", long 71°02'01", Rockingham County, at culvert on abandoned road near Camp Hedding, 2.5 mi northeast of Epping, NH.	-	-	9-10-76	.12
North River	do	Lat 42°11'11", long 71°08'20", Strafford County, at culvert on U.S. Highway 4, 0.8 mi east of Northwood, NH.	-	-	9-10-76	.04
do	do	Lat 43°10'49", long 71°08'28", Strafford County, at culvert on State Highway 152, 0.8 mi southeast of Northwood, NH.	-	-	9-10-76	.06
do	do	Lat 43°08'42", long 71°06'55", Strafford County, at culvert on abandoned road near State Highway 152, 3.0 mi southeast of Northwood, NH.	-	-	9-10-76	.11
Mountain Brook	do	Lat 43°06'01", long 71°11'30", Rockingham County, at culvert on Pawtuckway Mountain, 4.5 mi north of Raymond, NH.	-	-	9- 9-76	.01
North River	do	Lat 43°04'43", long 71°02'09", Rockingham County, at culvert on State Highway 125, 3.5 mi northeast of Epping, NH.	-	-	9-10-76	1.60
Lamprey River	Piscataqua River	Lat 43°05'31", long 71°00'29", Strafford County, at bridge on State Highway 152, near Wadley Falls, 4 mi east of Newmarket, NH.	-	-	9-10-76	10.4
Little River	Lamprey River	Lat 43°08'47", long 71°03'40", Rockingham County, at culvert on town road, 0.6 mi south of U.S. Highway 4, 5.5 mi southwest of Northwood, NH.	-	-	9-10-76	.98
do	do	Lat 43°07'08", long 71°02'07", Rockingham County, at culvert on State Highway 125, 8 mi southeast of Northwood, NH.	-	-	9-10-76	.98
do	do	Lat 43°08'40", long 71°00'45", Strafford County, at bridge on Tuttle Rd., 4.5 mi northeast of Newmarket, NH.	-	-	9-10-76	1.16
Piscassic River	do	Lat 43°01'02", long 71°05'10", Rockingham County, at culvert 0.2 mi south of Martin Crossing, and 1.5 mi southwest of Epping, NH.	-	-	9- 9-76	.09
do	do	Lat 43°01'31", long 71°03'38", Rockingham County, at culvert on State Highway 101, 1 mi south of Epping, NH.	-	-	9- 9-76	.08

Discharge measurements made at miscellaneous sites during water year 1976--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Piscataqua River basin--Continued				
Piscassic River	Lamprey River	Lat 43°01'57", long 71°01'04", Rockingham County, at culvert on Birch Rd., 2.9 mi east of Epping, NH.	-	-	9- 9-76	0.34
do	do	Lat 43°02'08", long 70°58'07", Rockingham County, below dam at outlet of Piscassic Ice Pond, near Piscassic Rd., 1.5 mi west of Newfields, NH.	-	-	9- 9-76	.29
do	do	Lat 43°04'07", long 70°57'46", Rockingham County, at culvert on Newmarket Rd., 1.5 mi southwest of Newmarket, NH.	-	-	9-10-76	.38
		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, NH.	96.4	1974-75	4- 2-76 4-20-76 5- 6-76 6-15-76	1250 504 76.8 41.9
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, NH.	17	1975	7-22-76	3.5 3.45 4.32
Arlington Mill Outlet	do	Lat 42°49'00", long 71°12'16", Rockingham County, at outlet of Arlington Mill Reservoir near State Highway 111, 1.8 mi north of Salem, NH.	-	-	7-22-76	13.2
		Connecticut River basin				
Sugar River	Connecticut River	Lat 43°23'10", long 72°23'16", Sullivan County, 1 mi below dam at outlet of Sunapee, NH.	45.5	-	5- 6-76	35.1
Whetstone Brook	do	Lat 42°50'55", long 72°34'40", Windham County, 100 ft downstream from bridge on U.S. Highway I91 at Brattleboro, VT, 1.9 mi downstream from Ames Brook and 1.4 mi upstream from mouth.	-	-	4- 2-76	216

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
01096585 - BEAVER BROOK AT WEST WINDHAM, NH (LAT 42 48 23 LONG 071 21 12)											
OCT , 1975											
06...	1200	35	210	7.5	26.0	14.0	9.4	--	B50	B7	60
APR , 1976											
26...	1000	65	165	6.3	13.0	8.5	11.3	18	1500	250	190
JUN											
21...	0915	12	380	6.7	25.0	23.0	7.2	20	310	B36	100
SEP											
07...	0900	11	330	6.4	15.0	13.0	9.0	15	250	B50	96
01096587 - BROOK NR DUNCAN BEACH, COBBETTS PND, WINDHAM, NH (LAT 42 48 20 LONG 071 16 33)											
JUL , 1976											
21...	0930	--	750	--	--	17.0	--	--	5300	B2200	B3500
SEP											
07...	1000	--	750	--	--	--	--	--	B800	B0	B70
01096588 - BROOK AT DUNCAN BEACH, COBBETTS PND, WINDHAM, NH (LAT 42 48 22 LONG 071 16 32)											
JUN , 1976											
21...	1245	--	560	--	29.0	19.0	3.4	--	B1500	410	750
JUL											
21...	0915	--	--	--	--	--	--	--	8800	B2800	B4000
SEP											
07...	1000	--	690	--	--	--	--	--	B200	B20	B0
01096589 - COBBETTS POND, AT DUNCAN BEACH, AT WINDHAM, NH (LAT 42 48 22 LONG 071 16 36)											
JUN , 1976											
21...	1115	--	207	7.0	29.0	26.0	7.8	<10	B140	36	72
JUL											
21...	0930	--	208	--	--	25.0	--	--	200	34	60
SEP											
07...	1000	--	190	7.0	16.0	20.5	8.5	11	B10	B0	B0
01096590 - GOLDEN BROOK AT WINDHAM, NH (LAT 42 47 26 LONG 071 18 06)											
OCT , 1975											
06...	1245	9.5	214	6.7	26.0	16.5	9.4	--	B8	B0	B1
APR , 1976											
26...	1115	7.3	205	6.5	13.0	11.0	11.0	12	B2	B0	B1
JUN											
21...	1015	.42	208	7.0	24.5	25.0	7.9	10	210	B50	180
JUL											
26...	1115	7.3	205	6.5	13.0	11.0	11.0	--	--	--	--
SEP											
08...	1515	11	199	6.8	16.5	22.0	8.4	11	110	B26	34
01100502 - WASH POND, AT OUTLET, AT HAMPSTEAD, NH (LAT 42 53 02 LONG 071 11 24)											
OCT , 1975											
07...	1040	5.5	101	6.4	--	14.0	9.2	--	B30	B0	B10
APR , 1976											
27...	0915	.50	111	6.9	11.0	10.0	10.7	10	110	B14	20
JUN											
22...	0815	.03	108	7.0	22.0	24.5	7.5	<10	300	170	190
SEP											
09...	1300	.20	106	7.3	19.0	22.0	9.2	<10	300	B6	42

B NON-IDEAL COLONY COUNT.

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
01096585 - BEAVER BROOK AT WEST WINDHAM, NH (LAT 42 48 23 LONG 071 21 12)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
26...	13	1.5	1.8	18	0	15	14	7.4	24	.1
JUN										
21...	36	2.8	4.4	18	0	15	5.7	28	61	1.8
SEP										
07...	16	2.5	5.0	41	0	34	26	19	62	1.0
01096587 - BROOK NR DUNCAN BEACH, COBBETTS PND, WINDHAM, NH (LAT 42 48 20 LONG 071 16 33)										
JUL , 1976										
21...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	--	--	--	--	--	--	--	--	--	--
01096588 - BROOK AT DUNCAN BEACH, COBBETTS PND, WINDHAM, NH (LAT 42 48 22 LONG 071 16 32)										
JUN , 1976										
21...	--	--	--	--	--	--	--	--	--	--
JUL										
21...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	--	--	--	--	--	--	--	--	--	--
01096589 - COBBETTS POND, AT DUNCAN BEACH, AT WINDHAM, NH (LAT 42 48 22 LONG 071 16 36)										
JUN , 1976										
21...	15	1.9	2.4	20	0	16	3.2	3.8	23	.1
JUL										
21...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	10	1.7	2.2	20	0	16	3.2	7.5	45	.1
01096590 - GOLDEN BROOK AT WINDHAM, NH (LAT 42 47 26 LONG 071 18 06)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
26...	20	1.8	2.2	18	0	15	9.1	11	40	.0
JUN										
21...	26	2.1	2.3	19	0	16	3.0	8.2	42	.1
JUL										
26...	--	--	--	--	--	--	--	--	--	--
SEP										
08...	10	1.7	2.1	20	0	16	5.1	7.7	43	.1
01100502 - WASH POND, AT OUTLET, AT HAMPSTEAD, NH (LAT 42 53 02 LONG 071 11 24)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	6.5	1.5	.9	18	0	15	3.6	7.6	18	.1
JUN										
22...	11	1.5	1.3	17	0	14	2.7	6.2	18	.1
SEP										
09...	5.7	1.5	1.1	18	0	15	1.4	3.8	20	.1

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL BORON (B) (UG/L)
01096585 - BEAVER BROOK AT WEST WINDHAM, NH (LAT 42 48 23 LONG 071 21 12)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
26...	3.4	.22	.10	.35	.45	.67	.04	.01	7.0	40
JUN										
21...	7.2	1.3	2.9	.70	3.6	4.9	.37	.26	18	220
SEP										
07...	7.5	1.4	.20	.68	.88	2.3	.37	.32	5.1	180
01096587 - BROOK NR DUNCAN BEACH, COBBETTS PND, WINDHAM, NH (LAT 42 48 20 LONG 071 16 33)										
JUL , 1976										
21...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	--	--	--	--	--	--	--	--	--	--
01096588 - BROOK AT DUNCAN BEACH, COBBETTS PND, WINDHAM, NH (LAT 42 48 22 LONG 071 16 32)										
JUN , 1976										
21...	--	--	--	--	--	--	--	--	--	--
JUL										
21...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	--	--	--	--	--	--	--	--	--	--
01096589 - COBBETTS POND, AT DUNCAN BEACH, AT WINDHAM, NH (LAT 42 48 22 LONG 071 16 36)										
JUN , 1976										
21...	.8	.00	.05	.28	.33	.33	.01	.01	11	20
JUL										
21...	--	--	--	--	--	--	--	--	--	--
SEP										
07...	1.7	.01	.03	.25	.28	.29	.02	.01	--	0
01096590 - GOLDEN BROOK AT WINDHAM, NH (LAT 42 47 26 LONG 071 18 06)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
26...	2.1	.03	.04	.16	.20	.23	.02	.01	5.0	20
JUN										
21...	1.1	.01	.05	.50	.55	.56	.04	.00	7.8	10
JUL										
26...	--	--	--	--	--	--	--	--	--	--
SEP										
08...	1.2	.02	.03	.45	.48	.50	.02	.01	8.6	0
01100502 - WASH POND, AT OUTLET, AT HAMPSTEAD, NH (LAT 42 53 02 LONG 071 11 24)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	1.2	.04	.06	.14	.20	.24	.03	.04	3.9	10
JUN										
22...	.3	.01	.11	.64	.75	.76	.03	.01	7.4	10
SEP										
09...	.8	.01	.04	.31	.35	.36	.02	.01	--	0

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
01100505 - SPICKET RIVER AT NORTH SALEM, NH (LAT 42 50 57 LONG 071 12 56)											
OCT , 1975											
07...	1005	45	76	6.5	--	13.5	9.4	--	160	43	120
APR , 1976											
27...	0800	2.7	87	6.9	8.5	7.5	11.2	14	110	B12	60
JUN											
24...	1030	13	80	6.8	29.0	26.0	6.4	<10	300	86	90
SEP											
08...	0850	8.5	69	6.7	14.0	17.0	9.2	10	600	52	230
01100506 - PROVIDENCE HILL BRK AT N. MAIN ST., SALEM, NH (LAT 42 48 54 LONG 071 11 49)											
JUL , 1976											
20...	1200	.50	190	6.5	29.5	21.0	3.2	18	220	160	56
01100507 - SPICKET RIVER NEAR SALEM, NH (LAT 42 49 01 LONG 071 12 13)											
OCT , 1975											
07...	0820	35	83	6.8	--	14.5	9.6	--	120	34	37
APR , 1976											
28...	0930	17	77	6.8	16.0	10.0	11.8	11	54	B9	B12
JUN											
23...	1500	24	89	6.9	30.0	23.5	7.8	<10	100	B24	48
SEP											
08...	0940	14	83	6.9	14.5	19.0	9.0	<10	110	B3	B12
01100515 - CAPTAIN POND BROOK NEAR SALEM, NH (LAT 42 48 42 LONG 071 11 28)											
OCT , 1975											
07...	0930	2.5	73	6.9	--	13.0	9.0	--	76	B36	30
APR , 1976											
28...	1015	4.8	77	7.4	18.5	11.0	11.0	16	20	B2	B4
JUN											
24...	0845	.15	80	6.8	29.0	26.5	7.0	15	340	170	110
SEP											
09...	1350	.30	76	6.8	19.0	21.0	8.2	38	B28	B8	B24
01100520 - SPICKET R ABOVE WIDOW HARRIS BRK AT SALEM, NH (LAT 42 48 08 LONG 071 11 46)											
OCT , 1975											
06...	1445	13	118	6.4	23.0	16.5	8.6	--	B130	B30	78
APR , 1976											
28...	0830	25	100	6.5	11.5	9.0	10.0	20	120	38	56
JUN											
23...	1030	16	108	6.6	29.0	24.0	7.0	10	34	62	140
SEP											
08...	1030	13	97	6.9	16.0	18.0	8.6	<10	740	76	150
01100530 - HITTYTITY BROOK NEAR SALEM, NH (LAT 42 48 18 LONG 071 13 07)											
OCT , 1975											
06...	1405	12	164	6.6	25.0	14.0	7.6	--	B40	B8	76
APR , 1976											
26...	1600	14	145	6.1	10.2	9.0	13.5	20	210	140	300
JUN											
23...	0830	2.8	160	6.5	23.5	24.0	5.2	22	B40	B12	88
SEP											
08...	1145	1.8	170	7.8	17.0	16.0	7.8	32	B20	B4	B16

B NON-IDEAL COLONY COUNT.

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
01100505 - SPICKET RIVER AT NORTH SALEM, NH (LAT 42 50 57 LONG 071 12 56)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	5.0	1.0	.9	14	0	11	2.8	5.7	12	.1
JUN										
24...	6.5	.9	1.2	17	0	14	4.3	6.2	12	.1
SEP										
08...	5.2	.8	1.0	16	0	13	5.1	4.6	13	.1
01100506 - PROVIDENCE HILL BRK AT N. MAIN ST., SALEM, NH (LAT 42 48 54 LONG 071 11 49)										
JUL , 1976										
20...	17	2.4	3.1	36	0	30	18	7.5	30	.1
01100507 - SPICKET RIVER NEAR SALEM, NH (LAT 42 49 01 LONG 071 12 13)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
28...	14	1.4	.9	14	0	11	3.6	6.6	8.5	.0
JUN										
23...	8.2	.9	1.2	17	0	14	3.4	4.4	12	.1
SEP										
08...	5.2	.7	1.1	17	0	14	3.4	4.0	14	.1
01100515 - CAPTAIN POND BROOK NEAR SALEM, NH (LAT 42 48 42 LONG 071 11 28)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
28...	12	1.3	.6	10	0	8	.6	8.3	11	.1
JUN										
24...	4.7	.9	1.1	16	0	13	4.1	4.3	11	.1
SEP										
09...	4.8	.9	.9	16	0	13	4.1	4.9	13	.1
01100520 - SPICKET R ABOVE WIDOW HARRIS BRK AT SALEM, NH (LAT 42 48 08 LONG 071 11 46)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
28...	40	2.2	1.2	8	0	7	4.0	7.4	14	.1
JUN										
23...	7.5	1.1	1.5	17	0	14	6.8	6.1	13	.1
SEP										
08...	6.3	1.1	1.3	18	0	15	3.6	4.9	16	.1
01100530 - HITTYTITY BROOK NEAR SALEM, NH (LAT 42 48 18 LONG 071 13 07)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
26...	8.0	1.3	1.5	14	0	11	18	7.2	26	.1
JUN										
23...	11	1.6	1.9	30	0	25	15	2.5	26	.1
SEP										
08...	10	1.5	2.3	31	0	25	.8	4.3	32	.1

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL BORON (B) (UG/L)
01100505 - SPICKET RIVER AT NORTH SALEM, NH (LAT 42 50 57 LONG 071 12 56)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	3.9	.06	.03	.27	.30	.36	.01	.01	8.3	50
JUN										
24...	.4	.04	.04	.31	.35	.39	.01	.01	24	0
SEP										
08...	.6	.01	.01	.22	.23	.24	.02	.01	2.8	20
01100506 - PROVIDENCE HILL BRK AT N. MAIN ST., SALEM, NH (LAT 42 48 54 LONG 071 11 49)										
JUL , 1976										
20...	6.0	.22	.06	1.3	1.4	1.6	.05	.01	--	0
01100507 - SPICKET RIVER NEAR SALEM, NH (LAT 42 49 01 LONG 071 12 13)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
28...	3.4	.10	.03	.25	.28	.38	.05	.01	4.0	10
JUN										
23...	1.4	.02	.05	.45	.50	.52	.01	.01	9.1	10
SEP										
08...	.4	.01	.04	.19	.23	.24	.01	.01	--	0
01100515 - CAPTAIN POND BROOK NEAR SALEM, NH (LAT 42 48 42 LONG 071 11 28)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
28...	2.3	.03	.04	.16	.20	.23	.02	.01	7.5	20
JUN										
24...	.3	.01	.04	.56	.60	.61	.02	.00	9.2	30
SEP										
09...	.8	.01	.02	.41	.43	.44	.02	.01	--	10
01100520 - SPICKET R ABOVE WIDOW HARRIS BRK AT SALEM, NH (LAT 42 48 08 LONG 071 11 46)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
28...	4.1	.32	.09	.26	.35	.67	.14	.01	8.4	20
JUN										
23...	1.0	.36	.05	.68	.73	1.1	.02	.01	20	20
SEP										
08...	.9	.31	.02	.26	.28	.59	.02	.01	--	10
01100530 - HITTYTITY BROOK NEAR SALEM, NH (LAT 42 48 18 LONG 071 13 07)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
26...	4.0	.07	.05	.35	.40	.47	.02	.01	7.8	40
JUN										
23...	4.2	.05	.10	.65	.75	.80	.03	.01	17	20
SEP										
08...	7.0	.07	.10	.70	.80	.87	.04	.01	--	20

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
01100535 - WIDOW HARRIS BROOK AT SALEM, NH (LAT 42 47 58 LONG 071 11 58)											
OCT , 1975											
06...	1510	8.0	83	6.3	24.0	15.0	6.3	--	390	B52	66
APR , 1976											
28...	0745	26	123	6.6	6.0	9.0	9.2	17	220	160	96
JUN											
23...	0930	2.3	150	6.3	29.0	23.0	2.3	15	550	200	300
SEP											
08...	1115	1.5	155	6.6	16.0	14.5	5.8	<10	750	150	290
01100537 - SPICKET RIVER AT RT 97 BRIDGE, SALEM, NH (LAT 42 47 15 LONG 071 12 00.01)											
JUL , 1976											
21...	0800	10	104	6.4	24.0	23.5	6.6	18	440	190	450
01100538 - SPICKET RIVER AT LAWRENCE HILL, SALEM, NH (LAT 42 46 07 LONG 071 12 08)											
JUL , 1976											
21...	1030	8.0	111	6.6	21.5	23.0	6.3	--	250	76	170
01100540 - SPICKET RIVER AT SALEM, NH (LAT 42 45 15 LONG 071 12 32)											
OCT , 1975											
07...	1430	30	132	6.6	--	13.5	8.1	--	B110	B14	50
APR , 1976											
26...	1330	59	132	6.4	14.5	9.5	9.8	18	450	130	290
JUN											
21...	1430	12	123	6.8	37.0	25.0	7.0	12	B0	B20	B28
JUL											
21...	1130	15	127	3.5	--	22.5	6.5	--	370	40	120
SEP											
08...	0745	11	104	6.6	11.0	15.5	8.6	<10	280	30	390
01100545 - POLICY BROOK NEAR SALEM, NH (LAT 42 47 29 LONG 071 15 06)											
OCT , 1975											
06...	1325	.00	159	6.8	23.0	16.5	9.6	--	130	B2	B2
APR , 1976											
26...	1500	3.8	153	6.2	12.5	11.0	11.2	9	B10	B5	22
JUN											
24...	0730	.83	150	6.6	28.0	25.5	6.3	<10	B40	B2	B14
SEP											
08...	1400	.30	150	6.4	16.5	17.5	4.8	<10	B4	B0	B3
01100550 - POLICY BROOK AT ROCKINGHAM BLVD., SALEM, NH (LAT 42 46 03 LONG 071 13 23.01)											
JUL , 1976											
20...	1515	1.0	510	6.5	31.5	23.0	2.4	34	E40000	E5000	B2200
01100675 - KELLY BROOK AT RT 125, PLAISTOW, NH (LAT 42 51 15 LONG 071 06 03)											
SEP , 1976											
09...	0915	.20	170	6.2	16.0	11.0	7.2	<10	2200	B12	180
01100680 - LITTLE RIVER AT PLAISTOW, NH (LAT 42 50 03 LONG 071 06 05)											
JUL , 1976											
20...	1000	2.5	320	7.0	28.0	20.0	7.0	15	550	130	200

B NON-IDEAL COLONY COUNT.

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
01100535 - WIDOW HARRIS BROOK AT SALEM, NH (LAT 42 47 58 LONG 071 11 58)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
28...	7.0	1.2	1.4	14	0	11	5.6	7.1	21	.1
JUN										
23...	10	1.5	1.9	21	0	17	17	5.6	23	.1
SEP										
08...	10	1.7	2.3	31	0	25	12	5.6	25	.1
01100537 - SPICKET RIVER AT RT 97 BRIDGE, SALEM, NH (LAT 42 47 15 LONG 071 12 00.01)										
JUL , 1976										
21...	18	1.3	1.5	17	0	14	11	9.0	14	.1
01100538 - SPICKET RIVER AT LAWRENCE HILL, SALEM, NH (LAT 42 46 07 LONG 071 12 08)										
JUL , 1976										
21...	--	--	--	--	--	--	--	--	--	--
01100540 - SPICKET RIVER AT SALEM, NH (LAT 42 45 15 LONG 071 12 32)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
26...	23	2.3	1.6	15	0	12	9.6	8.2	20	.1
JUN										
21...	16	1.4	1.7	18	0	15	4.6	6.8	17	.1
JUL										
21...	--	--	--	--	--	--	--	--	--	--
SEP										
08...	6.0	1.2	1.5	19	0	16	7.6	5.7	17	.1
01100545 - POLICY BROOK NEAR SALEM, NH (LAT 42 47 29 LONG 071 15 06)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
26...	9.0	1.3	1.3	15	0	12	15	8.8	25	.1
JUN										
24...	10	1.4	1.5	16	0	13	6.4	7.6	29	.1
SEP										
08...	7.2	1.4	1.5	16	0	13	10	6.8	30	.1
01100550 - POLICY BROOK AT ROCKINGHAM BLVD., SALEM, NH (LAT 42 46 03 LONG 071 13 23.01)										
JUL , 1976										
20...	68	3.8	3.9	51	0	42	26	9.0	110	.1
01100675 - KELLY BROOK AT RT 125, PLAISTOW, NH (LAT 42 51 15 LONG 071 06 03)										
SEP , 1976										
09...	12	3.5	1.7	40	0	33	40	10	24	.2
01100680 - LITTLE RIVER AT PLAISTOW, NH (LAT 42 50 03 LONG 071 06 05)										
JUL , 1976										
20...	45	3.6	2.4	31	0	25	5.0	14	64	.1

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL BORON (B) (UG/L)
01100535 - WIDOW HARRIS BROOK AT SALEM, NH (LAT 42 47 58 LONG 071 11 58)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
28...	1.9	.11	.03	.25	.28	.39	.02	.01	6.9	30
JUN										
23...	5.0	.41	.04	.56	.60	1.0	.03	.01	8.7	20
SEP										
08...	9.1	.46	.04	.29	.33	.79	.03	.01	6.9	30
01100537 - SPICKET RIVER AT RT 97 BRIDGE, SALEM, NH (LAT 42 47 15 LONG 071 12 00.01)										
JUL , 1976										
21...	1.3	.34	.01	.42	.43	.77	.04	.00	--	10
01100538 - SPICKET RIVER AT LAWRENCE HILL, SALEM, NH (LAT 42 46 07 LONG 071 12 08)										
JUL , 1976										
21...	--	--	--	--	--	--	--	--	--	--
01100540 - SPICKET RIVER AT SALEM, NH (LAT 42 45 15 LONG 071 12 32)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
26...	3.9	.39	.10	.33	.43	.82	.03	.01	6.6	20
JUN										
21...	1.8	.40	.04	.39	.43	.83	.02	.01	6.5	20
JUL										
21...	--	--	--	--	--	--	--	--	--	--
SEP										
08...	1.6	.34	.01	.24	.25	.59	.02	.01	11	0
01100545 - POLICY BROOK NEAR SALEM, NH (LAT 42 47 29 LONG 071 15 06)										
OCT , 1975										
06...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
26...	1.0	.04	.01	.29	.30	.34	.01	.01	3.6	10
JUN										
24...	.3	.01	.01	.19	.20	.21	.03	.02	8.9	10
SEP										
08...	.8	.04	.01	.14	.15	.19	.03	.02	--	0
01100550 - POLICY BROOK AT ROCKINGHAM BLVD., SALEM, NH (LAT 42 46 03 LONG 071 13 23.01)										
JUL , 1976										
20...	9.5	.01	.31	1.3	1.6	1.6	.24	.01	--	30
01100675 - KELLY BROOK AT RT 125, PLAISTOW, NH (LAT 42 51 15 LONG 071 06 03)										
SEP , 1976										
09...	14	.52	.03	.15	.18	.70	.04	.01	6.1	20
01100680 - LITTLE RIVER AT PLAISTOW, NH (LAT 42 50 03 LONG 071 06 05)										
JUL , 1976										
20...	11	.42	.05	.53	.58	1.0	.05	.01	--	0

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	AIR TEMPERATURE (DEG C)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
01100684 - LITTLE RIVER AT WESTVILLE, NH (LAT 42 49 06 LONG 071 06 50)											
OCT , 1975											
07...	1355	13	180	6.3	--	13.0	9.4	--	B130	B20	140
APR , 1976											
27...	1500	68	117	6.5	9.5	9.0	11.4	23	150	53	60
JUN											
22...	1330	24	240	7.0	31.0	24.0	7.4	14	520	250	310
SEP											
09...	0830	5.5	275	6.6	12.5	13.5	8.2	11	880	800	360
01100825 - POWWOW RIVER NEAR KINGSTON, NH (LAT 42 54 58 LONG 071 04 54)											
OCT , 1975											
07...	1115	1.5	100	6.5	--	10.5	9.5	--	76	B15	21
APR , 1976											
27...	1015	29	63	6.8	10.5	10.5	9.7	18	730	80	53
JUN											
22...	1000	2.7	69	6.0	26.0	24.0	2.6	23	B700	100	82
SEP											
09...	1215	1.8	74	6.4	25.0	18.0	6.2	18	110	32	110
01100827 - POWWOW R, AT OUTLET OF GREAT POND, KINGSTON, NH (LAT 42 54 44 LONG 071 03 46)											
APR , 1976											
27...	1115	17	72	6.9	10.5	11.0	10.8	13	56	B11	B4
JUN											
24...	1100	1.8	86	6.8	29.0	27.0	6.6	10	100	B10	120
SEP											
09...	1145	.30	107	6.6	16.5	19.0	7.8	<10	B32	B4	B0
01100830 - COUNTRY POND, AT OUTLET, NEAR KINGSTON, NH (LAT 42 53 37 LONG 071 03 23)											
OCT , 1975											
07...	1200	15	80	6.5	--	15.5	9.2	--	56	B11	330
APR , 1976											
27...	1300	29	76	6.6	11.0	11.5	9.8	17	20	B8	B2
JUN											
22...	1100	14	90	6.8	26.0	26.0	7.5	17	90	40	B12
SEP											
09...	1100	2.5	84	6.9	18.0	20.0	8.7	14	B2	B0	B1
01100833 - UNNAMED STREAM NR ARLINGTON PND, S KINGSTON, NH (LAT 42 53 43 LONG 071 04 34.01)											
SEP , 1976											
05...	1300	--	8040	--	--	--	--	--	--	--	--
01100835 - POWWOW RIVER NEAR EAST KINGSTON, NH (LAT 42 54 29 LONG 071 01 01)											
OCT , 1975											
07...	1240	36	81	6.4	--	15.0	9.6	--	B12	B4	B7
APR , 1976											
27...	1400	47	76	6.7	11.5	11.0	10.4	18	20	B7	B10
JUN											
22...	1200	17	88	6.7	27.0	27.5	7.4	16	250	120	78
SEP											
09...	1005	1.5	97	6.6	15.0	18.0	8.6	12	B4	B14	58

B NON-IDEAL COLONY COUNT.

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
01100684 - LITTLE RIVER AT WESTVILLE, NH (LAT 42 49 06 LONG 071 06 50)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	7.5	1.5	.9	14	0	11	7.1	7.0	17	.1
JUN										
22...	14	3.1	2.1	35	0	29	5.6	9.0	43	.3
SEP										
09...	15	3.7	2.5	42	0	34	17	8.5	56	.3
01100825 - POWWOW RIVER NEAR KINGSTON, NH (LAT 42 54 58 LONG 071 04 54)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	16	1.2	.6	6	0	5	1.5	5.3	6.5	.1
JUN										
22...	4.7	1.0	1.0	16	0	13	26	4.8	9.5	.1
SEP										
09...	5.2	1.3	1.0	15	0	12	9.6	3.9	11	.1
01100827 - POWWOW R, AT OUTLET OF GREAT POND, KINGSTON, NH (LAT 42 54 44 LONG 071 03 46)										
APR , 1976										
27...	9.5	1.3	.9	14	0	11	2.8	7.3	9.2	.0
JUN										
24...	4.9	1.2	1.4	16	0	13	4.1	5.7	12	.1
SEP										
09...	6.3	1.5	1.5	17	0	14	6.8	4.8	22	.1
01100830 - COUNTRY POND, AT OUTLET, NEAR KINGSTON, NH (LAT 42 53 37 LONG 071 03 23)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	5.5	1.0	.6	14	0	11	5.6	5.9	10	.1
JUN										
22...	12	1.2	1.0	16	0	13	4.1	4.8	14	.1
SEP										
09...	4.3	1.0	.8	17	0	14	3.4	3.8	16	.1
01100833 - UNNAMED STREAM NR ARLINGTON PND, S KINGSTON, NH (LAT 42 53 43 LONG 071 04 34.01)										
SEP , 1976										
05...	--	--	--	--	--	--	--	--	--	--
01100835 - POWWOW RIVER NEAR EAST KINGSTON, NH (LAT 42 54 29 LONG 071 01 01)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	8.0	1.3	.8	12	0	10	3.8	5.6	9.3	.1
JUN										
22...	4.8	1.1	1.0	16	0	13	5.1	3.8	14	.1
SEP										
09...	5.8	1.2	.9	17	0	14	6.8	4.0	17	.1

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL BORON (B) (UG/L)
01100684 - LITTLE RIVER AT WESTVILLE, NH (LAT 42 49 06 LONG 071 06 50)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	6.5	.11	.01	.29	.30	.41	.03	.01	9.5	40
JUN										
22...	11	.55	.08	.45	.53	1.1	.14	.08	16	20
SEP										
09...	14	.54	.05	.40	.45	.99	.08	.05	--	40
01100825 - POWWOW RIVER NEAR KINGSTON, NH (LAT 42 54 58 LONG 071 04 54)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	2.3	.03	.02	.28	.30	.33	.02	.01	6.6	30
JUN										
22...	1.6	.02	.04	.51	.55	.57	.02	.01	15	10
SEP										
09...	2.2	.04	.02	.38	.40	.44	.02	.01	10	0
01100827 - POWWOW R, AT OUTLET OF GREAT POND, KINGSTON, NH (LAT 42 54 44 LONG 071 03 46)										
APR , 1976										
27...	5.0	.15	.05	.13	.18	.33	.02	.01	6.4	20
JUN										
24...	1.8	.01	.04	.41	.45	.46	.01	.01	14	10
SEP										
09...	4.2	.11	.02	.08	.10	.21	.02	.01	5.4	10
01100830 - COUNTRY POND, AT OUTLET, NEAR KINGSTON, NH (LAT 42 53 37 LONG 071 03 23)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	3.3	.06	.04	.31	.35	.41	.02	.01	7.7	30
JUN										
22...	1.5	.00	.04	.46	.50	.50	.02	.01	17	20
SEP										
09...	1.6	.01	.03	.30	.33	.34	.02	.01	--	10
01100833 - UNNAMED STREAM NR ARLINGTON PND, S KINGSTON, NH (LAT 42 53 43 LONG 071 04 34.01)										
SEP , 1976										
05...	--	--	--	--	--	--	--	--	6.5	0
01100835 - POWWOW RIVER NEAR EAST KINGSTON, NH (LAT 42 54 29 LONG 071 01 01)										
OCT , 1975										
07...	--	--	--	--	--	--	--	--	--	--
APR , 1976										
27...	.7	.03	.02	.28	.30	.33	.02	.01	10	30
JUN										
22...	.4	.07	.03	.62	.65	.72	.01	.01	10	20
SEP										
09...	1.6	.27	.03	.32	.35	.62	.02	.01	--	20

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (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 IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
01096585 - BEAVER BROOK AT WEST WINDHAM, NH (LAT 42 48 23 LONG 071 21 12)												
APR , 1976 26...	--	0	0	10	0	0	400	4	70	<.5	0	10
01096590 - GOLDEN BROOK AT WINDHAM, NH (LAT 42 47 26 LONG 071 18 06)												
APR , 1976 26...	--	0	2	10	0	0	120	26	10	<.5	0	20
01100502 - WASH POND, AT OUTLET, AT HAMPSTEAD, NH (LAT 42 53 02 LONG 071 11 24)												
APR , 1976 27...	--	0	0	<10	1	0	90	3	0	<.5	0	10
01100505 - SPICKET RIVER AT NORTH SALEM, NH (LAT 42 50 57 LONG 071 12 56)												
APR , 1976 27...	--	0	0	10	1	0	190	3	60	<.5	0	10
01100506 - PROVIDENCE HILL BRK AT N. MAIN ST., SALEM, NH (LAT 42 48 54 LONG 071 11 49)												
JUL , 1976 20...	--	1	0	<10	1	20	1900	4	170	<.5	0	10
01100507 - SPICKET RIVER NEAR SALEM, NH (LAT 42 49 01 LONG 071 12 13)												
APR , 1976 28...	--	0	0	20	1	0	250	3	20	<.5	0	10
01100515 - CAPTAIN POND BROOK NEAR SALEM, NH (LAT 42 48 42 LONG 071 11 28)												
APR , 1976 28...	--	0	0	10	0	0	80	3	10	<.5	0	10
01100520 - SPICKET R ABOVE WIDOW HARRIS BRK AT SALEM, NH (LAT 42 48 08 LONG 071 11 46)												
APR , 1976 28...	--	0	0	10	1	0	570	3	70	<.5	0	10
01100530 - HITTYTITY BROOK NEAR SALEM, NH (LAT 42 48 18 LONG 071 13 07)												
APR , 1976 26...	--	0	0	10	1	0	360	3	90	<.5	0	10
01100535 - WIDOW HARRIS BROOK AT SALEM, NH (LAT 42 47 58 LONG 071 11 58)												
APR , 1976 28...	--	0	1	10	1	0	290	7	30	.6	1	0

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	TOTAL PCB (UG/L)	POLY-CHLO-RINATED NAPH-THA-LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA-TERIAL (UG/KG)
01096585 - BEAVER BROOK AT WEST WINDHAM, NH (LAT 42 48 23 LONG 071 21 12)												
APR , 1976 26...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
01096590 - GOLDEN BROOK AT WINDHAM, NH (LAT 42 47 26 LONG 071 18 06)												
APR , 1976 26...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
01100502 - WASH POND, AT OUTLET, AT HAMPSTEAD, NH (LAT 42 53 02 LONG 071 11 24)												
APR , 1976 27...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
01100505 - SPICKET RIVER AT NORTH SALEM, NH (LAT 42 50 57 LONG 071 12 56)												
APR , 1976 27...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
01100506 - PROVIDENCE HILL BRK AT N. MAIN ST., SALEM, NH (LAT 42 48 54 LONG 071 11 49)												
JUL , 1976 20...	.0	.00	.00	--	.0	--	.00	--	.00	--	.00	--
01100507 - SPICKET RIVER NEAR SALEM, NH (LAT 42 49 01 LONG 071 12 13)												
APR , 1976 28...	.0	.00	.00	.0	.0	0	.00	.0	.00	.5	.00	.8
01100515 - CAPTAIN POND BROOK NEAR SALEM, NH (LAT 42 48 42 LONG 071 11 28)												
APR , 1976 28...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
01100520 - SPICKET R ABOVE WIDOW HARRIS BRK AT SALEM, NH (LAT 42 48 08 LONG 071 11 46)												
APR , 1976 28...	.0	.00	.00	.0	.0	0	.00	3.0	.00	1.5	.00	1.9
01100530 - HITTYTITY BROOK NEAR SALEM, NH (LAT 42 48 18 LONG 071 13 07)												
APR , 1976 26...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
01100535 - WIDOW HARRIS BROOK AT SALEM, NH (LAT 42 47 58 LONG 071 11 58)												
APR , 1976 28...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
01096585 - BEAVER BROOK AT WEST WINDHAM, NH (LAT 42 48 23 LONG 071 21 12)												
APR , 1976 26...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01096590 - GOLDEN BROOK AT WINDHAM, NH (LAT 42 47 26 LONG 071 18 06)												
APR , 1976 26...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100502 - WASH POND, AT OUTLET, AT HAMPSTEAD, NH (LAT 42 53 02 LONG 071 11 24)												
APR , 1976 27...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100505 - SPICKET RIVER AT NORTH SALEM, NH (LAT 42 50 57 LONG 071 12 56)												
APR , 1976 27...	.00	.3	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100506 - PROVIDENCE HILL BRK AT N. MAIN ST., SALEM, NH (LAT 42 48 54 LONG 071 11 49)												
JUL , 1976 20...	.00	--	.00	--	.00	--	.00	--	.00	--	0	--
01100507 - SPICKET RIVER NEAR SALEM, NH (LAT 42 49 01 LONG 071 12 13)												
APR , 1976 28...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100515 - CAPTAIN POND BROOK NEAR SALEM, NH (LAT 42 48 42 LONG 071 11 28)												
APR , 1976 28...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100520 - SPICKET R ABOVE WIDOW HARRIS BRK AT SALEM, NH (LAT 42 48 08 LONG 071 11 46)												
APR , 1976 28...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100530 - HITTYTITY BROOK NEAR SALEM, NH (LAT 42 48 18 LONG 071 13 07)												
APR , 1976 26...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100535 - WIDOW HARRIS BROOK AT SALEM, NH (LAT 42 47 58 LONG 071 11 58)												
APR , 1976 28...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	0

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)
01100540 - SPICKET RIVER AT SALEM, NH (LAT 42 45 15 LONG 071 12 32)												
APR , 1976 26...	--	0	1	10	0	0	690	7	120	<.5	0	10
01100545 - POLICY BROOK NEAR SALEM, NH (LAT 42 47 29 LONG 071 15 06)												
APR , 1976 26...	--	0	0	10	1	0	60	3	0	.6	1	0
01100675 - KELLY BROOK AT RT 125, PLAISTOW, NH (LAT 42 51 15 LONG 071 06 03)												
SEP , 1976 09...	--	3	0	<10	1	0	320	2	190	<.5	0	10
01100680 - LITTLE RIVER AT PLAISTOW, NH (LAT 42 50 03 LONG 071 06 05)												
JUL , 1976 20...	--	4	1	<10	2	10	990	5	100	<.5	0	0
01100684 - LITTLE RIVER AT WESTVILLE, NH (LAT 42 49 06 LONG 071 06 50)												
APR , 1976 27...	--	0	0	10	1	0	480	3	40	<.5	0	0
01100825 - POWWOW RIVER NEAR KINGSTON, NH (LAT 42 54 58 LONG 071 04 54)												
APR , 1976 27...	--	0	0	<10	1	0	390	2	30	<.5	0	0
01100827 - POWWOW R, AT OUTLET OF GREAT POND, KINGSTON, NH (LAT 42 54 44 LONG 071 03 46)												
APR , 1976 27...	--	0	0	10	0	0	320	3	40	<.5	0	0
01100830 - COUNTRY POND, AT OUTLET, NEAR KINGSTON, NH (LAT 42 53 37 LONG 071 03 23)												
APR , 1976 27...	--	0	1	10	2	0	240	3	20	<.5	0	10
01100833 - UNNAMED STREAM NR ARLINGTON PND, S KINGSTON, NH (LAT 42 53 43 LONG 071 04 34.01)												
SEP , 1976 05...	9900	--	--	--	--	--	--	--	--	--	--	--
01100835 - POWWOW RIVER NEAR EAST KINGSTON, NH (LAT 42 54 29 LONG 071 01 01)												
APR , 1976 27...	--	0	0	10	1	0	400	3	60	<.5	0	30

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	TOTAL PCB (UG/L)	POLY-CHLO-RINATED NAPH-THA-LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA-TERIAL (UG/KG)
01100540 - SPICKET RIVER AT SALEM, NH (LAT 42 45 15 LONG 071 12 32)												
APR , 1976 26...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
01100545 - POLICY BROOK NEAR SALEM, NH (LAT 42 47 29 LONG 071 15 06)												
APR , 1976 26...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
01100680 - LITTLE RIVER AT PLAISTOW, NH (LAT 42 50 03 LONG 071 06 05)												
JUL , 1976 20...	.0	.00	.00	--	.0	--	.00	--	.00	--	.00	--
01100684 - LITTLE RIVER AT WESTVILLE, NH (LAT 42 49 06 LONG 071 06 50)												
APR , 1976 27...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
01100825 - POWWOW RIVER NEAR KINGSTON, NH (LAT 42 54 58 LONG 071 04 54)												
APR , 1976 27...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
01100827 - POWWOW R, AT OUTLET OF GREAT POND, KINGSTON, NH (LAT 42 54 44 LONG 071 03 46)												
APR , 1976 27...	.0	.00	.00	.0	.0	0	.00	.0	.00	4.5	.00	44
01100830 - COUNTRY POND, AT OUTLET, NEAR KINGSTON, NH (LAT 42 53 37 LONG 071 03 23)												
APR , 1976 27...	.0	--	.00	.0	.0	0	.00	.0	.00	.0	.00	.0
01100835 - POWWOW RIVER NEAR EAST KINGSTON, NH (LAT 42 54 29 LONG 071 01 01)												
APR , 1976 27...	.0	.00	.00	.0	.0	0	.00	.0	.00	.0	.00	.0

CHEMICAL ANALYSES OF SURFACE WATER IN MERRIMACK RIVER BASIN, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976.--Continued

DATE	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)
01100540 - SPICKET RIVER AT SALEM, NH (LAT 42 45 15 LONG 071 12 32)												
APR , 1976 26...	.00	.3	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100545 - POLICY BROOK NEAR SALEM, NH (LAT 42 47 29 LONG 071 15 06)												
APR , 1976 26...	.00	.2	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100680 - LITTLE RIVER AT PLAISTOW, NH (LAT 42 50 03 LONG 071 06 05)												
JUL , 1976 20...	.00	--	.00	--	.00	--	.00	--	.00	--	0	--
01100684 - LITTLE RIVER AT WESTVILLE, NH (LAT 42 49 06 LONG 071 06 50)												
APR , 1976 27...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100825 - POWWOW RIVER NEAR KINGSTON, NH (LAT 42 54 58 LONG 071 04 54)												
APR , 1976 27...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100827 - POWWOW R, AT OUTLET OF GREAT POND, KINGSTON, NH (LAT 42 54 44 LONG 071 03 46)												
APR , 1976 27...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100830 - COUNTRY POND, AT OUTLET, NEAR KINGSTON, NH (LAT 42 53 37 LONG 071 03 23)												
APR , 1976 27...	.00	19	.00	.0	.00	.0	.00	.0	.00	.0	0	0
01100835 - POWWOW RIVER NEAR EAST KINGSTON, NH (LAT 42 54 29 LONG 071 01 01)												
APR , 1976 27...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	0	(

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS (G/SQ M) DRY WEIGHT	BIOMASS (G/SQ M) ASH WEIGHT	CHLOROPHYLL A (MG/SQ M)	CHLOROPHYLL B (MG/SQ M)	BIOMASS PIGMENT RATIO	SAMPLING METHOD
MERRIMACK RIVER BASIN							
01096590 - GOLDEN BROOK AT WINDHAM, NH (LAT 42 47 26 LONG 071 18 06)							
JULY, 1976 26...	15	1.46	.615	.788	.181	1,100	POLYETHYLENE STRIP
01100505 - SPICKET RIVER AT NORTH SALEM, NH (LAT 42 50 57 LONG 071 12 56)							
APR., 1976 27...	15	12.0	7.23	16.6	4.19	290	"
SEPT. 08...	15	--	--	1.7	.5	--	"
01100507 - SPICKET RIVER NEAR SALEM, NH (LAT 42 49 01 LONG 071 12 13)							
APR., 1976 28...	15	1.62	.231	.502	.157	2,800	"
SEPT. 08...	15	--	--	.2	.1	--	"
01100515 - CAPTAIN POND BROOK NEAR SALEM, NH (LAT 42 48 42 LONG 071 11 28)							
APR., 1976 28...	15	1.31	.385	1.62	.200	570	"
01100520 - SPICKET RIVER ABOVE WIDOW HARRIS BROOK AT SALEM, NH (LAT 42 48 08 LONG 071 11 46)							
APR., 1976 28...	15	4.92	2.00	10.1	1.26	290	"
SEPT. 08...	15	--	--	.2	.2	--	"
01100535 - WIDOW HARRIS BROOK AT SALEM, NH (LAT 42 47 58 LONG 071 11 58)							
APR., 1976 28...	15	6.31	2.92	1.52	.381	2,200	"
01100540 - SPICKET RIVER AT SALEM, NH (LAT 42 45 15 LONG 071 12 32)							
SEPT., 1976 08...	15	--	--	2.7	.6	--	"
01100684 - LITTLE RIVER AT WESTVILLE, NH (LAT 42 49 06 LONG 071 06 50)							
APR., 1976 27...	15	13.5	9.54	--	--	--	"
SEPT. 09...	15	--	--	.9	.4	--	"
01100827 - POWWOW RIVER, AT OUTLET OF GREAT POND, KINGSTON, NH (LAT 42 54 44 LONG 071 03 46)							
APR., 1976 27...	15	2.93	1.46	2.18	.204	670	"
01100830 - COUNTRY POND, AT OUTLET, NEAR KINGSTON, NH (LAT 42 53 37 LONG 071 03 23)							
APR., 1976 27...	15	28.2	25.4	5.20	.698	530	"
01100835 - POWWOW RIVER NEAR EAST KINGSTON, NH (LAT 42 54 29 LONG 071 01 01)							
APR., 1976 27...	15	10.1	4.31	2.79	.564	2,100	"
SEPT. 09...	15	--	--	.7	.2	--	"

DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)
SACO RIVER BASIN											
01064300 ELLIS RIVER NEAR JACKSON, NH											
OCT. 15	1230	6.0	FEB. 04	1300	0.0	MAY 13	1230	8.0	AUG. 17	1315	12.0
DEC. 08	1230	0.0	MAR. 25	1300	0.0	JUNE 29	1600	15.0	SEP. 30	1150	9.5
01064400 LUCY BROOK NEAR NORTH CONWAY, NH											
OCT. 15	1500	6.0	MAR. 25	1520	0.0	MAY 11	1150	10.0	AUG. 17	1600	12.0
DEC. 08	1550	0.0	APR. 02	1050	2.0	JUNE 29	1345	14.0	SEP. 30	1425	9.0
FEB. 10	1250	0.0									
01065000 OSSIPEE RIVER AT EFFINGHAM FALLS, NH											
APR. 06	1230	5.0	JUNE 30	1200	21.0	AUG. 19	1230	15.0			
PISCATAQUA RIVER BASIN											
01072100 SALMON FALLS RIVER AT MILTON, NH											
NOV. 17	1130	8.5	DEC. 23	1100	1.0	MAY 11	1000	14.0			
01072850 MOHAWK BROOK NEAR CENTER STRAFFORD, NH											
OCT. 08	1325	12.5	FEB. 18	1315	0.0	APR. 01	1330	5.0	MAY 11	1350	17.0
NOV. 17	1400	6.0									
01073000 OYSTER RIVER NEAR DURHAM, NH											
NOV. 18	0930	5.0	MAY 10	1230	13.0	JUNE 07	1200	17.5	SEP. 20	1430	21.0
MAR. 29	0930	4.0									
01073500 LAMPREY RIVER NEAR NEWMARKET, NH											
MAR. 24	1100	2.0	JUNE 22	1045	26.0	JULY 21	1000	24.0	SEP. 22	1025	19.0
APR. 23	1000	12.5	JULY 06	1400	25.0						
01073600 DUDLEY BROOK NEAR EXETER, NH											
OCT. 24	1000	9.5	DEC. 12	1300	2.0	MAR. 30	1100	8.0	MAY 10	1000	12.0
MERRIMACK RIVER BASIN											
01075000 PEMIGEWASSET RIVER AT WOODSTOCK, NH											
OCT. 29	1010	8.0	MAY 25	0950	10.0	AUG. 26	1425	17.5	SEP. 21	1110	15.0
JAN. 26	1200	1.0	JUNE 30	1220	18.5						
01075800 STEVENS BROOK NEAR WENTWORTH, NH											
OCT. 30	0950	7.0	MAR. 08	0950	3.0	APR. 02	0910	10.0	AUG. 18	1035	14.0
JAN. 21	1000	1.0	APR. 02	1150	4.0	JULY 01	1040	15.0	SEP. 27	1220	12.0
DEC. 10	1050	1.0	MAY 28	1005	10.0						
01076000 BAKER RIVER NEAR RUMNEY, NH											
OCT. 30	1230	8.0	JAN. 21	1130	0.0	APR. 20	1115	10.0	JULY 01	1310	18.0
DEC. 15	0945	2.0	APR. 02	1030	5.0	MAY 28	1215	13.0	AUG. 18	1325	17.0
01076500 PEMIGEWASSET RIVER AT PLYMOUTH, NH											
OCT. 24	1150	10.0	JAN. 22	1145	1.0	JUNE 22	0900	21.0	AUG. 23	1125	23.5
NOV. 20	1045	6.0	APR. 23	1130	8.0	JULY 22	1210	20.0	SEP. 22	1045	14.0
NOV. 25	1015	3.0	MAY 24	1110	9.5						
01077000 SQUAM RIVER AT ASHLAND, NH											
OCT. 29	1345	12.0	MAY 25	1330	13.0	AUG. 11	1235	25.0	SEP. 21	1330	19.0
MAR. 09	1130	4.0									

MERRIMACK RIVER BASIN--CONTINUED

01078000 SMITH RIVER NEAR BRISTOL, NH

DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)
OCT. 28	1300	9.0	JAN. 20	1440	1.0	MAY 26	0930	11.0	AUG. 19	1100	15.5
DEC. 09	1000	2.0	APR. 13	0950	4.0	JULY 07	1105	20.5			

01081000 WINNIPESAUKEE RIVER AT TILTON, NH

MAY 21	1230	12.0	AUG. 17	1310	23.0	SEP. 29	1250	18.0			

01081500 MERRIMACK RIVER FRANKLIN JUNCTION, NH

NOV. 03	1000	11.0	MAR. 01	1240	3.0	MAY 21	1030	11.0	AUG. 27	0935	20.0

01082000 CONTOOCOOK RIVER AT PETERBOROUGH, NH

NOV. 07	1015	8.0	APR. 21	0920	14.0	AUG. 24	1015	20.0	SEP. 30	1000	15.0
MAR. 11	0935	2.0	JULY 09	1145	22.0	AUG. 24	1345	20.5			

01083000 NUBANUSIT BROOK NEAR PETERBOROUGH, NH

MAR. 11	1010	2.0	APR. 21	1115	17.0	JULY 09	1515	25.0	AUG. 24	1130	20.0

01085000 CONTOOCOOK RIVER NEAR HENNIKER, NH

NOV. 19	1200	5.0	APR. 16	1250	14.0	JULY 08	1335	23.5	AUG. 20	1215	22.0

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

NOV. 26	1100	1.0	MAR. 01	1545	3.0	JUNE 21	1505	26.0	SEP. 27	1340	14.0
JAN. 13	1125	0.0	APR. 05	1415	8.0	AUG. 16	1415	24.0			

01085800 WEST BRANCH WARNER RIVER NEAR BRADFORD, NH

OCT. 09	1000	9.0	FEB. 02	0940	0.0	APR. 16	0930	10.0	SEP. 28	1000	13.0
DEC. 30	1010	1.0	MAR. 10	0940	1.0	JULY 08	1540	20.0	AUG. 20	0925	14.5
NOV. 19	0920	4.0	MAY 27	0945	12.0	AUG. 10	1315	18.0			

01086000 WARNER RIVER AT DAVISVILLE, NH

DEC. 09	1400	0.0	MAY 18	1500	14.0	AUG. 16	1200	70.0	SEP. 27	1240	14.0
MAR. 01	1300	1.0									

01087000 BLACKWATER RIVER NEAR WEBSTER, NH

SEP. 28	1045	7.0	MAR. 01	1045	3.0	MAY 18	1040	14.5	SEP. 27	1100	14.0
DEC. 09	1105	0.0	APR. 07	1255	8.0	JUNE 23	1230	24.0			

01088000 CONTOOCOOK RIVER AT PENACOOK, NH

OCT. 30	1630	8.0	MAR. 05	1030	4.0	MAY 26	1440	14.0	AUG. 08	1330	22.0
DEC. 09	1330	5.0	APR. 13	1330	4.0	JULY 07	1500	24.0	SEP. 29	1530	15.5

01089000 SOUCOOK RIVER NEAR CONCORD, NH

MAR. 30	1400	4.5									

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

NOV. 19	1505	7.0	MAY 27	1210	15.0	AUG. 19	1530	24.0	SEP. 28	1400	14.0
MAR. 10	1240	1.0	JUNE 16	1520	24.0						

01091000 SOUTH BRANCH PISCATAQUOG RIVER NEAR GOFFSTOWN, NH

OCT. 10	1140	8.0	JAN. 08	1115	0.0	MAY 10	1005	13.0	AUG. 18	1145	18.0
NOV. 17	1100	2.0	MAR. 29	1045	1.0	JUNE 18	1020	21.5	SEP. 28	0940	13.0

01091500 PISCATAQUOG RIVER NEAR GOFFSTOWN, NH

OCT. 10	1345	8.0	JAN. 08	1430	0.0	MAY 10	1225	13.0	AUG. 18	1355	14.0
NOV. 17	1315	8.0	MAR. 29	1310	5.0	JUNE 18	1150	22.0	SEP. 28	1135	14.0

DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)
MERRIMACK RIVER BASIN--CONTINUED											
01093800 STONY BROOK TRIBUTARY NEAR TEMPLE, NH											
NOV. 10	1250	10.0	MAR. 11	1230	2.0	JUNE 01	1200	15.0	AUG. 25	1030	20.0
DEC. 22	1205	1.0	APR. 21	1250	16.0	JULY 12	1120	18.0	SEP. 30	1100	12.0
01094000 SOUHEGAN RIVER AT MERRIMACK, NH											
NOV. 17	1545	3.0	MAY 10	1500	14.0	JUNE 18	1400	24.0	AUG. 31	1115	16.0
MAR. 29	1525	7.0									
CONNECTICUT RIVER BASIN											
01127880 BIG BROOK NEAR PITTSBURG, NH											
NOV. 03	1615	6.0	JAN. 21	1015	0.0	APR. 21	0830	3.5	JULY 08	1740	17.0
DEC. 11	1625	0.0	MAR. 10	1715	0.0	JUNE 02	1630	14.5	AUG. 25	0945	11.0
01128500 CONNECTICUT RIVER AT FIRST CONNECTICUT LAKE, NEAR PITTSBURG, NH											
NOV. 04	1215	6.0	APR. 21	1025	5.0	JULY 08	1910	18.0			
01129200 CONNECTICUT RIVER BELOW INDIAN STREAM, NEAR PITTSBURG, NH											
DEC. 12	1200	0.0	MAR. 11	1200	1.0	JUNE 03	0945	14.0	AUG. 25	1500	16.0
01129300 HALLS STREAM NEAR EAST HEREFORD, QUEBEC											
DEC. 03	1400	0.0	APR. 20	1700	11.0	JUNE 02	1400	14.0	AUG. 24	1700	20.0
01129500 CONNECTICUT RIVER AT NORTH STRATFORD, NH											
NOV. 03	1225	7.0	APR. 20	1525	12.0	APR. 02	1845	2.0	JUNE 02	1115	20.0
01130000 UPPER AMMONOOSUC RIVER NEAR GROVETON, NH											
NOV. 03	0945	6.0	APR. 02	1605	3.0	JUNE 02	0915	14.0	JULY 09		20.0
DEC. 11	1140	0.0	APR. 20	1300	12.0	JULY 08		22.0	AUG. 24		19.0
JAN. 20	1345	0.0									
01131500 CONNECTICUT RIVER NEAR DALTON, NH											
NOV. 06		6.0	JUNE 02	1055	16.0	AUG. 26	1055	19.0			
01133000 EAST BRANCH PASSUMPSIC RIVER NEAR EAST HAVEN, VT											
OCT. 29	0900	6.5	MAR. 02	1330	0.0	AUG. 23	1800	20.0	SEP. 30	1300	11.0
DEC. 15	1200	1.0	JULY 07	1300	19.0						
01134500 MOOSE RIVER AT VICTORY, VT											
OCT. 22	1600	10.5	APR. 08	1000	4.0	SEP. 30	1430	10.5			
01135000 MOOSE RIVER AT ST. JOHNSBURY, VT											
DEC. 15	1530	1.5	MAR. 03	1100	0.0	JULY 07	1100	23.0	SEP. 30	1700	11.5
JAN. 22	1600	0.0	MAY 14	0900	10.5	AUG. 24	0900	17.5			
01135500 PASSUMPSIC RIVER AT PASSUMPSIC, VT											
NOV. 20	1230	4.5	JAN. 20	0830	0.0	AUG. 24	1000	21.0	SEP. 21	1700	17.0
DEC. 18	1530	1.0									
01137500 AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, NH											
DEC. 23	1230	1.0	FEB. 04	1240	1.0	MAR. 15	1130	1.0	JUNE 02	1245	13.0
01138000 AMMONOOSUC RIVER NEAR BATH, NH											
OCT. 28	1430	9.0	DEC. 18	1300	1.5	MAR. 04	1430	0.5	JULY 06	1700	25.0

CONNECTICUT RIVER BASIN--CONTINUED

01139000 WELLS RIVER AT WELLS RIVER, VT

DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)
OCT. 28	1230	7.5	DEC. 16	1100	1.5	MAR. 04	1030	0.0	AUG. 24	1300	19.5

01139800 EAST ORANGE BRANCH AT EAST ORANGE, VT

OCT. 29	0730	6.0	APR. 22	1500	9.5	MAY 27	1800	13.0	JULY 21	1215	25.0

01141500 OMPOMPANOOSUC RIVER AT UNION VILLAGE, VT

NOV. 06	1230	8.5	JAN. 05	1330	0.0	MAR. 08	1400	0.5	AUG. 31	1000	23.0
DEC. 11	1400	0.5	FEB. 02	1400	0.0	JULY 23	0900	20.0			

01141800 MINK BROOK NEAR ETNA, NH

OCT. 28	1400	6.0	JAN. 22	0810	0.0	AUG. 10	1000	24.0	AUG. 31	1200	24.0
DEC. 11	1600	0.5	MAR. 08	1200	0.0						

01142500 AYERS BROOK AT RANDOLPH, VT

JUNE 03	0730	10.5	AUG. 25	1000	24.0						

01144000 WHITE RIVER AT WEST HARTFORD, VT

OCT. 21	0800	9.0	JAN. 05	1600	0.0	MAR. 24	1000	3.0	MAY 24	1000	10.5
NOV. 21	0800	4.0	FEB. 20	0700	0.0	APR. 23	0900	10.0	AUG. 23	1300	25.0
DEC. 18	1100	0.0									

01144500 CONNECTICUT RIVER AT WHITE RIVER JUNCTION, VT

OCT. 17	0900	10.5	DEC. 15	1000	0.0	JAN. 22	1200	0.0	APR. 22	0800	10.0
DEC. 05	1600	0.5	JAN. 15	1000	0.0	MAR. 10	1500	0.5	AUG. 31	1200	24.0

01145000 MASCOMA RIVER AT WEST CANAAN, NH

OCT. 20	1545	8.5	DEC. 08	1125	1.0	AUG. 24	1615	21.0			

01150500 MASCOMA RIVER AT MASCOMA, NH

OCT. 20	1130	11.5	DEC. 08	1500	3.5	MAR. 26	1230	2.5	MAY 12	1600	11.0

01151500 OTTAUQUECHEE RIVER AT NORTH HARTLAND, VT

OCT. 28	1100	7.0	MAR. 10	1500	0.5	JULY 12	1200	22.0	AUG. 31	1300	24.0
DEC. 18	0700	0.5	APR. 22	1000	10.0	AUG. 12	0800	23.0			

01152500 SUGAR RIVER AT WEST CLAREMONT, NH

OCT. 01	0910	13.0	DEC. 15	1130	1.0	FEB. 23	1000	0.5	JULY 01	0900	19.5
DEC. 03	1530	3.5	JAN. 19	1000	0.0	APR. 06	0940	4.0			

01153000 BLACK RIVER AT NORTH SPRINGFIELD, VT

OCT. 01	1445	13.0	DEC. 01	1615	4.5	APR. 06	1600	4.5	JUNE 30	1330	24.0
OCT. 21	1440	10.0	JAN. 19	1345	0.0	APR. 08	1200	4.0	SEP. 30	1300	12.5
OCT. 22	1230	9.5	FEB. 23	1400	0.5						

01153500 WILLIAMS RIVER AT BROCKWAYS MILLS, VT

DEC. 04	1100	0.5	FEB. 23	1530	1.0	MAY 27	1100	10.0	SEP. 21	1315	17.0
JAN. 14	1400	0.5	APR. 08	1430	5.5	JUNE 29	1210	23.0			

01154000 SAXTONS RIVER AT SAXTONS RIVER, VT

OCT. 09	0830	12.0	MAR. 01	1230	0.5	MAY 27	1300	13.0	AUG. 04	1000	14.5
DEC. 04	1530	0.5	APR. 13	1330	7.0	JUNE 29	1030	21.0	SEP. 30	1500	12.5
JAN. 19	1530	0.0									

01154500 CONNECTICUT RIVER AT NORTH WALPOLE, NH

OCT. 09	0930	13.5	JAN. 19	1530	0.0	MAR. 01	1100	0.5	SEP. 27	1100	16.5
DEC. 03	0830	4.5	FEB. 10	1030	0.0	APR. 08	0845	4.5			

DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)
CONNECTICUT RIVER BASIN--CONTINUED											
01155000 COLD RIVER AT DREWSVILLE, NH											
OCT. 01	1730	14.5	JAN. 14	1100	1.0	APR. 18	0730	3.0	JUNE 29	1330	23.0
DEC. 04	0830	1.0	FEB. 26	1000	1.0	MAY 27	1500	14.0	AUG. 04	1330	18.0
01155500 WEST RIVER AT JAMAICA, VT											
OCT. 02	1645	14.0	DEC. 02	1415	2.5	APR. 07	0730	3.5	JUNE 02	1330	16.0
OCT. 21	1525	9.5	FEB. 24	1315	0.5						
01156000 WEST RIVER AT NEWFANE, VT											
OCT. 10	0900	9.5	DEC. 02	1545	2.5	JUNE 02	1630	18.0	JUNE 29	1700	25.5
OCT. 21	1200	9.0	JAN. 15	1600	0.5						
01157000 ASHUELOT RIVER NEAR GILSUM, NH											
OCT. 08	1530	12.5	NOV. 26	0900	30.0	FEB. 26	1200	0.0	MAY 28	1000	18.0
OCT. 20	1500	7.5	JAN. 14	0830	0.0	APR. 02	1300	5.0	JULY 01	1200	20.0
01158000 ASHUELOT RIVER BELOW SURRY MOUTAIN DAM, NEAR KEENE, NH											
OCT. 03	1100	12.0	DEC. 16	1300	2.5	FEB. 26	1400	0.5	MAY 28	0830	14.0
NOV. 26	0800	3.0	JAN. 13	1630	0.5	APR. 09	1000	6.0	JUNE 28	1400	26.0
01158600 OTTER BROOK BELOW OTTER BROOK DAM, NEAR KEENE, NH											
OCT. 03	1300	13.5	JAN. 13	1330	0.5	FEB. 27	1000	0.5	JUNE 28	1200	23.0
DEC. 05	0830	2.5	JAN. 19	1000	0.0	APR. 09	1030	6.0			
01160000 SOUTH BRANCH ASHUELOT RIVER AT WEBB, NEAR MARLBOROUGH, NH											
OCT. 08	1230	10.5	DEC. 16	1030	3.0	FEB. 26	1530	1.5	JULY 13	1230	20.0
OCT. 20	1130	9.0	JAN. 13	1030	0.0	JUNE 01	1230	18.5	SEP. 22	1015	13.0
NOV. 26	0930	3.0	FEB. 10	0900	0.0	JULY 02	0930	18.5			
01161000 ASHUELOT RIVER AT HINSDALE, NH											
OCT. 09	1600	13.0	APR. 08	1500	7.0	JULY 01	1500	23.0	AUG. 12	0945	19.5
FEB. 25	1500	0.5	JUNE 01	1600	18.0						
HUDSON RIVER BASIN											
01329000 BATTEN KILL AT ARLINGTON, VT											
OCT. 22	1330	9.5	JAN. 20	1400	1.0	APR. 23	1300	11.0	JULY 23	1230	17.0
NOV. 21	1230	6.0	FEB. 20	1230		MAY 24	1630	10.0	AUG. 24	1300	17.0
DEC. 18	1200	2.0	MAR. 24	1400	5.0	JUNE 22	1130	19.0	SEP. 24	1230	11.0
01334000 WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT											
DEC. 18	1415	1.5	FEB. 19	1215	0.0	APR. 22	1000	14.0	JULY 06	1430	19.5
ST. LAWRENCE RIVER BASIN											
04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT											
NOV. 07	1100	7.0	FEB. 03	1030	0.0	APR. 21	1130	11.0	AUG. 30	1230	20.0
DEC. 15	1400	4.0	MAR. 09	0830	0.5						
04281500 EAST CREEK AT RUTLAND, VT											
NOV. 06	1500	7.5	DEC. 15	1115	1.5	FEB. 03	1300	0.5	APR. 21	0700	48.0
04282000 OTTER CREEK AT CENTER RUTLAND, VT											
NOV. 07	1200	7.0	FEB. 04	0800	0.0	APR. 21	1000	10.5	AUG. 10	1300	24.0
DEC. 16	0800	0.5	MAR. 03	1200	0.5	JUNE 28	1300	22.0	AUG. 30	1100	22.0

ST. LAWRENCE RIVER BASIN--CONTINUED

04282500 OTTER CREEK AT MIDDLEBURY, VT

DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)	DATE	TIME	TEMPERATURE (DEG C)
OCT. 16	1000	10.0	FEB. 04	1200	0.5	APR. 21	1400	9.0	AUG. 30	1400	24.0
DEC. 16	1100	0.5	MAR. 09	1000	0.5	JULY 14	1000	24.0			

04284000 JAIL BRANCH AT EAST BARRE, VT

OCT. 29	1000	6.0	FEB. 05	0700	0.0	MAR. 08	1500	0.0	JULY 21	1500	25.0
DEC. 17	1600	0.0	FEB. 25	1100	0.0	APR. 21	1600	9.0	AUG. 26	1400	24.0
JAN. 07	1000	0.0									

04285500 NORTH BRANCH WINOOSKI RIVER AT WRIGHTSVILLE, VT

OCT. 29	1100	6.5	FEB. 05	1000	0.0	MAR. 08	1600	0.0	APR. 21	1100	10.0
DEC. 11	0900	0.5									

04286000 WINOOSKI RIVER AT MONTPELIER, VT

OCT. 29	1200	6.5	FEB. 05	1200	0.0	APR. 20	1300	9.5	AUG. 24	0800	24.0
DEC. 11	0700	0.5	MAR. 09	1700	0.5						

04287000 DOG RIVER AT NORTHFIELD FALLS, VT

OCT. 23	1000	7.5	FEB. 05	1430	0.0	APR. 20	1400	10.0	AUG. 25	1130	24.0
DEC. 11	1000	1.5	MAR. 10	1205	0.5						

04288000 MAD RIVER NEAR MORETOWN, VT

OCT. 23	1230	8.5	DEC. 17	0945	0.5	MAR. 09	1600	0.0	AUG. 24	0950	24.0
DEC. 16	1600	0.5	FEB. 04	1500	0.0						

04289000 LITTLE RIVER NEAR WATERBURY, VT

DEC. 16	1500	0.5	MAR. 09	1530	0.5	APR. 20	0815	10.0	AUG. 24	1200	25.0
FEB. 05	1300	0.5									

04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT

OCT. 15	1300	11.0	JAN. 20	1500	0.0	MAR. 02	1100	0.0	AUG. 26	1100	25.0
DEC. 09	1200	0.0									

04292000 LAMOILLE RIVER AT JOHNSON, VT

OCT. 14	1500	10.5	JAN. 20	1245	0.0	MAR. 02	0830	0.0	AUG. 25	1400	24.0
DEC. 08	1300	0.0									

04292500 LAMOILLE RIVER AT EAST GEORGIA, VT

OCT. 15	0900	10.0	JAN. 21	0800	0.0	MAR. 02	1000	0.0	AUG. 26	0800	24.0
DEC. 09	0900	0.0									

04293000 MISSIQUOI RIVER NEAR NORTH TROY, VT

OCT. 21	1230	9.5	JAN. 21	0800	0.0	JULY 08	1300	19.0	SEP. 30	0900	10.0
DEC. 09	1600	0.5									

04293500 MISSIQUOI RIVER NEAR RICHFORD, VT

OCT. 21	1055	9.5	JAN. 21	1545	0.0						

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT

JAN. 21	1155	1.5	MAR. 02	1250	0.0	AUG. 26	1130	24.0			

04296000 BLACK RIVER AT COVENTRY, VT

OCT. 29	1500	8.0	JAN. 22	1025	0.0	APR. 07	1225	5.5	SEP. 30	1120	11.0
DEC. 10	1325	1.0	MAR. 02	0730	0.0	AUG. 23	1625	23.5			

HILLSBORO COUNTY

424705071284801. Local number, NAW 101 (Formerly published as Nashua 101).
LOCATION.--Lat 42°47'05", long 71°28'48", Hydrologic Unit 01070002, at east side of Manchester Street about 600 ft (180 m) north of intersection of Henri A. Burque Highway and Manchester Street in Nashua.
Owner: Pennichuck Water Works.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug observation water-table well, diameter 36 in (0.91 m), depth 19 ft (5.8 m), lined with stone to 19 ft (5.8 m), open end.
DATUM.--Altitude of land-surface datum is 170 ft (52 m). Measuring point: Southeast edge of northwest slab of granite, 0.50 ft (0.15 m) above land-surface datum.
PERIOD OF RECORD.--December 1955 to October 1956, October 1958 to April 1976, well destroyed.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.83 ft (1.17 m) below land-surface datum, Apr. 23, 1969; dry at times in 1956, 1963-1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	9.51	DEC 23	10.85	FEB 24	8.86	APR 28	10.84				
NOV 25	8.97	JAN 26	11.69	MAR 24	8.89						

MERRIMACK COUNTY

431526071345501. Local number, CVW 1 (Formerly published as Concord 1).
LOCATION.--Lat 43°15'26", long 71°34'55", Hydrologic Unit 01070002, at south side of Bog Road, about 750 ft (230 m) west of intersection of U.S. Highways 3 and 4 and Bog Road, Concord.
Owner: U.S. Geological Survey.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Driven observation water-table well, diameter 3/4 in (0.02 m), depth 11 ft (3.4 m), screened 9 to 11 ft (2.7 to 3.4 m).
DATUM.--Altitude of land-surface datum is 345 ft (105 m). Measuring point: Top of casing, 2.80 ft (0.85 m) above land-surface datum.
PERIOD OF RECORD.--August 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.09 ft (0.03 m) below land-surface datum, Apr. 4, 1960; lowest measured, 7.32 ft (2.23 m) below land-surface datum, Nov. 1, 1965.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	3.22	DEC 23	2.48	FEB 24	0.62	APR 29	1.89	JUN 25	3.50	AUG 30	4.57
NOV 26	2.25	JAN 26	2.79	MAR 25	0.41	MAY 27	1.89	JUL 27	4.10	SEP 28	4.98

432343071570901. Local number, NLW 1 (Formerly published as New London 1).
LOCATION.--Lat 43°23'43", long 71°57'09", Hydrologic Unit 01070003, at north side of Golf Course Road about 500 ft (150 m) east of intersection of State Highway 114 and Golf Course Road.
Owner: W. S. Mariner.
AQUIFER.--Sandy till of Pleistocene age.
WELL CHARACTERISTICS.--Dug observation water-table well, diameter 36 in (0.91 m), depth 21 ft (6.4 m), lined with stone to 21 ft (6.4 m), open end.
DATUM.--Altitude of land-surface datum is 1,020 ft (310 m). Measuring point: Top of 2-in (0.05 m) casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--October 1947 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.80 ft (0.24 m) below land-surface datum, Apr. 2, 1963; lowest measured, 16.90 ft (5.15 m) below land-surface datum, Dec. 28, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	10.54	DEC 23	4.73	FEB 23	5.44	APR 23	6.39	JUN 25	9.58	AUG 20	11.56
NOV 22	5.92	JAN 21	8.66	MAR 21	5.55	MAY 24	5.28	JUL 23	10.29	SEP 21	12.85

STRAFFORD COUNTY

430721071005001. Local number, LIW 1 (Formerly published as Lee 1).
LOCATION.--Lat 43°07'21", long 71°00'50", Hydrologic Unit 01060003, southwest side of Bennett Road about 200 ft (60 m) from the west corner of the Lee Town Green.
Owner: Mildred Carlson.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug observation water-table well, diameter 42 in (1.07 m), depth 33 ft (10.1 m), lined with stone to 33 ft (10.1 m).
DATUM.--Altitude of land-surface datum is 190 ft (58 m). Measuring point: Top of stone cover, at land-surface datum.
PERIOD OF RECORD.--November 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.34 ft (8.94 m) below land-surface datum, Nov. 1, 25, 1965.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	30.80	DEC 24	30.67	FEB 20	30.66	APR 23	30.69	JUN 24	31.21	AUG 20	31.23
NOV 27	30.71	JAN 23	31.30	MAR 23	30.52	MAY 24	30.72	JUL 24	31.38	SEP 20	31.60

BENNINGTON COUNTY

424810073160401. Local number, PQW 1 (Formerly published as Pownal 1).
LOCATION.--Lat 42°48'10", long 73°16'04", Hydrologic Unit 02020003, in front of residence on west side of State Highway 346 and 0.15 mi (0.24 km) south of post office at North Pownal.
Owner: Robert Rudd, Sr.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in (0.61 m), depth 18 ft (5.5 m), cased with stone to 18 ft (5.5 m), open end.
DATUM.--Altitude of land-surface datum is 515 ft (157 m). Measuring point: Top of 0.75-in (0.02 m) diameter hole drilled in center of 0.38-in (0.01 m) thick steel cover at land-surface datum.
PERIOD OF RECORD.--October 1964 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.65 ft (3.25 m) below land-surface datum, May 22, 1976; lowest measured, 16.59 ft (5.06 m) below land-surface datum, Oct. 19, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	12.65	DEC 20	13.74	FEB 24	11.48	APR 17	13.14	JUN 19	13.54	AUG 21	13.04
NOV 26	13.22	JAN 24	13.84	MAR 25	12.83	MAY 25	10.78	JUL 24	13.65	SEP 25	13.74

CHITTENDEN COUNTY

443646073124901. Local number, MJW 3 (Formerly published as Milton 3).
LOCATION.--Lat 44°36'46", long 73°12'49", Hydrologic Unit 02010005, about 600 ft (183 m) south of manager's residence at Vermont Sandbar Waterfowl Development Area, about 400 ft (122 m) west of U.S. Highway 2, and 0.9 mi (1.4 km) northwest of Lamoille River bridge at Milton. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in (0.03 m), depth 40 ft (12.2 m), screened 38 to 40 ft (11.6 to 12.2 m).
DATUM.--Altitude of land-surface datum is 160 ft (49 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--November 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.97 ft (6.70 m) below land-surface datum, May 29, 1974; lowest measured, 37.82 ft (11.53 m) below land-surface datum, Feb. 26, 1965.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	34.23	DEC 23	33.56	FEB 24	34.24	APR 27	26.70	JUN 25	25.31	AUG 24	27.80
NOV 25	34.70	JAN 26	33.80	MAR 25	29.71	MAY 26	25.33	JUL 26	26.54	SEP 24	29.14

ESSEX COUNTY

444731071514701. Local number, BIW 1 (Formerly published as Brighton 1).
LOCATION.--Lat 44°47'31", long 71°51'47", Hydrologic Unit 01110000, south of road and just west of parking lot for Brighton State Park Beach at Brighton.
Owner: U.S. Geological Survey.
AQUIFER.--Medium and coarse sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 35 ft (10.7 m), screened 33 to 35 ft (10.1 to 10.7 m).
DATUM.--Altitude of land-surface datum is 1,180 ft (360 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.94 ft (0.59 m) below land-surface datum, Apr. 25, 1974; lowest measured, 4.94 ft (1.51 m) below land-surface datum, July 27, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	3.28	DEC 23	3.85	FEB 22	3.98	APR 26	2.76	JUN 21	3.20	AUG 24	3.45
DEC 01	3.45	JAN 25	4.00	MAR 26	3.18	MAY 25	2.98	JUL 24	4.20	SEP 23	3.91

FRANKLIN COUNTY

445603072422901. Local number, BKW 1 (Formerly published as Berkshire 1).
LOCATION.--Lat 44°56'03", long 72°42'29", Hydrologic Unit 02010007, at southeast end of State Highway 118 bridge on Missisquoi River at East Berkshire.
Owner: U.S. Geological Survey.
AQUIFER.--Fine sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 51 ft (15.5 m), screened 49 to 51 ft (14.9 to 15.5 m).
DATUM.--Altitude of land-surface datum is 425 ft (129 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.15 ft (3.09 m) below land-surface datum, Apr. 25, 1974; lowest measured, 16.43 ft (5.01 m) below land-surface datum, Aug. 26, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	13.60	DEC 23	13.00	FEB 24	11.45	APR 27	13.54	JUN 25	15.28	AUG 24	14.41
NOV 25	12.99	JAN 26	13.98	MAR 25	10.24	MAY 26	12.74	JUL 26	14.73	SEP 24	14.84

LAMOILLE COUNTY

443405072323501. Local number, MPW 1 (Formerly published as Morristown 1).
LOCATION.--Lat 44°34'05", long 72°32'35", Hydrologic Unit 02010005, Vermont Highway Department right-of-way off State Highway 15 and 3 mi (5 km) east of Morrisville.
Owner: U.S. Geological Survey.
AQUIFER.--Silty, fine to medium sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 50 ft (15.2 m), screened 48 to 50 ft (14.6 to 15.2 m).
DATUM.--Altitude of land-surface datum is 660 ft (201 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--October 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.31 ft (4.67 m) below land-surface datum, Apr. 2, 1976; lowest measured, 20.35 ft (6.20 m) below land-surface datum, Aug. 26, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	19.06	JAN 26	18.73	MAR 25	17.09	MAY 27	17.07	JUL 26	19.12	SEP 24	19.10
DEC 23	18.50	FEB 25	18.20	APR 27	17.00	JUN 25	18.28	AUG 24	18.81		

ORANGE COUNTY

435343072151801. Local number, WOW 1 (Formerly published as West Fairlee 1).
LOCATION.--Lat 43°53'43", long 72°15'18", Hydrologic Unit 01080103, 60 ft (18 m) west of salt shed and 1.3 mi (2.1 km) south-southeast of West Fairlee Village.
Owner: U.S. Geological Survey.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 54 ft (16.5 m) screened 52 to 54 ft (15.9 to 16.5 m).
DATUM.--Altitude of land-surface datum is 700 ft (213 m). Measuring point: Top of casing, 2.00 ft (0.61 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.88 ft (0.27 m) below land-surface datum, Apr. 24, 1969; lowest measured, 5.43 ft (1.66 m) below land-surface datum, Nov. 18, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	3.32	DEC 23	3.45	FEB 25	2.36	APR 27	1.47	JUN 24	3.28	AUG 25	4.18
NOV 26	2.78	JAN 27	3.76	MAR 25	1.89	MAY 26	2.05	JUL 26	3.96	SEP 24	4.50

ORLEANS COUNTY

443952072114001. Local number, GLW 1 (Formerly published as Glover 1).
LOCATION.--Lat 44°39'52", long 72°11'40", Hydrologic Unit 01110000, at Vermont Highway Department salt shed west of State Highway 16 and 3 mi (5 km) south of Glover Village.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 82 ft (25 m), screened 80 to 82 ft (24.4 to 25 m).
DATUM.--Altitude of land-surface datum is 1,200 ft (366 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.11 ft (3.69 m) below land-surface datum, May 23, 1969; lowest measured, 18.95 ft (5.78 m) below land-surface datum, Mar. 28, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	16.92	DEC 23	16.39	FEB 24	17.15	APR 27	13.40	JUN 25	14.78	AUG 24	15.52
NOV 25	16.24	JAN 26	17.01	MAR 25	15.95	MAY 26	14.91	JUL 26	15.83	SEP 24	15.88

445158072155001. Local number, IBW 1 (Formerly published as Irasburg 1).
LOCATION.--Lat 44°51'58", long 72°15'50", Hydrologic Unit 01110000, adjacent to barnyard gate 56 ft (17 m) west of centerline U.S. Highway 5, and 0.9 mi (4.2 km) south of junction with State Highway 14 in Irasburg.
Owner: Norman Beaulieu.
AQUIFER.--Glacial till of Pleistocene age.
WELL CHARACTERISTICS.--Dug observation water-table well, diameter 30 in (0.76 m), depth 15 ft (4.6 m), cased with stone to 15 ft (4.6 m).
DATUM.--Altitude of land-surface datum is 910 ft (277 m). Measuring point: Top edge of notch chiseled in top of concrete well curb, on east side, 0.5 ft (0.15 m) above land-surface datum.
REMARKS.--Water level influenced periodically by local snowmelt.
PERIOD OF RECORD.--October 1964 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.79 ft (0.24 m) below land-surface datum, May 1, 1971; lowest measured, 13.4 ft (4.08 m) below land-surface datum, Nov. 12, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	4.35	DEC 23	6.59	FEB 25	6.65	APR 27	5.90	JUN 25	6.18	AUG 24	5.14
NOV 25	4.15	JAN 26	10.43	MAR 25	5.02	MAY 26	3.99	JUL 26	6.86	SEP 24	6.21

RUTLAND COUNTY

434217073010601. Local number, PFW 8 (Formerly published as Pittsford 8).
LOCATION.--Lat 43°42'17", long 73°01'06", Hydrologic Unit 02010002, 12 ft (4 m) west of storage building at St. Alphonsus Cemetery at Pittsford.
Owner: U.S. Geological Survey.
AQUIFER.--Medium to fine sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 42 ft (12.8 m), screened 40 to 42 ft (12.2 to 12.8 m).
DATUM.--Altitude of land-surface datum is 490 ft (149 m). Measuring point: Top of casing, 2.00 ft (0.61 m) above land-surface datum.
REMARKS.--Well pulled Nov. 8, 1968, point replaced, depth changed from 43 ft (13.1 m) to 42 ft (12.8 m), old 3-ft (0.9 m) point was completely encrusted.
PERIOD OF RECORD.--October 1957 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.17 ft (10.41 m) below land-surface datum, May 26, 1976; lowest measured, 39.59 ft (12.07 m) below land-surface datum, Oct. 18, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	35.99	DEC 23	35.55	FEB 24	34.92	APR 27	34.34	JUN 24	34.36	AUG 25	34.54
NOV 29	35.72	JAN 27	35.57	MAR 25	34.48	MAY 26	34.17	JUL 26	34.48	SEP 24	34.60

WASHINGTON COUNTY

441829072413901. Local number, MHW 3 (Formerly published as Middlesex 3).
LOCATION.--Lat 44°18'29", long 72°41'39", Hydrologic Unit 02010003, adjacent to salt shed at Vermont Highway Department garage off U.S. Highway 2 and 1.25 mi (2.01 km) west of Middlesex Village.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 50 ft (15.2 m), screened 48 to 50 ft (14.6 to 15.2 m).
DATUM.--Land-surface datum is 453.72 ft (138.28 m) above mean sea level. Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--October 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.99 ft (4.87 m) below land-surface datum, Feb. 24, 1976; lowest measured, 23.49 ft (7.16 m) below land-surface datum, Sept. 25, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	20.75	DEC 23	20.42	FEB 24	15.99	APR 27	20.30	JUN 24	22.24	AUG 25	22.04
NOV 25	20.50	JAN 27	19.44	MAR 25	18.35	MAY 26	19.63	JUL 27	21.47	SEP 24	22.56

441552072341901. Local number, MMW 2 (Formerly published as Montpelier 2).
LOCATION.--Lat 44°15'52", long 72°34'19", Hydrologic Unit 02010003, at southeast corner of garage at Nine Winter Street in Montpelier.
Owner: U.S. Geological Survey.
AQUIFER.--Medium to coarse sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 26 ft (7.9 m), screened 24 to 26 ft (7.3 to 7.9 m).
DATUM.--Altitude of land-surface datum is 520 ft (159 m). Measuring point: Top of casing, 0.10 ft (0.03 m) above land-surface datum.
PERIOD OF RECORD.--October 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.09 ft (3.38 m) below land-surface datum, Apr. 24, 1969; lowest measured, 16.74 ft (5.10 m) below land-surface datum, Sept. 26, 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	14.03	DEC 23	14.68	FEB 24	14.80	APR 27	12.80	JUN 25	15.10	AUG 24	14.02
NOV 25	13.93	JAN 26	15.88	MAR 25	13.77	MAY 26	12.48	JUL 26	14.88	SEP 24	15.75

WINDSOR COUNTY

431551072350601. Local number, CKW 1 (Formerly published as Chester 1).
LOCATION.--Lat 43°15'51", long 72°35'06", Hydrologic Unit 01080107, at Vermont Highway Department salt shed on Elm Street in Chester.
Owner: U.S. Geological Survey.
AQUIFER.--Boulders, coarse gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 22 ft (6.7 m), screened 20 to 22 ft (6.1 to 6.7 m).
DATUM.--Altitude of land-surface datum is 580 ft (177 m). Measuring point: Top of casing, 2.00 ft (0.61 m) above land-surface datum.
PERIOD OF RECORD.--November 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.19 ft (0.67 m) below land-surface datum, Feb. 24, 1976; lowest measured, 6.31 ft (1.92 m) below land-surface datum, Sept. 28, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	3.60	DEC 23	4.72	FEB 24	2.19	APR 27	4.44	JUN 24	5.63	SEP 24	5.62
NOV 26	4.34	JAN 27	4.88	MAR 25	2.62	MAY 26	4.29	JUL 26	5.32		

433240072242901. Local number, HLW 54.
LOCATION.--Lat 43°32'40", long 72°24'29", Hydrologic Unit 01080104, at northeast corner of fire station in Hartland.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-level well, diameter 1.25 in (0.03 m), depth 51 ft (15.54 m), screened 49 to 51 ft (14.93 to 15.54 m).
DATUM.--Altitude of land-surface datum is 575 ft (175 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--August 1969 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.65 ft (2.03 m) below land-surface datum, July 26, 1973; lowest measured, 9.94 ft (3.03 m) below land-surface datum, Oct. 22, 1971.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 25	8.80	SEP 24	9.09								

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	9.03	DEC 29	7.93	FEB 23	8.60	APR 23	6.85	JUN 24	8.57	AUG 25	9.41
NOV 25	8.43	JAN 26	8.60	MAR 26	8.71	MAY 25	7.61	JUL 27	9.13	SEP 28	9.42

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	9.41	DEC 23	9.20	FEB 22	8.13	APR 26	7.39	JUN 25	8.79	AUG 25	9.60
NOV 18	9.42	JAN 22	8.84	MAR 25	8.97	MAY 24	7.98	JUL 23	9.25	SEP 24	9.52

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	9.94	JAN 27	8.49	MAR 28	8.75	MAY 23	7.32	JUL 26	8.60	SEP 25	9.55
DEC 27	9.07	FEB 25	9.11	APR 26	6.86	JUN 27	8.33	AUG 28	9.13		

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	9.65	DEC 26	8.98	FEB 26	8.52	APR 26	7.26	JUN 25	8.17	AUG 27	7.83
NOV 27	8.83	JAN 26	8.43	MAR 26	7.12	MAY 29	7.36	JUL 26	6.65	SEP 24	8.91

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	9.28	DEC 20	8.51*	FEB 26	8.36	APR 25	7.29	JUN 24	8.54	AUG 25	9.56
NOV 27	9.34	JAN 28	7.95	MAR 25	7.75	MAY 28	7.89	JUL 25	8.95	SEP 25	9.52

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	9.59	DEC 26	9.27	FEB 24	9.16	APR 26	7.40	JUN 25	8.99	AUG 25	9.61
NOV 22	9.14	JAN 27	8.65	MAR 26	8.27	MAY 26	8.40	JUL 28	9.28	SEP 24	9.47

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	8.67	DEC 23	8.61	FEB 25	8.22	APR 27	6.99	JUN 24	8.20	AUG 25	8.64
NOV 26	8.62	JAN 27	8.33	MAR 25	7.36	MAY 26	7.42	JUL 26	8.56	SEP 24	8.93

435129072483301. Local number, RJW 1 (Formerly published as Rochester 1).
LOCATION.--Lat 43°51'29", long 72°48'33", Hydrologic Unit 01080105, adjacent to salt shed at Vermont Highway Department garage 1.3 mi (2.1 km) south of Rochester Village.
Owner: U.S. Geological Survey.
AQUIFER.--Sand of Pleistocene age.
WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in (0.03 m), depth 73 ft (22.3 m), screened 71 to 73 ft (21.6 to 22.3 m).
DATUM.--Altitude of land-surface datum is 800 ft (244 m). Measuring point: Top of casing, 4.00 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--October 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.50 ft (1.37 m) below land-surface datum, Mar. 26, 1968; lowest measured, 13.05 ft (3.98 m) below land-surface datum, Aug. 25, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	8.45	DEC 23	10.56	FEB 24	7.47	APR 27	9.24	JUN 24	10.82	AUG 25	10.06
NOV 29	9.69	JAN 27	10.20	MAR 25	6.74	MAY 26	8.01	JUL 26	11.31	SEP 24	11.49

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

STATION NUMBER	CITY OR TOWN	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	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)	IMME-DIATE COLI-FORM (COL. PER 100 ML)
424822071163301	WINDHAM	42 48 22	071 16 33	01	76-06-21	600	7.0	19.0	4.0	<10	80
424927071125401	N. SALEM	42 49 27	071 12 54	01	76-07-20	250	5.6	14.0	1.6	23	80
424937071203701	WINDHAM	42 49 37	071 20 37	01	76-06-30	250	6.2	14.5	7.5	<10	80
425015071055601	PLAISTOW	42 50 15	071 05 56	01	76-06-25	380	6.6	24.0	5.6	<10	80
425058071065001	PLAISTOW	42 50 58	071 06 50	01	76-06-25	285	7.4	17.0	3.0	20	80
425226071105401	HAMPSTEAD	42 52 26	071 10 54	01	76-06-30	1800	6.5	19.5	2.0	10	80
425517071041001	KINGSTON	42 55 17	071 04 10	01	76-06-25	440	5.1	14.5	3.3	<10	80
425626071033001	KINGSTON	42 56 26	071 03 30	01	76-06-25	125	5.4	19.0	2.9	16	80

STATION NUMBER	DATE OF SAMPLE	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	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)
424822071163301	76-06-21	80	80	82	15	31	5.5	159	0	130	24
424927071125401	76-07-20	80	80	14	.7	31	.7	14	0	11	14
424937071203701	76-06-30	80	80	32	3.2	7.3	3.4	59	0	48	19
425015071055601	76-06-25	80	80	28	7.8	26	4.1	58	0	48	31
425058071065001	76-06-25	80	80	19	5.0	25	1.4	108	0	89	15
425226071105401	76-06-30	80	80	100	15	190	14	132	0	108	35
425517071041001	76-06-25	80	80	19	2.5	39	4.2	13	0	11	18
425626071033001	76-06-25	80	80	5.4	1.1	9.3	1.5	16	0	13	19

STATION NUMBER	DATE OF SAMPLE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
424822071163301	76-06-21	110	.1	23	.00	.01	.12	.13	.13	.01
424927071125401	76-07-20	45	.1	5.5	.23	.01	.17	.18	.41	.05
424937071203701	76-06-30	16	.1	12	6.0	.00	.13	.13	6.1	.01
425015071055601	76-06-25	57	.1	18	2.7	.00	.08	.08	2.8	.01
425058071065001	76-06-25	21	.9	19	.01	.00	.13	.13	.14	.02
425226071105401	76-06-30	430	.1	12	2.6	.07	.18	.25	2.9	.01
425517071041001	76-06-25	74	.1	13	6.8	.00	.38	.38	7.2	.04
425626071033001	76-06-25	10	.1	14	.01	.49	.24	.73	.74	.03

STATION NUMBER	DATE OF SAMPLE	TOTAL ORTHO PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL BORON (B) (UG/L)
424822071163301	76-06-21	.01	5.1	10
424927071125401	76-07-20	.00	--	20
424937071203701	76-06-30	.01	--	10
425015071055601	76-06-25	.01	18	40
425058071065001	76-06-25	.01	9.4	10
425226071105401	76-06-30	.02	9.3	50
425517071041001	76-06-25	.02	33	90
425626071033001	76-06-25	.02	9.0	20

INDEX

☆ U. S. GOVERNMENT PRINTING OFFICE: 1977--701-550--142

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
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	*hectares (ha)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	**liters (l)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons (10^6 gal)	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days [$(ft^3/s) \cdot d$]	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (l/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (l/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day (mgal/d)	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	tonnes (t)

*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p.15, 1972 edition.

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

U.S. DEPARTMENT OF THE INTERIOR
Geological Survey
150 Causeway Street
Boston MA 02114