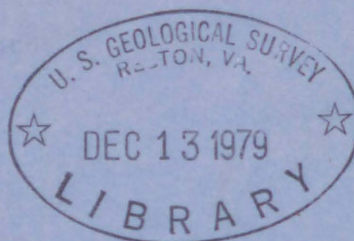


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Water Resources Data for Maine



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT ME-78-1

WATER YEAR 1978

Prepared in cooperation with the State of Maine
and with other agencies

CALENDAR FOR WATER YEAR 1978

1977

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Water Resources Data for Maine

U.S.GEOLOGICAL SURVEY WATER-DATA REPORT ME-78-1

WATER YEAR 1978

Prepared in cooperation with the State of Maine
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

For additional information write to
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PREFACE

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

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

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CONTENTS

	Page
Preface.....	III
List of gaging stations; in downstream order, for which records are published.....	VI
Introduction.....	1
Cooperation.....	1
Hydrologic conditions.....	3
Definition of terms.....	3
Downstream order and station numbers.....	10
Numbering system for wells and miscellaneous sites.....	10
Special networks and programs.....	11
Explanation of stage and water-discharge records.....	11
Collection and computation of data.....	11
Accuracy of field data and computed results.....	13
Other data available.....	13
Explanation of water-quality records.....	14
Collection and examination of data.....	14
Water analysis.....	14
Water temperature.....	14
Sediment.....	14
Explanation of ground-water level records.....	15
Collection of the data.....	15
Publications on techniques of water-resources investigations.....	16
Gaging station records.....	17
Discharge at partial-record stations and miscellaneous sites.....	192
Measurements made at miscellaneous sites.....	192
Miscellaneous temperature and specific conductance determinations.....	199
Ground-water records.....	208
Ground-water level records.....	208
Quality of ground water records.....	215
Index.....	229
Appendix.....	A-1
Alphabetical listing of changes in selected parameter names and parameter codes...	A-1
Numerical listing of changes in selected parameter names and parameter codes.....	A-6

ILLUSTRATIONS

Figure 1. Map showing location of data collection stations.....	2
2. Comparison of discharge at three long-term index gaging stations during 1978 water year with median discharge for period 1941-70.....	4
3. System for numbering wells and miscellaneous sites.....	10

TABLES

Factors for converting inch-pound units to International System units (SI).inside back cover
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Letter after station name designates type of data: (d) discharge, (e) elevation,
stage or contents, (c) chemical, (b) biological, (m) microbiological,
(t) water temperature, (s) sediment

NORTH ATLANTIC SLOPE BASINS

Page

ST. JOHN RIVER BASIN

St. John River at Ninemile Bridge (dct)..... 17

Big Black River:

Shields Branch Big Black River near Seven Islands (d)..... 22

St. John River at Dickey (dct)..... 23

Allagash River near Allagash (dct)..... 28

St. Francis River at outlet of Glasier Lake, near Connors,

New Brunswick (d)..... 33

St. John River above Fish River, at Fort Kent (ct)..... 34

Fish River near Fort Kent (d)..... 38

St. John River below Fish River, at Fort Kent (d)..... 39

St. John River at Van Buren (bcmst)..... 40

Aroostook River near Masardis (d)..... 44

Machias River near Ashland (d)..... 45

Aroostook River at Washburn (d)..... 46

Aroostook River at Caribou (bcmst)..... 47

Meduxnekeag River:

Timoney Lake Outlet Stream:

Marley Brook near Ludlow (d)..... 57

Meduxnekeag River near Houlton (d)..... 58

ST. CROIX RIVER BASIN

St. Croix River at Vanceboro (d)..... 59

Grand Lake Stream at Grand Lake Stream (d)..... 60

St. Croix River at Baileyville (d)..... 61

St. Croix River at Baring (d)..... 62

St. Croix River at Milltown (bcmst)..... 63

DENNY'S RIVER BASIN

Dennys River at Dennysville (d)..... 76

NARRAGUAGUS RIVER BASIN

Narraguagus River at Cherryfield (dbcmst)..... 77

UNION RIVER BASIN

West Branch Union River at Amherst (d)..... 86

Garland Brook near Mariaville (d)..... 87

PENOBSCOT RIVER BASIN

Penobscot River:

East Branch Penobscot River at Grindstone (d)..... 88

Penobscot River near Mattawamkeag (d)..... 89

Mattawamkeag River near Mattawamkeag (d)..... 90

Piscataquis River near Dover-Foxcroft (d)..... 91

Sebec River at Sebec (d)..... 92

Pleasant River near Milo (d)..... 93

Piscataquis River near Medford (d)..... 94

Penobscot River at West Enfield (dbcmst)..... 95

Passadumkeag River at Lowell (d)..... 105

Kenduskeag Stream near Kenduskeag (d)..... 106

Reservoirs in Penobscot River basin (e)..... 107

PEMAQUID RIVER BASIN

Pemaquid River:

Little Pond Outlet Brook:

Tributary A Little Pond near Damariscotta (d)..... 108

SHEEPSHOT RIVER BASIN

Sheepscot River at North Whitefield (d)..... 109

KENNEBEC RIVER BASIN

Moose River (head of Kennebec River):

Moosehead Lake at East Outlet (e)..... 110

Kennebec River at Moosehead (d)..... 111

Kennebec River at The Forks (d)..... 112

<u>NORTH ATLANTIC SLOPE BASINS--Continued</u>	Page
<u>KENNEBEC RIVER BASIN--Continued</u>	
Kennebec River--Continued	
Dead River near Dead River (d).....	113
Dead River at The Forks (d).....	114
Kennebec River at Bingham (dbcmst).....	115
Carrabassett River near North Anson (d).....	125
Wilson Stream at East Wilton (d).....	126
Sandy River near Mercer (d).....	127
Sebasticook River near Pittsfield (d).....	128
Messalonskee Stream:	
Hatchery Brook:	
Cold Brook near North Belgrade (d).....	129
Hatchery Brook at North Belgrade (d).....	130
Bond Brook:	
Tanning Brook:	
North Branch Tanning Brook near Manchester (d).....	131
Cobbosseecontee Stream:	
Mill Stream at Winthrop (d).....	132
Jock Stream at South Monmouth (d).....	133
Cobbosseecontee Lake at East Winthrop (e).....	134
Cobbosseecontee Stream at Gardiner (d).....	135
Reservoirs in Kennebec River basin (e).....	136
<u>ANDROSCOGGIN RIVER BASIN</u>	
Androscoggin River:	
Umbagog Lake:	
Magalloway River:	
Diamond River near Wentworth Location, NH (d).....	137
Androscoggin River at Errol, NH (d).....	138
Androscoggin River near Gorham, NH (d).....	139
Wild River at Gilead (dbcmst).....	140
Ellis River at South Andover (d).....	146
Androscoggin River at Rumford (d).....	147
Swift River near Roxbury (d).....	148
Nezinscot River at Turner Center (d).....	149
Little Androscoggin River near South Paris (d).....	150
Thompson Lake Outlet at Oxford (d).....	151
Little Androscoggin River near Auburn (d).....	152
Androscoggin River near Auburn (d).....	153
Androscoggin River at Brunswick (bcmst).....	154
Reservoirs in Androscoggin River basin (e).....	165
<u>ROYAL RIVER BASIN</u>	
Royal River:	
Collyer Brook near Gray (d).....	166
Royal River at Yarmouth (d).....	167
<u>PRESUMPCOT RIVER BASIN</u>	
Presumpscot River near West Falmouth (dct).....	168
<u>SACO RIVER BASIN</u>	
Saco River near Conway, NH (d).....	176
Ossipee River at Effingham Falls, NH (d).....	177
Ossipee River at Cornish (d).....	178
Saco River at Cornish (dbcmst).....	179
Little Ossipee River near South Limington (d).....	189
<u>MOUSAM RIVER BASIN</u>	
Mousam River near West Kennebunk (d).....	190
<u>PISCATAQUA RIVER BASIN</u>	
Salmon Falls River (head of Piscataqua River) at Milton, NH (d).....	191

WATER RESOURCES DATA FOR MAINE, 1978

INTRODUCTION

Water resources data for the 1978 water year for Maine 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 ground water. This report contains discharge records for 68 gaging stations; stage only records for 2 gaging stations; contents for 17 lakes and reservoirs; water quality for 13 gaging stations and 22 wells; and water levels for 22 observation wells. 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 and observation wells are shown in figure 1. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Maine.

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, 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 1935 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 in 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 beginning with the 1968 water year, and ground-water data since the 1971 water year have been 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 ME-78-1." Water-data reports are sold by the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

COOPERATION

The U.S. Geological Survey and organizations of the State of Maine have had cooperative agreements for the systematic collection of streamflow records since 1909, and for water-quality and ground-water records since 1957. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Maine Public Utilities Commission, H. E. Gelder, chairman.

Maine Department of Environmental Protection, H. E. Warren, commissioner.

Androscoggin Valley Regional Planning Commission, J. J. Jaworski, executive director.

Cobbossee Watershed District, T. U. Gorden, executive director.

Town of Wilton, D. T. McLaughlin, chairman, Board of Selectmen.

Assistance in the form of funds or services was given by the U.S. Department of State in collecting records published herein for 5 gaging stations and 1 water-quality station; and Corps of Engineers, U.S. Army, for 4 water-quality stations and 1 gaging station.

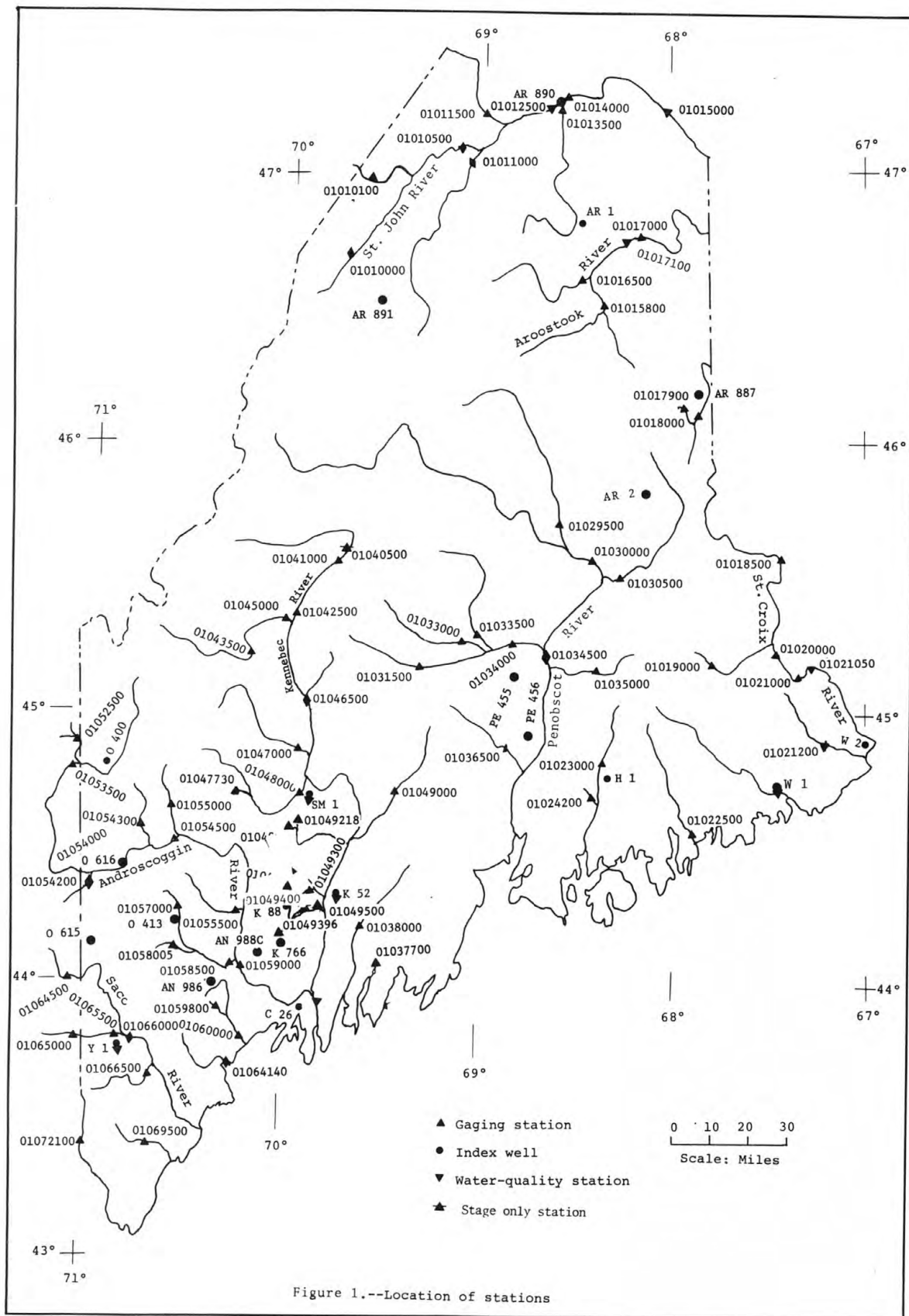
The following organizations contributed funds and services through the requirements of the Federal Energy Regulatory Commission:

Boise Cascade

Great Northern Paper Company

Kennebec Water Power Company

Union Water Power Company



The following organizations aided in collecting records:

Bangor Hydro-Electric Company

Georgia-Pacific Corporation

Maine Public Service Company

Organizations that supplied data are acknowledged in station descriptions or in footnotes to tables.

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 records are obtained and compiled in a manner equally acceptable to both countries. These stations are designated herein as "International gaging stations."

HYDROLOGIC CONDITIONS

Runoff for the water year 1978 was in the excessive range at all the index gaging stations, and ranged from 122 percent to 153 percent of normal at the individual sites. Mean monthly runoff at the index stations was in the excessive range for the months of October and January, in the normal range for the months of December, March, and June, and in the deficient range for July and August. Mean monthly runoff at three of the index gaging stations was in the excessive range for February, in the normal range for April, and in the deficient range for September.

New maximum monthly mean discharges were recorded at all four index gaging stations for October and at three of the index stations for January. New minimum monthly means were recorded at the Dover-Foxcroft stations for August, and at the South Paris and West Buxton stations for September.

Ground-water levels were above normal until the end of February when they had declined to the normal range in all but the western area, where they continued in the above-normal range. March levels were generally average but spring recharge raised levels to above normal in most of the State in April. By the end of July, water levels were below normal in all but the northern and western sections. At the end of September, ground-water levels were below normal statewide and many domestic wells had gone dry; some for the first time in many years.

Water in usable storage, which was 175 percent of normal at the start of the water year, remained above average every month except April, and was 103 percent of normal at the end of September.

Figure 2, for which records of three long-term index gaging stations were used, shows a comparison of the monthly and yearly mean discharges for the 1978 water year with median discharges for the 1941-70 period.

DEFINITION OF TERMS

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

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

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

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

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

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

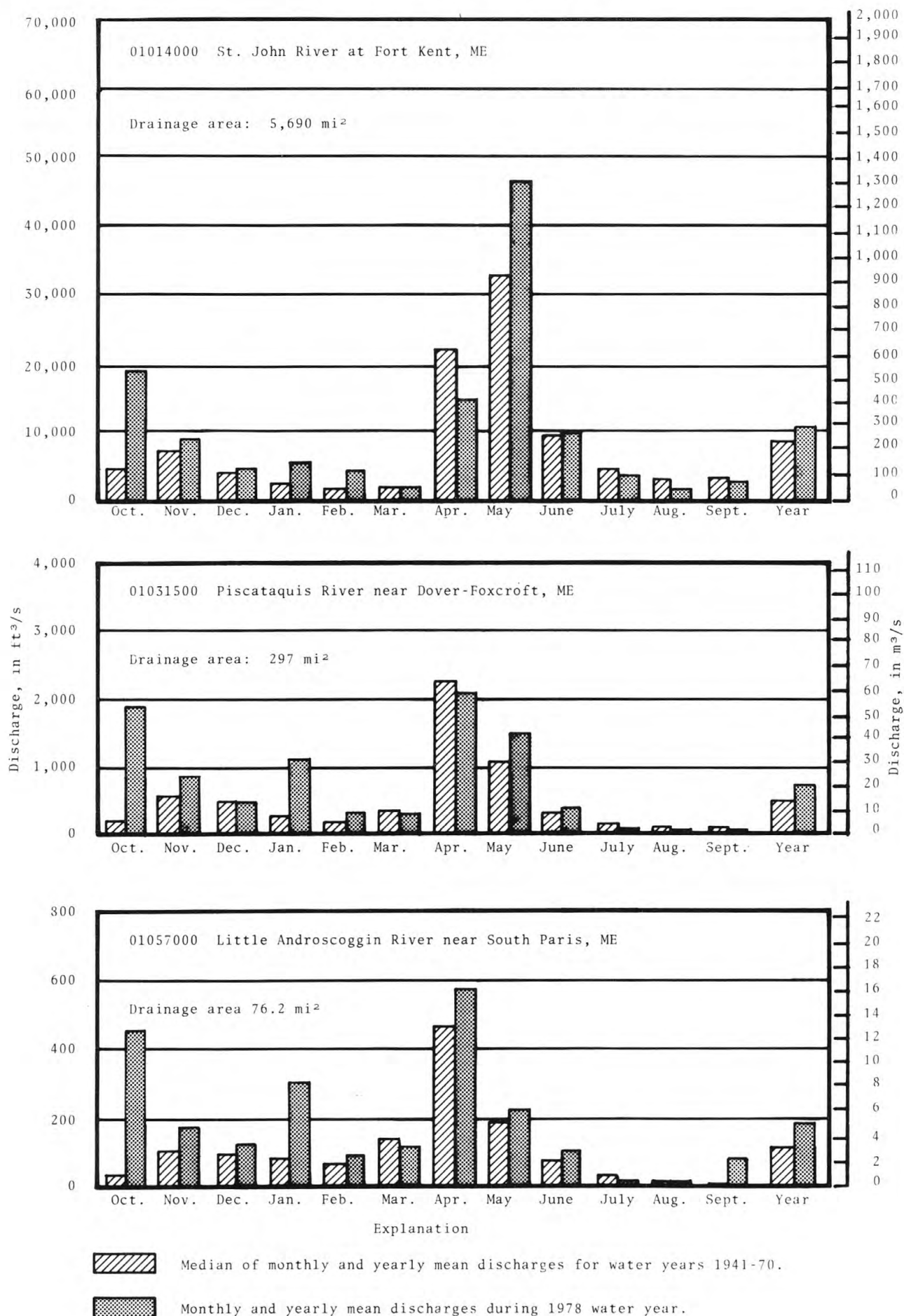


Figure 2.--Comparison of runoff at three long-term index gaging stations during 1978 water year with median runoff for period 1941-70.

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

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

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

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

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

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

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

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

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

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

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

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

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

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

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

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

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

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

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

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

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow of stage of the stream or to prevent the intrusion of salt water.

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

Cubic foot per second (FT³/S, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.2832 cubic meters per second.

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

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

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

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

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

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

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

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

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO₃).

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

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

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

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

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

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

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

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

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

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. Classification is as follows:

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

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

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

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).

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

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.

Sodium-adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

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

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

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

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

Substrate is the physical surface upon which an organism lived.

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

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

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimeted. All areas shown are those for the stage when the planimeted map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

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

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

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

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

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

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

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

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

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

Total (as used in tables of chemical analysis):

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

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

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

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

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

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indentation in a list of stations in the front of the report. Each indentation represents one rank. This downstream order and system of indentation 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 has been 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 01022500, which appears just to the left of the station name, includes the 2-digit part number "01" plus the 6-digit downstream order number "022500".

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system or 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.

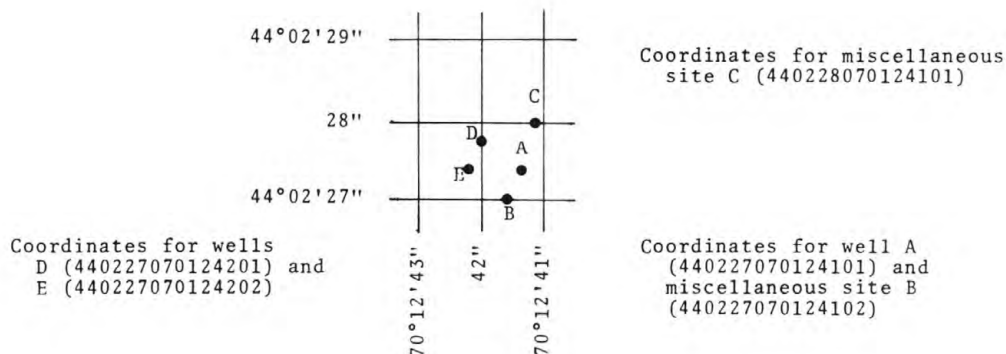


Figure 3.--System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data 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 into 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 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 consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, 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 discharge 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 engineers 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 the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

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

For a lake or reservoir station, 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.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, 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.

Data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. 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 or contents. The location of the gaging station and the drainage area are obtained from 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 later obtained. 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 the 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 affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

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

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of 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 nor 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 (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), 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 (or contents), 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 heights 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 any 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 may be 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, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. 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 discharge 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-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 most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Tabulations of miscellaneous data follow the information for continuous record stations and are in two tables; the first is a tabulation of measurements made at miscellaneous sites and the second a tabulation of water temperature and specific conductance data obtained at the time discharge measurements were made at continuous record stations.

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 interpretations 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 ft³/s; to tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/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 of the 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 subdistrict 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 measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); 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, the well number, depth of well, 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, 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.

The chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent the 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 a 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 the measurement of pH in the field and the 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 discharge measurements for water-discharge stations. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

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

Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

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

In addition to records of quantities of suspended sediment, records of periodic measurement of particle-size distribution of suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of 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 ensure that measurements at each well are consistent.

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 National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom); 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-five manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. Material is grouped under major subject headings called books and further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. Reports listed below are for sale by U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office). Prices, effective July 1979, are subject to change. When ordering these publications, please give the series (U.S. Geological Survey Techniques of Water-Resources Investigations), title, book number, and chapter number.

- 1-D1 Water temperature-influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages. \$1.60.
- 1-D2 Guidelines for collection and field analysis of ground-water samples for selected unstable constituents by W.W. Wood: USGS-TWRI Book 1, Chapter D2 1976 24 pages. \$0.85
- 2-D1 Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages. \$1.90.
- 2-E1 Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages. \$1.75.
- 3-A1 General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS-TWRI Book 3, Chapter A1. 1967. 30 pages \$1.00.
- 3-A2 Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages. \$0.35.
- 3-A3 Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages. \$0.40.
- 3-A4 Measurement of peak discharge at width contractions by indirect methods, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages. \$1.00.
- 3-A5 Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3 Chapter A5. 1967. 29 pages. \$0.35.
- 3-A6 General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages. \$1.00.
- 3-A7 Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS-TWRI Book 3, Chapter A7. 1968. 28 pages. \$1.40.
- 3-A8 Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages. \$1.25.
- 3-A11 Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages. \$1.20.
- 3-A12 Fluorometric procedures for dye tracing, by J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. \$0.35. Not currently available.
- 3-B1 Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages. \$0.70.
- 3-B2 Introduction to ground-water hydraulics, a programed text for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages. \$2.50.
- 3-C1 Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages. \$2.50.
- 3-C2 Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages. \$2.50.
- 3-C3 Computation of fluvial-sediment discharge, by George Porterfield: USGS-TWRI Book 3, Chapter C3 1972. 66 pages. \$2.10.
- 4-A1 Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages. \$1.60.
- 4-A2 Frequency curves, by H.C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages. \$1.20.
- 4-B1 Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages. \$0.65.
- 4-B2 Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages. \$0.75.
- 4-B3 Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3 1973. 15 pages. \$0.65.
- 4-D1 Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages. \$1.10.
- 5-A1 Methods for determination of inorganic substances in water and fluvial sediments, by M. W. Skougstad, M. J. Fishman, L. C. Friedman, D. E. Erdmann, and S. S. Duncan, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages. \$10.00.
- 5-A2 Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages. \$0.80.
- 5-A3 Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages. \$0.90.
- 5-A4 Methods for collection and analysis of aquatic biological and microbiological samples, edited by P. E. Greeson, T.A. Ehlke, G.A. Irwin, B.W. Lium, and K.V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages. \$9.25.
- 5-A5 Methods for determination of radioactive substances in water and fluvial sediments, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages. \$5.75.
- 5-C1 Laboratory theory and methods for sediment analysis, by H.P. Guy: USGS-TWRI Book 5, Chapter C1 1969. 58 pages. \$2.10.
- 7-C1 Finite difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages. \$2.30.
- 7-C2 Computer model of two-dimensional solute transport and dispersion in ground water by L. F. Konikow and J.D. Bredehoeft: USGS-TWRI Book 7, Chapter C2. 1978. 90 pages. \$2.75
- 8-A1 Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages. \$1.30.
- 8-B2 Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages. \$1.10.

HYDROLOGIC DATA STATION RECORDS

17

NORTH ATLANTIC SLOPE BASINS

ST. JOHN RIVER BASIN

01010000 ST. JOHN RIVER AT NINEMILE BRIDGE, ME

LOCATION.--Lat 46°42'00", long 69°42'59", Aroostook County, Hydrologic Unit 01010001, on right bank in T. 12, R. 15, 0.1 mi (0.2 km) downstream from Ninemile Brook, 0.4 mi (0.6 km) downstream from site of Ninemile Bridge, and 11 mi (18 km) northwest of Clayton Lake Post Office.

DRAINAGE AREA.--1,290 mi² (3,340 km²), approximately.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year. October 1950 monthly discharge only, published in WSP 1721.

GAGE.--Water-stage recorder. Datum of gage is 931.26 ft (283.848 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period and period of no gage-height record Jan. 17 to Mar. 19, which are fair.

AVERAGE DISCHARGE.--28 years, 2,303 ft³/s (65.2 m³/s), 24.24 in/yr (616 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,400 ft³/s (1,260 m³/s) May 1, 1974, gage height, 12.63 ft (3.850 m); minimum, 59 ft³/s (1.67 m³/s) Sept. 5, 1953; minimum gage height, 0.25 ft (0.076 m) Sept. 5, 1953, Sept. 11, 12, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,000 ft³/s (765 m³/s) May 11, gage height 9.66 ft (2.944 m); maximum gage height, 10.02 ft (3.054 m) Apr. 24 (backwater from ice); minimum discharge, 88 ft³/s (2.49 m³/s) Aug. 27, 28, gage height, 0.32 ft (0.098 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6100	1710	1250	1120	2800	920	1000	16500	1220	1720	569	1100
2	7500	1550	1200	1050	2650	890	990	13300	2250	1440	452	715
3	11700	1440	1170	980	2500	870	970	11700	2260	1220	383	508
4	10200	1360	1140	940	2400	860	940	11200	2260	1020	395	478
5	7910	1410	1080	910	2250	825	920	11900	1820	812	927	1310
6	5910	1530	1020	880	2100	820	890	13900	1470	657	1360	1330
7	4430	1430	960	850	2000	800	870	16700	1390	550	952	2100
8	3430	1290	910	920	1950	780	850	19000	1280	481	664	3740
9	2850	1190	880	1070	1850	765	830	22100	2090	438	537	3240
10	6020	1230	860	1420	1750	750	840	26500	2710	410	519	2690
11	7240	1360	840	1750	1680	735	880	26400	2300	467	497	2180
12	5680	1590	815	2150	1600	725	960	23400	1770	462	398	1900
13	4640	1650	795	2650	1550	710	1100	20200	1350	419	316	1950
14	3820	1530	775	2500	1500	690	1300	18000	1640	366	259	1600
15	3530	1340	760	2300	1450	680	1500	16100	3830	329	218	1230
16	5210	1280	750	2200	1400	675	1750	14000	3550	303	185	1070
17	5800	1300	740	2000	1350	670	2100	11800	2580	375	174	1220
18	10600	3190	725	1800	1300	660	2450	9700	1900	522	154	1070
19	10100	6020	710	1650	1250	650	2900	7740	1510	493	147	830
20	8120	5190	705	1500	1200	640	3500	6250	8240	416	137	668
21	7820	3920	695	1400	1150	630	4250	5410	12100	367	124	562
22	6780	3140	685	1300	1100	630	5300	6080	7540	328	114	500
23	6690	2680	680	1250	1070	640	6600	5110	4870	297	105	459
24	5740	2280	680	1170	1030	665	7800	3940	3350	385	98	428
25	4620	2030	720	1120	1000	700	9400	3100	2520	572	93	393
26	3700	1920	900	1200	990	740	11500	2530	2010	589	90	356
27	3110	1390	1250	1600	970	790	12700	2130	1610	470	90	325
28	2700	854	1600	2100	940	830	16400	1800	1510	463	91	302
29	2410	1100	1500	2600	---	880	18400	1500	1960	1140	117	288
30	2140	1300	1350	3000	---	925	18900	1230	1910	1070	1320	295
31	1910	---	1220	2950	---	970	---	1030	---	761	1660	---
TOTAL	178410	59204	29365	50330	44780	23515	138790	350250	86800	19342	13145	34837
MEAN	5755	1973	947	1624	1599	759	4626	11300	2893	624	424	1161
MAX	11700	6020	1600	3000	2800	970	18900	26500	12100	1720	1660	3740
MIN	1910	854	680	850	940	630	830	1030	1220	297	90	288
CFSM	4.46	1.53	.73	1.26	1.24	.59	3.59	8.76	2.24	.48	.33	.90
IN.	5.14	1.71	.85	1.45	1.29	.68	4.00	10.10	2.50	.56	.38	1.00
CAL YR 1977 TOTAL	970837			MEAN 2660	MAX 28200	MIN 174	CFSM 2.06	IN 28.00				
WTR YR 1978 TOTAL	1028768			MEAN 2819	MAX 26500	MIN 90	CFSM 2.19	IN 29.67				

01010000 ST. JOHN RIVER AT NINEMILE BRIDGE, ME--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to current year.

WATER TEMPERATURES: October 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1975.

REMARKS.--Interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 94 micromhos May 21, 1976; minimum, 26 micromhos June 24, 1977.

WATER TEMPERATURES: Maximum, 29.5°C Aug. 14, 1978; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 86 micromhos Aug. 26; minimum, 31 micromhos June 20-22.

WATER TEMPERATURES: Maximum, 29.5°C Aug. 14; minimum, 0.0°C on many days during winter periods.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C)* WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	43	43	43	50	50	50	56	54	55	51	51	51
2	44	40	42	51	50	51	55	54	55	51	50	50
3	40	38	39	52	51	51	55	54	54	51	50	50
4	40	39	39	53	52	53	55	54	54	51	50	51
5	41	39	40	54	53	54	57	54	55	51	50	51
6	42	41	42	55	53	54	57	52	56	52	50	51
7	42	42	42	55	55	55	57	56	57	52	51	52
8	43	42	42	56	55	56	57	55	57	52	52	52
9	43	42	42	56	53	55	56	56	56	51	48	50
10	44	41	43	56	54	56	57	55	56	47	45	47
11	43	41	42	57	56	56	58	56	56	45	43	44
12	43	43	43	57	55	56	60	57	59	43	40	42
13	44	42	43	57	54	55	61	60	61	40	37	39
14	44	44	44	55	53	54	61	60	61	37	35	36
15	44	44	44	55	51	54	60	58	60	35	34	35
16	44	42	43	55	54	55	58	58	58	34	34	34
17	43	42	42	56	55	55	58	58	58	36	35	35
18	---	---	---	57	52	55	59	57	58	36	35	35
19	---	---	---	52	50	51	58	57	57	36	36	36
20	---	---	---	---	---	---	57	57	57	38	37	38
21	---	---	---	---	---	---	56	56	56	38	38	38
22	---	---	---	---	---	---	57	56	57	41	39	40
23	---	---	---	---	---	---	57	56	57	41	40	41
24	---	---	---	---	---	---	56	56	56	42	42	42
25	---	---	---	---	---	---	56	56	56	43	43	43
26	45	43	44	---	---	---	56	54	55	43	42	43
27	47	45	46	51	47	50	54	53	54	44	44	44
28	48	47	47	56	51	54	55	53	54	44	41	42
29	48	48	48	56	55	56	55	52	53	42	41	42
30	49	48	49	55	55	55	51	50	51	41	40	40
31	50	49	49	---	---	---	51	50	51	40	40	40
MONTH	50	38	43	57	47	54	61	50	56	52	34	43

01010000 ST. JOHN RIVER AT NINEMILE BRIDGE, ME--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.5	7.0	7.5	3.5	.5	2.0	.0	.0	.0	.0	.0	.0
2	7.5	7.0	7.5	4.0	.0	2.0	.0	.0	.0	.0	.0	.0
3	7.0	6.5	7.0	5.5	2.0	4.0	.0	.0	.0	.0	.0	.0
4	7.0	6.5	6.5	6.5	3.5	5.0	.5	.0	.0	.0	.0	.0
5	7.5	6.0	7.0	6.0	3.5	5.0	.0	.0	.0	.0	.0	.0
6	8.5	7.0	7.5	4.0	2.0	2.5	.0	.0	.0	.0	.0	.0
7	7.5	5.5	7.0	2.5	1.0	1.5	.0	.0	.0	.0	.0	.0
8	6.0	4.5	5.5	1.5	.0	1.0	.0	.0	.0	.0	.0	.0
9	6.0	5.5	5.5	2.5	1.0	2.0	.0	.0	.0	.0	.0	.0
10	6.5	6.0	6.0	4.5	2.5	3.5	.0	.0	.0	.0	.0	.0
11	6.5	5.5	6.0	6.0	4.5	5.5	.0	.0	.0	.0	.0	.0
12	6.5	5.5	6.0	4.5	3.0	3.5	.5	.0	.0	.0	.0	.0
13	6.5	5.0	5.5	3.0	.5	2.0	.0	.0	.0	.0	.0	.0
14	5.0	4.0	4.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
15	4.0	4.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	4.5	3.5	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17	4.5	4.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
18	4.5	4.0	4.5	1.5	.0	.5	.0	.0	.0	.0	.0	.0
19	4.0	4.0	4.0	1.0	.0	.5	.0	.0	.0	.0	.0	.0
20	4.5	4.0	4.5	.5	.0	.0	.0	.0	.0	.0	.0	.0
21	6.0	4.5	5.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0
22	5.5	4.5	5.0	1.0	.0	.5	.0	.0	.0	.0	.0	.0
23	5.0	3.5	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
24	3.5	2.5	3.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
25	3.5	2.0	3.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0
26	6.0	3.5	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
27	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
28	7.5	6.0	6.5	.0	.0	.0	1.0	.0	.0	.0	.0	.0
29	6.0	4.0	5.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
30	4.5	2.5	3.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	4.0	1.0	2.5	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	8.5	1.0	5.5	6.5	.0	1.5	1.0	.0	.0	.0	.0	.0

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

[illegible]

ST. JOHN RIVER BASIN

01010100 SHIELDS BRANCH BIG BLACK RIVER NEAR SEVEN ISLANDS, ME

LOCATION.--Lat 46°56'30", long 69°38'58", Aroostook County, Hydrologic Unit 01010001, on left bank 75 ft (23 m) upstream from bridge, 5.5 mi (8.8 km) east of international boundary at Seven Islands Village, and 2.7 mi (4.3 km) upstream from mouth.

DRAINAGE AREA.--161 mi² (417 km²).

PERIOD OF RECORD.--October 1976 to September 1978 (seasonal records only).

GAGE.--Water-stage recorder. Altitude of gage is 830 ft (250 m), from topographic map.

REMARKS.--Records fair. Several observations of water temperature and specific conductance were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,360 ft³/s (95.2 m³/s) Apr. 23, 1977, gage height, 18.73 ft (5.709 m); minimum daily, 5.4 ft³/s (0.15 m³/s) Aug. 23, 24, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,940 ft³/s (83.3 m³/s) May 10, gage height, 17.74 ft (5.407 m); minimum not determined; minimum daily, 5.4 ft³/s (0.15 m³/s) Aug. 23, 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	555	205				---	44	1850	615	81	17	22
2	710	190				---	47	1600	581	79	16	20
3	995	175				---	48	1400	420	67	16	21
4	789	160				---	52	1450	329	53	17	22
5	591	165				---	54	1600	233	41	20	21
6	457	170				---	53	1920	196	31	17	49
7	369	160				---	52	2170	181	28	14	156
8	310	155				---	54	2290	151	27	12	124
9	284	145				---	58	2480	185	26	11	124
10	502	140				---	66	2400	323	24	9.5	111
11	740	135				---	75	2740	267	24	8.5	83
12	600	130				---	88	2290	169	25	7.7	76
13	520	185				---	100	1920	108	25	7.2	58
14	460	170				---	125	1760	293	26	6.8	41
15	420	155				---	150	1570	641	27	6.5	31
16	520	150				---	180	1300	561	27	6.3	27
17	650	135				---	210	1060	371	27	6.1	23
18	1100	---				---	250	901	235	27	5.9	22
19	960	---				---	300	745	198	27	5.8	21
20	830	---				---	360	625	424	26	5.6	20
21	790	---				---	440	623	759	24	5.6	19
22	760	---				---	550	734	589	23	5.5	19
23	670	---				---	700	587	437	23	5.4	18
24	560	---				---	850	452	328	28	5.4	18
25	480	---				---	1030	362	242	32	5.6	18
26	410	---				---	1280	302	173	29	6.7	18
27	350	---				---	1550	251	119	26	9.0	18
28	300	---				---	1800	203	90	23	14	21
29	265	---				32	1950	161	78	20	25	24
30	250	---				36	2200	128	80	18	43	25
31	225	---				40	---	124	---	17	28	---
TOTAL	17422	---				---	14716	38498	9376	981	369.1	1270
MEAN	562	---				---	491	1242	313	31.6	11.9	42.3
MAX	1100	---				---	2200	2900	759	81	43	156
MIN	225	---				---	44	124	78	17	5.4	18
CFSM	3.49	---				---	3.05	7.71	1.94	.20	.07	.26
IN.	4.03	---				---	3.40	8.90	2.17	.23	.09	.29

01010500 ST. JOHN RIVER AT DICKEY, ME

LOCATION.--Lat 47°06'44", long 69°05'25", Aroostook County, Hydrologic Unit 01010001, on right bank at downstream side of highway bridge at Dickey, 0.4 mi (0.6 km) downstream from Little Black River, and 2.8 mi (4.5 km) upstream from Allagash River.

DRAINAGE AREA.--2,700 mi² (7,000 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to November 1910 and April to November 1911 (published as "near Dickey"), September 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 590.66 ft (180.033 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to December 1911, nonrecording gage at site 2,300 ft (700 m) downstream at different datum. September 1946 to April 1962, water-stage recorder at site 1,300 ft (400 m) downstream at same datum.

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

AVERAGE DISCHARGE.--32 years (water years 1947-78), 4,722 ft³/s (133.7 m³/s), 23.75 in/yr (603 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 87,200 ft³/s (2,470 m³/s) May 1, 1974, gage height, 18.67 ft (5.691 m); maximum gage height, 29.16 ft (8.888 m) Apr. 30, 1974 (backwater from ice); minimum discharge, 129 ft³/s (3.65 m³/s) Sept. 17, 1948.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 27,000 ft³/s (760 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 22	1500	ice jam	*16.92 5.157	May 11	0200	*58300 1650	15.48 4.718
Apr. 30	0700	38900 1100	12.93 3.941				

Minimum discharge, 216 ft³/s (6.12 m³/s), Aug. 26-28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11700	3910	2600	2550	4400	1070	1950	33900	4260	2780	1140	1970
2	12200	3560	2590	2400	3900	1040	2050	27500	5910	2590	909	1480
3	19600	3300	2640	2250	3500	1030	2020	23300	5790	2210	803	1130
4	19500	3110	2670	2150	3050	1010	2000	22900	4880	1870	748	1000
5	15000	2960	2440	2100	2800	990	1980	24700	4210	1590	737	792
6	11400	2900	2110	2020	2600	980	1920	28900	3520	1330	780	1120
7	8650	2910	1980	1980	2350	970	1880	34700	3070	1170	1540	1880
8	6890	2700	1860	1920	2200	965	1830	39300	2870	1080	1300	4320
9	5680	2420	1800	2300	2050	945	1800	44800	2830	993	1010	4520
10	9020	2240	1750	2800	1950	935	1800	55700	4190	881	831	3820
11	15900	2300	1700	3300	1850	920	1880	57000	4660	810	728	3430
12	13100	2420	1680	3800	1760	910	2050	51000	3740	771	695	3080
13	10400	2650	1640	4450	1700	900	2300	43800	2890	759	668	2430
14	8610	2760	1600	4800	1650	895	2750	39300	3030	739	572	2410
15	7290	2560	1580	4500	1580	885	3200	35800	5770	686	499	2390
16	8760	2350	1550	4200	1520	880	3850	31500	8390	636	435	2030
17	11300	2300	1520	3850	1480	875	4500	26100	6620	648	395	1550
18	17500	3880	1510	3500	1420	870	5200	22000	4650	604	353	1430
19	20200	10500	1500	3250	1370	865	6300	18100	3550	617	334	1540
20	16400	11400	1500	3000	1310	860	7500	14900	3400	707	327	1350
21	15400	8880	1500	2850	1290	855	9500	12900	18000	712	304	1120
22	13900	6800	1490	2700	1260	850	12000	13500	14000	676	289	974
23	12800	5550	1480	2550	1220	860	14000	12400	9570	628	269	872
24	11900	4600	1470	2450	1190	880	17000	9820	6710	647	253	803
25	9960	4000	1460	2370	1160	940	20000	7710	5170	666	234	726
26	8260	3600	1700	2300	1130	1000	23100	6200	3980	723	230	705
27	7090	3350	2100	2600	1110	1100	26300	5150	3150	878	220	705
28	6380	2260	2750	3050	1100	1220	30000	4340	2620	876	216	685
29	5570	1670	3250	3650	---	1480	36000	3800	2420	802	258	637
30	4920	2180	2950	4400	---	1540	38200	3270	2750	1000	369	608
31	4330	---	2700	4800	---	1700	---	2840	---	1330	802	---
TOTAL	349610	116020	61070	94840	53900	31220	284860	757130	156600	32409	18248	51507
MEAN	11280	3867	1970	3059	1925	1007	9495	24420	5220	1045	589	1717
MAX	20200	11400	3250	4800	4400	1700	38200	57000	18000	2780	1540	4520
MIN	4330	1670	1460	1920	1100	850	1800	2840	2420	604	216	608
CFSM	4.18	1.43	.73	1.13	.71	.37	3.52	9.04	1.93	.39	.22	.64
IN.	4.82	1.60	.84	1.31	.74	.43	3.92	10.43	2.16	.45	.25	.71
CAL YR 1977	TOTAL	1991439	MEAN	5456	MAX	60000	MIN	500	CFSM	2.02	IN	27.44
WTR YR 1978	TOTAL	2007414	MEAN	5500	MAX	57000	MIN	216	CFSM	2.04	IN	27.66

ST. JOHN RIVER BASIN

01010500 ST. JOHN RIVER AT DICKEY, ME--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1975 to current year.

WATER TEMPERATURES: April 1975 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1975 to September 1976.

INSTRUMENTATION.--Water-quality monitor since April 1975.

REMARKS.--Interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 109 micromhos Sept. 1, 1975; minimum, 30 micromhos Apr. 20, 1976, May 19, 20, June 23, 1977.

WATER TEMPERATURES: Maximum, 28.5°C Aug. 16, 1975; minimum, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 161 mg/L Apr. 21, 1976; minimum daily mean, 1 mg/L on many days during water year.

SEDIMENT LOADS: Maximum daily, 26,500 tons (24,000 metric tons) Apr. 21, 1976; minimum daily, 2.2 tons (2.0 metric tons) Jan. 15-29.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 90 micromhos Aug. 23; minimum, 32 micromhos Nov. 25.

WATER TEMPERATURES: Maximum, 26.0°C July 9, 10, 22; minimum, 0.0°C on many days during winter periods.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	50	47	48	49	45	47	47	40	43	---	---	---
2	47	46	46	50	46	48	---	---	---	---	---	---
3	47	43	46	50	47	49	---	---	---	---	---	---
4	43	43	43	50	49	50	75	62	70	---	---	---
5	45	40	42	52	49	50	70	62	67	---	---	---
6	42	40	41	53	50	51	---	---	---	---	---	---
7	42	40	41	52	49	50	---	---	---	---	---	---
8	45	40	42	51	50	51	---	---	---	---	---	---
9	43	41	42	52	51	52	---	---	---	---	---	---
10	45	42	44	53	52	52	---	---	---	---	---	---
11	46	41	44	53	52	53	---	---	---	---	---	---
12	41	40	40	53	52	52	---	---	---	74	67	71
13	43	40	41	52	50	51	---	---	---	68	64	66
14	43	40	42	50	49	49	---	---	---	64	61	62
15	42	42	42	50	49	49	---	---	---	61	58	59
16	43	42	43	50	49	50	---	---	---	58	58	58
17	42	41	42	50	50	50	---	---	---	59	57	58
18	42	39	41	51	49	50	---	---	---	58	57	58
19	39	37	38	50	46	49	---	---	---	59	57	58
20	37	36	37	46	42	44	---	---	---	60	56	59
21	40	37	38	42	40	41	---	---	---	61	58	59
22	39	38	39	42	40	41	---	---	---	61	58	60
23	40	39	39	43	40	42	---	---	---	62	60	61
24	40	39	40	42	33	40	---	---	---	63	62	62
25	43	39	41	42	32	35	---	---	---	64	63	64
26	43	40	42	42	33	36	---	---	---	65	64	65
27	45	41	43	42	37	39	---	---	---	67	65	66
28	45	42	43	49	38	45	---	---	---	68	67	67
29	46	43	44	54	49	52	---	---	---	67	64	65
30	47	44	45	56	46	51	---	---	---	64	61	62
31	49	45	46	---	---	---	---	---	---	61	59	60
MONTH	50	36	42	56	32	47	75	40	60	74	57	62

ST. JOHN RIVER BASIN

01010500 ST. JOHN RIVER AT DICKEY, ME--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.0	8.5	9.0	5.0	3.5	4.0	.0	.0	.0	.0	.0	.0
2	8.5	8.5	8.5	5.5	3.0	4.0	.0	.0	.0	.0	.0	.0
3	8.5	7.5	8.0	6.0	4.0	5.0	.0	.0	.0	.0	.0	.0
4	7.5	7.0	7.5	7.5	6.0	6.5	.0	.0	.0	.0	.0	.0
5	8.5	7.0	8.0	6.5	5.0	6.0	.0	.0	.0	.0	.0	.0
6	9.5	8.0	8.5	5.0	3.5	4.5	.0	.0	.0	.0	.0	.0
7	9.0	7.5	8.5	4.0	3.0	3.5	.0	.0	.0	.0	.0	.0
8	8.0	6.5	7.5	3.0	1.5	2.5	.0	.0	.0	.0	.0	.0
9	7.5	7.0	7.0	4.0	2.5	3.0	.0	.0	.0	.0	.0	.0
10	8.5	7.5	8.0	5.5	4.0	4.5	.0	.0	.0	.0	.0	.0
11	8.5	7.5	8.0	7.0	5.5	6.5	.0	.0	.0	.0	.0	.0
12	8.0	7.0	7.5	5.5	4.0	5.0	.0	.0	.0	.0	.0	.0
13	8.0	7.0	7.5	4.0	2.0	3.0	.0	.0	.0	.0	.0	.0
14	6.5	5.5	6.0	2.0	.0	1.0	.0	.0	.0	.0	.0	.0
15	6.0	5.5	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	5.5	5.5	5.5	.5	.0	.5	.0	.0	.0	.0	.0	.0
17	5.5	5.0	5.5	1.5	.5	1.0	.0	.0	.0	.0	.0	.0
18	6.0	5.5	6.0	2.0	1.5	2.0	.0	.0	.0	.0	.0	.0
19	6.0	5.5	5.5	1.5	.5	1.0	.0	.0	.0	.0	.0	.0
20	6.0	5.5	5.5	1.0	.5	1.0	.0	.0	.0	.0	.0	.0
21	6.5	5.5	6.0	1.0	.0	.5	.0	.0	.0	.0	.0	.0
22	6.5	6.0	6.0	1.0	.0	.5	.0	.0	.0	.0	.0	.0
23	6.0	5.0	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
24	5.0	4.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
25	5.0	3.5	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26	7.0	4.5	6.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
27	8.0	6.5	7.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
28	8.5	7.5	8.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
29	7.5	6.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
30	6.5	3.5	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	5.5	4.0	4.5	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	9.5	3.5	6.5	7.5	.0	2.0	.0	.0	.0	.0	.0	.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	.5	.0	.5	1.5	.5	1.0
2	.0	.0	.0	.5	.0	.0	.5	.5	.5	2.0	1.0	1.5
3	.0	.0	.0	.5	.0	.0	.5	.0	.5	3.0	1.5	2.5
4	.0	.0	.0	.5	.5	.5	.5	.0	.5	4.0	2.0	3.0
5	.0	.0	.0	.5	.0	.5	.5	.5	.5	5.0	2.5	3.5
6	.0	.0	.0	.5	.0	.0	.5	.0	.5	5.5	3.0	4.0
7	.0	.0	.0	.5	.0	.0	.5	.0	.5	6.0	3.5	4.5
8	.0	.0	.0	.5	.0	.5	.5	.0	.5	6.0	3.5	4.5
9	.0	.0	.0	.5	.0	.5	.5	.5	.5	5.0	4.5	4.5
10	.0	.0	.0	.5	.0	.5	.5	.5	.5	4.0	3.5	4.0
11	.0	.0	.0	.5	.0	.0	.5	.0	.5	5.0	3.5	4.0
12	.0	.0	.0	.5	.0	.5	.5	.5	.5	6.0	4.0	5.0
13	.0	.0	.0	.5	.0	.0	.5	.5	.5	7.5	5.0	6.5
14	.0	.0	.0	.5	.0	.5	.5	.5	.5	8.0	6.0	7.5
15	.0	.0	.0	.5	.0	.0	.5	.0	.5	9.0	7.5	8.0
16	.0	.0	.0	.5	.0	.0	.5	.0	.5	10.0	8.0	9.0
17	.0	.0	.0	.5	.0	.0	.5	.0	.5	9.5	9.0	9.0
18	.0	.0	.0	.5	.0	.0	.5	.0	.5	9.5	8.5	9.0
19	.0	.0	.0	.5	.0	.0	.5	.0	.0	9.0	8.5	8.5
20	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.0	8.5	8.5
21	.0	.0	.0	.5	.0	.0	.5	.0	.5	9.5	8.5	9.0
22	.0	.0	.0	.5	.0	.5	.5	.0	.5	10.0	8.0	9.0
23	.0	.0	.0	.5	.0	.5	1.0	.0	.5	10.5	8.0	9.5
24	.0	.0	.0	.5	.0	.0	1.0	.5	.5	12.5	9.0	11.0
25	.0	.0	.0	.0	.0	.0	2.0	.0	1.0	14.5	11.0	12.5
26	.0	.0	.0	.0	.0	.0	2.5	.0	1.0	15.5	12.5	14.0
27	.0	.0	.0	.5	.0	.0	2.5	.0	1.0	18.0	14.5	16.0
28	.0	.0	.0	.5	.5	.5	2.0	.5	1.5	19.0	16.5	18.0
29	---	---	---	.5	.5	.5	2.0	.5	1.5	21.0	17.5	19.5
30	---	---	---	.5	.0	.5	1.5	1.0	1.0	21.0	18.5	20.0
31	---	---	---	.5	.0	.5	---	---	---	22.0	18.0	19.5
MONTH	.0	.0	.0	.5	.0	.0	2.5	.0	.5	22.0	.5	8.5

ST. JOHN RIVER BASIN

01011000 ALLAGASH RIVER NEAR ALLAGASH, ME

LOCATION.--Lat 47 04'14", long 69 04'51", Aroostock County, Hydrologic Unit 01010002, on left bank 3.0 mi (4.8 km) upstream from mouth and village of Allagash.

DRAINAGE AREA.--1,250 mi² (3,240 km²), approximately, not including 249 mi² (645 km²) drained by Chamberlain Lake through Telos Canal.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1910 to November 1910, May to November 1911, September 1931 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WSP 1231: 1911.

GAGE.--Water-stage recorder. Datum of gage is 604.6 ft (184.28 m) National Geodetic Vertical Datum of 1929. Prior to December 1911, nonrecording gage at site 3.0 mi (4.8 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Some regulation for recreational purposes since May 1969 by Churchill Lake, usable capacity, about 3.4 billion ft³ (96 million m³), 58 mi (93 km) upstream.

AVERAGE DISCHARGE.--47 years (water years 1932-78), 1,921 ft³/s (54.40 m³/s), 20.87 in/yr (530 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,400 ft³/s (833 m³/s) Apr. 29, 1973, gage height, 12.33 ft (3.758 m); maximum gage height, 14.43 ft (4.398 m) Apr. 3, 1976 (backwater from ice); minimum discharge, 87 ft³/s (2.46 m³/s) Sept. 11, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,900 ft³/s (479 m³/s) May 10, gage height, 9.63 ft (2.935 m); maximum gage height, 12.63 ft (3.850 m) Apr. 25 (backwater from ice); minimum discharge, 331 ft³/s (9.37 m³/s) Aug. 28, gage height, 2.13 ft (0.649 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2200	2550	1470	1190	1610	640	850	10600	2140	1570	699	441
2	3000	2390	1480	1150	1540	630	900	9150	2150	1480	1060	414
3	4570	2260	1490	1120	1480	620	920	8220	2040	1340	653	443
4	4560	2150	1410	1080	1400	610	905	8110	1850	1210	671	645
5	4190	2070	1180	1060	1330	600	890	8530	1680	1110	803	497
6	3700	1960	1100	1040	1270	590	875	9600	1660	1030	815	436
7	3250	1860	1060	1020	1220	580	860	11000	1630	996	776	746
8	2890	1740	1020	1020	1170	575	850	12100	1620	969	731	934
9	2670	1600	970	1100	1120	565	830	14000	1800	1070	697	916
10	4030	1480	930	1250	1080	555	825	16700	1970	1170	668	1030
11	4790	1420	900	1480	1030	550	860	16400	1880	1250	623	1060
12	4350	1360	865	1700	1000	545	940	14900	1740	1140	586	1130
13	4020	1310	840	1900	970	540	1050	13300	1580	997	567	1200
14	3630	1300	820	2050	950	535	1200	12000	2300	912	547	1130
15	3520	1220	805	1930	920	530	1350	10800	3150	843	511	1080
16	4350	1180	795	1800	890	525	1550	9150	2760	815	482	1040
17	4840	1180	780	1700	860	520	1800	7500	2380	810	468	1020
18	6620	2390	770	1600	840	515	2100	6490	2060	763	450	987
19	6190	3800	755	1500	810	510	2450	5810	1830	728	416	929
20	5610	3490	750	1430	790	510	2850	5320	1780	753	396	862
21	5470	3100	740	1380	770	505	3400	5170	2070	779	392	814
22	5110	2840	725	1350	750	500	4000	5540	2030	736	375	784
23	5110	2560	720	1300	730	505	4600	4760	1940	736	371	744
24	4760	2310	715	1270	710	510	5400	4120	1790	977	364	711
25	4350	2170	740	1240	695	520	6300	3670	1680	963	347	689
26	3990	2020	830	1220	680	545	7500	3290	1560	805	342	667
27	3710	1910	940	1250	670	580	8520	2940	1420	768	340	632
28	3430	1540	1100	1350	655	625	10200	2630	1370	803	337	612
29	3170	1500	1330	1470	---	670	11000	2420	1460	830	402	578
30	2950	1460	1300	1570	---	740	11700	2220	1550	792	528	537
31	2730	---	1240	1660	---	790	---	2040	---	735	490	---
TOTAL	127760	60120	30570	43180	27940	17735	97475	248480	56870	29880	16907	23708
MEAN	4121	2004	986	1393	998	572	3249	8015	1896	964	545	790
MAX	6620	3800	1490	2050	1610	790	11700	16700	3150	1570	1060	1200
MIN	2200	1180	715	1020	655	500	825	2040	1370	728	337	414
CFSM	3.30	1.60	.79	1.11	.80	.46	2.60	6.41	1.52	.77	.44	.63
IN.	3.80	1.79	.91	1.29	.83	.53	2.90	7.39	1.69	.89	.50	.71
CAL YR 1977 TOTAL	816283			2236	17900	200	CFSM 1.79	IN 24.29				
WTR YR 1978 TOTAL	780625			2139	16700	337	CFSM 1.71	IN 23.23				

NOTE.--No gage-height record Dec. 11 to Mar. 3.

01011000 ALLAGASH RIVER NEAR ALLAGASH, ME--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1975 to current year.

WATER TEMPERATURES: April 1975 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1975 to September 1976.

INSTRUMENTATION.--Water-quality monitor since April 1975.

REMARKS.--Interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 95 micromhos Dec. 4, 1977; minimum, 30 micromhos on many days during April 1976.

WATER TEMPERATURES: Maximum, 27.5°C Aug. 2, 1975; minimum, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 160 mg/L Apr. 3, 1976; minimum daily mean, 1 mg/L on many days.

SEDIMENT LOADS: Maximum daily, 5,830 tons (5,290 metric tons) Apr. 3, 1976; minimum daily, 1.3 tons (1.2 metric tons) Oct. 10-12, Jan. 16-30, 1976.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 79 micromhos July 8; minimum, 48 micromhos Oct. 21.

WATER TEMPERATURES: Maximum, 26.5°C Aug. 15; minimum, 0.0°C on many days during winter periods.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	68	61	65	53	52	52	---	---	---	---	---	---
2	68	60	63	---	---	---	---	---	---	---	---	---
3	66	58	60	---	---	---	---	---	---	---	---	---
4	64	58	60	---	---	---	63	59	61	---	---	---
5	60	56	59	---	---	---	---	---	---	---	---	---
6	59	58	58	---	---	---	---	---	---	---	---	---
7	59	58	58	---	---	---	---	---	---	---	---	---
8	59	57	58	---	---	---	---	---	---	---	---	---
9	59	58	59	53	52	53	---	---	---	---	---	---
10	59	56	57	55	52	54	---	---	---	---	---	---
11	58	55	57	55	53	54	---	---	---	---	---	---
12	56	54	55	55	54	55	---	---	---	---	---	---
13	55	53	55	55	53	53	---	---	---	---	---	---
14	55	54	55	55	53	54	---	---	---	---	---	---
15	56	53	54	56	53	54	---	---	---	---	---	---
16	55	52	54	55	52	54	---	---	---	---	---	---
17	53	50	52	57	52	55	---	---	---	---	---	---
18	53	51	52	55	53	54	---	---	---	---	---	---
19	53	49	52	55	53	54	---	---	---	---	---	---
20	52	50	51	54	52	53	---	---	---	---	---	---
21	51	48	50	56	53	54	---	---	---	---	---	---
22	52	51	52	56	55	55	---	---	---	---	---	---
23	53	52	52	56	54	55	---	---	---	---	---	---
24	53	52	52	56	54	55	---	---	---	---	---	---
25	53	52	52	62	55	57	---	---	---	---	---	---
26	53	51	52	61	58	60	---	---	---	---	---	---
27	52	50	51	63	58	60	---	---	---	---	---	---
28	52	50	51	61	57	59	---	---	---	---	---	---
29	53	50	52	61	55	59	---	---	---	---	---	---
30	53	52	52	---	---	---	---	---	---	---	---	---
31	53	52	52	---	---	---	---	---	---	---	---	---
MONTH	68	48	55	63	52	55	63	59	61	---	---	---

01011000 ALLAGASH RIVER NEAR ALLAGASH, ME--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.0	9.5	10.0	4.0	2.0	3.5	.0	.0	.0	.0	.0	.0
2	10.0	9.5	9.0	3.5	1.5	2.5	.0	.0	.0	.0	.0	.0
3	10.0	9.0	9.0	---	---	---	.0	.0	.0	.0	.0	.0
4	9.5	9.0	9.0	---	---	---	.0	.0	.0	.0	.0	.0
5	9.0	8.0	8.5	---	---	---	.0	.0	.0	.0	.0	.0
6	9.0	8.0	8.5	---	---	---	.0	.0	.0	.0	.0	.0
7	8.0	7.0	7.5	---	---	---	.0	.0	.0	.0	.0	.0
8	7.5	6.0	7.0	---	---	---	.0	.0	.0	.0	.0	.0
9	7.5	7.0	7.0	4.5	3.0	3.5	.0	.0	.0	.0	.0	.0
10	8.0	7.0	7.5	6.5	4.5	5.5	.0	.0	.0	.0	.0	.0
11	8.0	7.0	7.5	6.5	3.5	5.0	.0	.0	.0	.0	.0	.0
12	7.5	6.5	7.0	4.0	2.5	3.5	.0	.0	.0	.0	.0	.0
13	7.5	6.5	7.0	2.5	.5	1.5	.0	.0	.0	.0	.0	.0
14	6.5	5.5	6.0	.5	.0	.5	.0	.0	.0	.0	.0	.0
15	6.0	5.5	5.5	1.5	.5	1.5	.0	.0	.0	.0	.0	.0
16	5.5	5.5	5.5	2.0	1.5	2.0	.0	.0	.0	.0	.0	.0
17	5.5	5.5	5.5	2.0	.5	1.5	.0	.0	.0	.0	.0	.0
18	5.5	5.0	5.5	1.0	.5	.5	.0	.0	.0	.0	.0	.0
19	6.0	5.5	5.5	.5	.0	.5	.0	.0	.0	.0	.0	.0
20	5.5	4.0	5.0	1.0	.5	.5	.0	.0	.0	.0	.0	.0
21	4.5	3.0	3.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
22	6.0	3.5	5.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23	6.5	6.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
24	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
25	6.5	4.5	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
26	5.0	3.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
27	4.5	3.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
28	4.5	2.5	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
29	5.5	4.0	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
30	6.5	4.5	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	5.5	2.5	4.5	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	10.0	2.5	6.5	6.5	.0	1.5	.0	.0	.0	.0	.0	.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.5	1.0
2	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	1.0	1.5
3	.0	.0	.0	.0	.0	.0	.5	.0	.0	2.5	1.0	2.0
4	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	1.0	2.0
5	.0	.0	.0	.0	.0	.0	.5	.0	.0	3.5	1.0	2.5
6	.0	.0	.0	.0	.0	.0	.5	.5	.5	3.5	1.5	2.5
7	.0	.0	.0	.0	.0	.0	.5	.0	.5	4.0	1.5	3.0
8	.0	.0	.0	.0	.0	.0	.5	.0	.5	4.0	2.0	3.0
9	.0	.0	.0	.0	.0	.0	.5	.5	.5	3.5	2.0	2.5
10	.0	.0	.0	.0	.0	.0	.5	.5	.5	3.0	2.0	2.5
11	.0	.0	.0	.0	.0	.0	.5	.5	.5	4.5	2.5	3.5
12	.0	.0	.0	.0	.0	.0	.5	.5	.5	5.0	3.0	4.0
13	.0	.0	.0	.0	.0	.0	.5	.5	.5	6.5	4.0	5.0
14	.0	.0	.0	.0	.0	.0	.5	.5	.5	7.0	5.0	6.0
15	.0	.0	.0	.0	.0	.0	.5	.5	.5	8.0	6.5	7.0
16	.0	.0	.0	.0	.0	.0	.5	.5	.5	9.5	6.5	8.0
17	.0	.0	.0	.0	.0	.0	.5	.5	.5	9.0	7.0	8.5
18	.0	.0	.0	.0	.0	.0	.5	.5	.5	9.5	7.5	8.5
19	.0	.0	.0	.0	.0	.0	.5	.5	.5	9.0	6.0	8.0
20	.0	.0	.0	.0	.0	.0	.5	.5	.5	9.0	7.5	8.5
21	.0	.0	.0	.0	.0	.0	.5	.5	.5	9.0	8.0	8.5
22	.0	.0	.0	.0	.0	.0	.5	.5	.5	9.5	7.0	8.5
23	.0	.0	.0	.0	.0	.0	.5	.5	.5	11.0	7.5	9.5
24	.0	.0	.0	.0	.0	.0	.5	.5	.5	12.5	8.5	10.5
25	.0	.0	.0	.0	.0	.0	.5	.5	.5	14.0	10.5	12.5
26	.0	.0	.0	.0	.0	.0	1.0	.5	.5	14.5	12.0	13.0
27	.0	.0	.0	.0	.0	.0	1.5	.5	.5	17.0	13.0	15.0
28	.0	.0	.0	.0	.0	.0	1.5	.5	1.0	17.5	15.0	16.5
29	---	---	---	.5	.0	.5	2.0	.5	1.0	19.0	16.0	17.5
30	---	---	---	.5	.0	.5	1.5	1.0	1.0	19.5	17.0	18.0
31	---	---	---	.5	.0	.5	---	---	---	---	---	---
MONTH	.0	.0	.0	.5	.0	.0	2.0	.0	.5	19.5	.5	7.5

01011500 ST. FRANCIS RIVER AT OUTLET OF GLASIER LAKE, NEAR CONNORS, NEW BRUNSWICK
(International gaging station)

LOCATION.--Lat 47°12'25", long 68°57'25", Madawaska County, on left bank at outlet of Glasier Lake, 4.0 mi (6.4 km) upstream from mouth, and 6.5 mi (10.5 km) west of Connors.

DRAINAGE AREA.--520 mi² (1,347 km²).

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1621: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 550 ft (168 m), from International Boundary Map.

REMARKS.--Records excellent.

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

AVERAGE DISCHARGE.--27 years, 886 ft³/s (25.1 m³/s), 23.14 in/yr (588 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) May 12, 1969, gage height, 14.01 ft (4.270 m); minimum, 60 ft³/s (1.70 m³/s) Aug. 28, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,710 ft³/s (247 m³/s) May 13, gage height, 11.59 ft (3.533 m); minimum, 60 ft³/s (1.70 m³/s) Aug. 28, gage height, 2.03 ft (0.619 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	392	856	658	373	577	260	202	3240	1170	450	142	81
2	461	798	656	369	563	251	200	3280	1110	420	137	77
3	558	759	622	371	555	245	198	3300	1040	398	136	79
4	695	730	603	378	529	239	203	3420	954	372	140	83
5	827	700	582	379	514	233	200	3670	877	353	138	85
6	906	670	554	370	490	234	200	4000	830	333	131	81
7	912	642	535	362	476	230	199	4460	799	321	128	91
8	883	607	517	357	467	230	197	5040	747	317	122	91
9	843	575	496	359	443	221	191	5690	719	314	118	95
10	892	549	476	376	434	224	195	6580	696	304	114	95
11	962	543	444	392	420	224	199	7670	662	291	109	92
12	1090	532	428	466	404	219	217	8580	623	268	105	97
13	1150	516	416	555	394	211	225	8620	582	252	101	95
14	1130	508	412	658	388	214	238	8280	604	235	100	89
15	1110	496	420	719	384	212	258	7980	606	225	99	85
16	1080	484	413	747	367	214	281	7580	614	221	96	88
17	1090	476	396	761	344	212	307	7020	635	228	92	89
18	1180	533	394	771	335	210	375	6250	633	213	92	86
19	1280	645	391	755	325	199	459	5560	628	204	90	83
20	1400	810	385	727	315	198	579	4900	630	204	91	81
21	1450	947	374	703	310	192	762	4310	626	200	88	81
22	1410	1000	356	665	301	205	958	3840	604	197	84	84
23	1330	985	372	636	289	207	1120	3320	597	194	83	79
24	1280	962	359	633	288	202	1300	2880	577	193	79	77
25	1210	917	350	588	283	191	1410	2510	562	183	72	78
26	1150	862	377	587	279	192	1550	2200	550	171	70	76
27	1090	826	379	599	278	207	1760	1960	529	167	69	73
28	1040	769	365	583	266	222	2070	1740	504	171	64	73
29	1010	722	364	578	---	213	2460	1580	470	165	75	73
30	961	676	366	595	---	204	2900	1410	464	160	79	67
31	912	---	370	586	---	197	---	1260	---	149	82	---
TOTAL	31684	21095	13830	16998	11018	6712	21413	142130	20642	7873	3126	2504
MEAN	1022	703	446	548	394	217	714	4585	688	254	101	83.5
MAX	1450	1000	658	771	577	260	2900	8620	1170	450	142	97
MIN	392	476	350	357	266	191	191	1260	464	149	64	67
CFSM	1.97	1.35	.86	1.05	.76	.42	1.37	8.82	1.32	.49	.19	.16
IN.	2.27	1.51	.99	1.22	.79	.48	1.53	10.17	1.48	.56	.22	.18
CAL YR 1977	TOTAL	367722	MEAN	1007	MAX	8300	MIN	144	CFSM	1.94	IN	26.31
WTR YR 1978	TOTAL	299025	MEAN	819	MAX	8620	MIN	64	CFSM	1.58	IN	21.39

ST. JOHN RIVER BASIN

01012500 ST. JOHN RIVER ABOVE FISH RIVER, AT FORT KENT, ME

LOCATION.--Lat 47°14'55", long 68°36'20", Aroostook County, Hydrologic Unit 01010001, on right bank 10 ft (3 m) downstream from International Bridge at Fort Kent and 1 mi (1.6 km) upstream from Fish River.

DRAINAGE AREA.--4,790 mi² (12,406 km²).

PERIOD OF RECORD.--Water years 1977 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1977 to current year.

WATER TEMPERATURES: April 1977 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1977.

REMARKS.--Interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 97 micromhos Jan. 9, 1978; minimum, 42 micromhos May 13, 1978.

WATER TEMPERATURES: Maximum, 25.5°C Aug. 15, 16, 1978; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 97 micromhos Jan. 9; minimum, 42 micromhos May 13.

WATER TEMPERATURES: Maximum, 25.5°C Aug. 15, 16; minimum, 0.0°C on many days during winter periods.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	55	52	54	64	59	61	71	70	70	74	72	73
2	52	51	51	64	59	62	70	69	70	73	72	73
3	50	48	50	66	62	64	70	68	69	74	73	74
4	48	47	47	67	63	66	71	67	68	75	75	75
5	58	46	51	67	65	66	71	64	70	---	---	---
6	57	55	56	68	58	65	72	70	71	75	73	74
7	57	55	56	66	64	65	72	71	71	82	73	75
8	59	56	57	67	63	66	75	71	72	76	74	75
9	62	57	59	68	67	68	75	73	74	97	74	84
10	63	60	61	68	68	68	78	74	76	79	73	76
11	60	56	58	69	68	68	78	77	78	---	---	---
12	57	55	56	69	67	68	80	78	79	72	68	70
13	58	56	57	68	68	68	81	78	79	71	66	67
14	59	56	57	68	67	67	79	78	78	66	64	65
15	59	58	59	68	66	67	79	76	77	64	63	63
16	60	59	60	68	67	68	76	75	76	63	62	62
17	59	58	59	68	68	68	76	74	75	63	61	62
18	59	56	58	68	65	66	74	73	73	63	62	63
19	56	55	55	65	61	64	74	73	73	65	63	64
20	55	46	54	61	57	60	75	72	74	67	64	66
21	56	55	55	58	57	58	74	72	73	68	63	66
22	56	55	56	59	58	58	74	73	74	68	67	68
23	56	55	56	59	58	58	74	73	73	69	68	69
24	57	55	56	61	58	60	74	73	73	71	70	71
25	59	56	57	61	60	60	75	73	73	77	71	74
26	60	58	59	64	59	62	76	73	74	73	70	72
27	60	58	59	65	62	63	75	74	74	71	70	70
28	61	59	60	67	65	66	75	74	74	70	68	69
29	61	58	59	70	66	68	75	73	75	68	67	68
30	62	58	60	71	69	70	75	74	75	---	---	---
31	64	59	61	---	---	---	75	72	74	67	66	67
MONTH	64	46	57	71	57	65	81	64	74	97	61	70

ST. JOHN RIVER BASIN

01012500 ST. JOHN RIVER ABOVE FISH RIVER, AT FORT KENT, ME--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.0	9.5	9.5	4.5	4.0	4.5	.0	.0	.0	.0	.0	.0
2	9.5	9.0	9.0	5.0	3.5	4.5	.0	.0	.0	.0	.0	.0
3	9.0	8.5	9.0	6.5	4.5	5.5	.0	.0	.0	.0	.0	.0
4	8.5	8.0	8.0	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0
5	9.0	7.5	8.5	6.5	5.5	6.0	.0	.0	.0	.0	.0	.0
6	9.5	8.5	9.0	5.5	4.5	5.0	.0	.0	.0	.0	.0	.0
7	9.0	8.5	9.0	4.0	3.5	4.0	.0	.0	.0	.0	.0	.0
8	8.0	7.5	8.0	3.0	2.5	3.0	.0	.0	.0	.0	.0	.0
9	8.0	7.5	8.0	4.5	3.0	4.0	.0	.0	.0	.0	.0	.0
10	9.0	8.0	8.5	6.0	4.5	5.5	.0	.0	.0	.0	.0	.0
11	8.5	8.0	8.5	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0
12	8.0	7.5	8.0	6.0	5.5	5.5	.0	.0	.0	.0	.0	.0
13	8.0	7.0	7.5	5.5	3.0	4.5	.0	.0	.0	.0	.0	.0
14	7.5	6.5	7.0	3.0	1.0	2.0	.0	.0	.0	.0	.0	.0
15	6.5	6.0	6.5	1.0	.5	.5	.0	.0	.0	.0	.0	.0
16	6.0	6.0	6.0	1.5	.5	1.0	.0	.0	.0	.0	.0	.0
17	6.0	5.5	6.0	2.5	1.5	2.0	.0	.0	.0	.0	.0	.0
18	6.0	6.0	6.0	3.0	2.0	2.5	.0	.0	.0	.0	.0	.0
19	6.0	6.0	6.0	2.0	1.5	1.5	.0	.0	.0	.0	.0	.0
20	6.0	6.0	6.0	1.5	1.0	1.5	.0	.0	.0	.0	.0	.0
21	6.5	6.0	6.5	1.0	.5	1.0	.0	.0	.0	.0	.0	.0
22	6.5	6.0	6.5	1.5	1.0	1.5	.0	.0	.0	.0	.0	.0
23	6.0	5.5	5.5	1.0	.5	.5	.0	.0	.0	.0	.0	.0
24	5.5	4.5	5.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
25	5.5	4.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
26	6.5	5.0	6.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
27	7.5	6.5	7.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
28	8.0	7.5	7.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
29	7.5	6.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
30	6.0	5.0	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	5.5	4.5	5.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	10.0	4.0	7.0	7.0	.0	2.5	.0	.0	.0	.0	.0	.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	1.5	1.5
2	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	2.0	2.5
3	.0	.0	.0	.0	.0	.0	.0	.0	.0	---	---	---
4	.0	.0	.0	.0	.0	.0	.0	.0	.0	---	---	---
5	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0	2.5	3.5
6	.0	.0	.0	.0	.0	.0	.0	.0	.0	---	---	---
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	---	---	---
8	.0	.0	.0	.0	.0	.0	.0	.0	.0	---	---	---
9	.0	.0	.0	.0	.0	.0	.0	.0	.0	---	---	---
10	.0	.0	.0	.0	.0	.0	.0	.0	.0	---	---	---
11	.0	.0	.0	.0	.0	.0	.0	.0	.0	---	---	---
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.0	4.5	5.0
13	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.0	5.5	6.0
14	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	6.5	7.5
15	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.0	7.5	8.0
16	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.5	8.0	9.0
17	.0	.0	.0	.0	.0	.0	.0	.0	.0	10.0	9.5	9.5
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	10.0	9.0	9.5
19	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.5	9.0	9.0
20	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.0	8.5	9.0
21	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.0	9.0	9.0
22	.0	.0	.0	.0	.0	.0	.0	.0	.0	10.0	8.5	9.0
23	.0	.0	.0	.0	.0	.0	.0	.0	.0	11.0	9.0	10.0
24	.0	.0	.0	.0	.0	.0	.0	.0	.0	12.5	10.0	11.5
25	.0	.0	.0	.0	.0	.0	.5	.0	.0	14.0	12.0	13.0
26	.0	.0	.0	.0	.0	.0	1.0	.0	.5	15.0	13.0	14.0
27	.0	.0	.0	.0	.0	.0	1.5	.0	.5	---	---	---
28	.0	.0	.0	.0	.0	.0	1.5	.0	1.0	---	---	---
29	---	---	---	.0	.0	.0	1.5	.5	1.0	---	---	---
30	---	---	---	.0	.0	.0	2.0	.0	1.0	---	---	---
31	---	---	---	.0	.0	.0	---	---	---	---	---	---
MONTH	.0	.0	.0	.0	.0	.0	2.0	.0	.0	15.0	1.5	8.0

ST. JOHN RIVER BASIN

01013500 FISH RIVER NEAR FORT KENT, ME

LOCATION.--Lat 47°14'14", long 68°34'56", Aroostook County, Hydrologic Unit 01010003, on right bank 300 ft (91 m) upstream from highway bridge at Fort Kent Mills, 2 mi (3 km) upstream from mouth, and 2 mi (3 km) south of Fort Kent.

DRAINAGE AREA.--871 mi² (2,256 km²).

PERIOD OF RECORD.--July 1903 to December 1908 and May to November 1911 (published as "at Wallagrass"), September 1929 to current year.

REVISED RECORDS.--WSP 1001: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 511.38 ft (155.869 m) National Geodetic Vertical Datum of 1929. July 1903 to December 1908 and May to November 1911, nonrecording gage at site 10 mi (16 km) upstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Large lake area above station has not yet been developed for storage. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--54 years (water years 1904-8, 1930-78), 1,403 ft³/s (39.73 m³/s), 21.87 in/yr (555 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft³/s (447 m³/s) Apr. 30, 1973, gage height, 12.43 ft (3.789 m); minimum, 34 ft³/s (0.963 m³/s) Aug. 29, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,740 ft³/s (248 m³/s) May 11, gage height, 8.98 ft (2.737 m); minimum discharge, 116 ft³/s (3.28 m³/s) Sept. 29, 30, gage height, 2.20 ft (0.671 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	943	2300	1280	950	1530	655	590	6600	2470	965	476	138
2	1440	2170	1220	930	1470	640	610	6670	2330	997	444	134
3	1800	2050	1160	910	1420	630	615	6740	2140	981	421	138
4	2000	1930	1100	890	1360	620	620	6780	1950	957	415	165
5	2210	1800	1040	875	1300	610	620	6860	1820	926	398	151
6	2300	1710	980	860	1230	600	615	7070	1760	880	381	145
7	2290	1610	950	860	1180	590	610	7350	1680	872	365	184
8	2240	1540	925	910	1120	575	605	7630	1640	865	360	180
9	2260	1460	890	970	1080	570	595	8080	1610	865	350	184
10	2650	1400	850	1060	1040	560	590	8630	1560	880	330	184
11	2640	1370	830	1130	1000	555	590	8720	1530	880	314	184
12	2670	1310	805	1200	970	550	605	8640	1470	857	309	184
13	2650	1250	780	1260	950	545	640	8410	1420	850	303	173
14	2590	1220	760	1320	920	540	685	8140	1490	833	282	173
15	2610	1180	770	1380	890	535	760	7790	1500	809	273	176
16	2670	1130	800	1430	860	530	850	7370	1480	825	263	176
17	2940	1100	810	1490	840	525	980	6880	1450	777	254	165
18	3320	1370	805	1520	820	520	1120	6390	1390	746	236	158
19	3440	1480	780	1530	800	515	1330	5890	1330	724	227	151
20	3560	1520	760	1530	780	510	1560	5430	1280	702	222	148
21	3640	1780	730	1510	760	505	2010	5160	1250	666	200	151
22	3610	1850	730	1480	740	505	2450	4930	1220	645	192	145
23	3540	1880	740	1440	725	500	2870	4590	1230	632	180	141
24	3450	1830	740	1400	720	500	3240	4270	1180	597	165	141
25	3330	1750	730	1380	705	500	3690	3950	1160	597	158	138
26	3200	1700	740	1430	695	500	4220	3670	1120	584	151	131
27	3040	1600	790	1500	680	505	4740	3400	1090	577	145	134
28	2900	1530	840	1530	665	515	5330	3150	1010	564	138	131
29	2750	1450	890	1570	---	530	6010	2960	965	538	162	122
30	2600	1340	935	1590	---	550	6580	2820	949	507	151	116
31	2450	---	960	1580	---	570	---	2640	---	507	145	---
TOTAL	83733	47610	27120	39415	27250	17055	56330	187610	44474	23605	8410	4641
MEAN	2701	1587	875	1271	973	550	1878	6052	1482	761	271	155
MAX	3640	2300	1280	1590	1530	655	6580	8720	2470	997	476	184
MIN	943	1100	730	860	665	500	590	2640	949	507	138	116
CFSM	3.10	1.82	1.01	1.46	1.12	.63	2.16	6.95	1.70	.87	.31	.18
IN.	3.58	2.03	1.16	1.68	1.16	.73	2.41	8.01	1.90	1.01	.36	.20
CAL YR 1977	TOTAL	631361	MEAN	1730	MAX	8840	MIN	320	CFSM	1.99	IN	26.97
WTR YR 1978	TOTAL	567253	MEAN	1554	MAX	8720	MIN	116	CFSM	1.78	IN	24.23

ST. JOHN RIVER BASIN

39

01014000 ST. JOHN RIVER BELOW FISH RIVER, AT FORT KENT, ME
(International gaging station)

LOCATION.--Lat 47°15'27", long 68°35'35", Aroostook County, Hydrologic Unit 01010001, on right bank at Fort Kent and 0.2 mi (0.3 km) downstream from Fish River.

DRAINAGE AREA.--5,690 mi² (14,740 km²), approximately, not including 249 mi² (645 km²) drained by Chamberlain Lake through Telos Canal.

RECORDS AVAILABLE.--October 1926 to current year. Prior to October 1931, published as "at Fort Kent."

GAGE.--Water-stage recorder. Datum of gage is 488.9 ft (149.02 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 10, 1933, nonrecording gage on opposite bank at same datum.

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

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

AVERAGE DISCHARGE.--52 years, 9,673 ft³/s (274 m³/s), 23.09 in/yr (586 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 148,000 ft³/s (4,190 m³/s) May 1, 1974, gage height, 26.95 ft (8.21 m); minimum daily, 510 ft³/s (14.4 m³/s) Mar. 13-15, 1948.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 45,000 ft³/s (1,300 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 30	1500	63100 1790	17.43 5.313	May 11	1000	*96300 2730	21.67 6.605

Minimum discharge, 737 ft³/s (20.9 m³/s) Aug. 28, gage height, 0.87 ft (0.265 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13700	10800	6630	4100	7100	2740	2390	58900	10100	6530	2880	2030
2	15700	10000	6660	3900	6750	2680	2430	50800	12100	6220	2570	2500
3	22800	9380	6710	3700	6300	2620	2480	44800	12000	5680	2330	2050
4	25600	8870	6540	3600	6000	2590	2500	43400	10900	5120	2210	2120
5	22700	8420	6050	3450	5700	2520	2500	45200	9890	4630	2150	1960
6	19400	8020	5690	3350	5400	2480	2470	50300	9110	4210	2220	1590
7	16300	7770	5360	3220	5170	2430	2430	58100	8290	3900	2500	2640
8	14000	7400	5230	3100	4950	2360	2420	66300	7760	3790	2880	3620
9	12600	6970	4630	3250	4800	2310	2410	74200	7690	3850	2510	5870
10	14700	6660	4370	3620	4650	2270	2400	89300	8290	3840	2220	5840
11	23000	6470	3990	4250	4500	2200	2390	95700	9440	3790	1990	5300
12	22300	6460	3630	5300	4400	2180	2520	90800	8710	3600	1850	4770
13	19200	6450	3800	6300	4250	2110	2720	81700	7470	3370	1800	4330
14	16800	6660	4000	8000	4100	2050	3000	74200	7470	3190	1690	4150
15	15400	6340	4250	8600	3930	2010	3550	67700	9970	3020	1560	3860
16	16300	5930	4500	8100	3810	2000	4400	60800	13100	2920	1440	3410
17	19900	5750	4350	7700	3690	1980	5600	52200	12100	3000	1350	3040
18	26300	7920	4150	7350	3580	1960	7200	44900	9940	2820	1270	2840
19	31900	14600	4100	6900	3480	1930	9200	38400	8260	2640	1180	2870
20	28400	17600	4000	6500	3350	1910	12100	32800	7450	2700	1120	2620
21	26800	15300	3900	6200	3280	1900	15000	29200	16400	2810	1060	2370
22	25200	13300	4050	5800	3200	1890	18500	28800	19000	2690	1010	2170
23	23500	11800	4100	5500	3110	1880	22000	26800	14500	2570	964	2000
24	22400	10700	4000	5200	3040	1870	27000	22900	11600	2620	907	1860
25	20100	9710	3900	5000	2990	1860	34300	19600	9750	2810	854	1770
26	17700	8850	4000	5100	2920	1840	42700	16900	8290	2630	812	1730
27	16000	8760	4150	5200	2880	1820	43100	14900	7100	2720	786	1670
28	14900	6200	4350	5500	2800	1900	47400	13300	6220	2860	758	1590
29	13700	5530	4300	5900	---	2000	57400	12300	5700	2720	903	1530
30	12600	5700	4400	6600	---	2130	62100	11200	6090	2570	1060	1450
31	11600	---	4300	7200	---	2280	---	10200	---	2980	1290	---
TOTAL	601500	264320	144090	167490	120130	66700	446610	1426600	294690	108800	50124	85550
MEAN	19400	8811	4648	5403	4290	2152	14890	46020	9823	3510	1617	2852
MAX	31900	17600	6710	8600	7100	2740	62100	95700	19000	6530	2880	5870
MIN	11600	5530	3630	3100	2800	1820	2390	10200	5700	2570	758	1450
CFSM	3.41	1.55	.82	.95	.75	.38	2.62	8.09	1.73	.62	.28	.50
IN.	3.93	1.73	.94	1.10	.79	.44	2.92	9.33	1.93	.71	.33	.56
CAL YR 1977	TOTAL	4095320	MEAN	11220	MAX	97500	MIN	1240	CFSM	1.97	IN	26.77
WTR YR 1978	TOTAL	3776604	MEAN	10350	MAX	95700	MIN	758	CFSM	1.82	IN	24.69

ST. JOHN RIVER BASIN

01015000 ST. JOHN RIVER AT VAN BUREN, ME
(National stream-quality accounting network station)

LOCATION.--Lat 47°09'35", long 67°55'55", Aroostook County, Hydrologic Unit 01010001, on left bank 1,000 ft (305 m) downstream from International Bridge at VanBuren.

DRAINAGE AREA.--8,270 mi² (21,419 km²).

PERIOD OF RECORD.--May to September 1978.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML)
MAY 11...	1245	139000	52	6.8	14.0	4.0	15	--	13.0	101	K28	28
JUL 06...	1245	6120	82	7.0	23.0	20.0	--	2.0	7.8	87	11	51
AUG 03...	1130	3390	104	6.8	18.5	19.0	--	2.0	4.6	50	200	K9
30...	1500	1540	170	6.6	23.5	17.0	--	2.0	3.9	41	500	K14
30...	1800	1540	--	--	--	--	--	2.0	--	--	K1400	K4
SEP 19...	1200	4170	101	6.7	8.0	11.5	--	1.0	7.5	70	1200	K28
DATE	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
MAY 11...	21	5	7.0	.9	1.1	10	.1	.5	20	0	16	5.1
JUL 06...	34	7	11	1.5	1.7	10	.1	.5	--	--	27	--
AUG 03...	47	13	15	2.4	2.4	10	.2	.6	--	--	34	--
30...	64	30	18	4.7	4.2	12	.2	.9	--	--	34	--
30...	64	22	18	4.7	4.2	12	.2	.9	--	--	42	--
SEP 19...	42	18	12	2.8	2.6	12	.2	.5	--	--	24	--
DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)
MAY 11...	6.0	1.7	.0	3.2	46	30	17300	.16	.04	.37	.41	.23
JUL 06...	4.9	1.5	.0	2.9	58	40	958	.06	.01	.28	.29	.05
AUG 03...	10	3.1	.0	2.4	86	56	787	.00	.00	1.6	1.6	1.2
30...	17	6.3	.0	2.6	162	75	674	.03	.00	.57	.57	.00
30...	20	6.0	.0	2.6	154	82	640	.00	.00	.56	.56	.00
SEP 19...	13	3.4	.0	3.0	93	52	1050	.03	.01	.37	.38	.01
DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
MAY 11...	.18	.57	2.5	.05	.00	1	1	0	0	0	0	0
JUL 06...	.24	.35	1.6	.01	.00	--	--	--	--	--	--	--
AUG 03...	.36	1.6	7.1	.03	.00	--	--	--	--	--	--	--
30...	--	.60	2.7	.01	.00	1	--	1	0	0	0	1
30...	--	.56	2.5	.01	.00	1	--	0	0	0	0	0
SEP 19...	.37	.41	1.8	.01	.00	--	--	--	--	--	--	--

01015000 ST. JOHN RIVER AT VAN BUREN, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CADMIUM SUS- PENDE D RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, SUS- PENDE D RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, SUS- PENDE D RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, SUS- PENDE D RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
MAY 11...	0	1	10	8	2	2	2	0	41	32	9	2900
JUL 06...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--
30...	0	1	<10	<3	7	0	0	0	28	18	10	780
30...	0	0	<10	<2	8	0	0	0	2	0	3	570
SEP 19...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	IRON, SUS- PENDE D RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDE D RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE D RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)
MAY 11...	--	90	68	54	14	110	90	20	<.5
JUL 06...	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--
30...	250	530	49	24	25	100	0	110	.5
30...	150	420	3	0	3	100	0	110	.8
SEP 19...	--	--	--	--	--	--	--	--	--

DATE	MERCURY SUS- PENDE D RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SELE- NIUM, SUS- PENDE D RECOV- ERABLE (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE D RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
MAY 11...	.0	<.5	0	0	0	0	0	0	20
JUL 06...	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--
30...	.0	<.5	0	0	0	0	0	0	20
30...	.3	<.5	0	0	0	0	0	0	20
SEP 19...	--	--	--	--	--	--	--	--	--

DATE	ZINC, SUS- PENDE D RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE D RECOV- ERABLE (MG/L AS C)	SEDI- MENT, SUS- PENDE D RECOV- ERABLE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE D RECOV- ERABLE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY 11...	10	10	--	9.3	.6	54	20300	70
JUL 06...	--	--	7.5	--	--	11	182	100
AUG 03...	--	--	14	--	--	6	55	100
30...	20	0	--	20	.8	13	54	100
30...	20	0	--	1.5	--	13	54	100
SEP 19...	--	--	--	--	--	8	90	84

ST. JOHN RIVER BASIN

01015000 ST. JOHN RIVER AT VAN BUREN, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	MAY 11.78 1245	JUL 6.78 1245	AUG 3.78 1130	AUG 30.78 1500	AUG 30.78 1800	SEP 19.78 1200				
TOTAL CELLS/ML	140	3500	2600	4700	3600	1500				
DIVERSITY: DIVISION	0.0	1.5	0.7	0.7	1.2	1.0				
..CLASS	0.0	1.7	0.7	0.7	1.2	1.0				
...ORDER	1.0	2.4	0.8	1.6	1.9	1.1				
...FAMILY	1.0	3.1	0.9	1.7	2.3	2.9				
....GENUS	1.0	3.4	1.0	2.1	2.7	3.1				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	--	-	21	1	44	3
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	--	-	180	12
...HYDRODICTYACEAE										
....PEDIASTRUM	--	-	--	-	21	1	--	-	89	6
...MICRACTINIACEAE										
....GOLENKINIA	--	-	120	3	--	-	*	0	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	--	-	420	12	26	1	270	6	200	6
....CHODATELLA	--	-	93	3	--	-	--	-	--	-
...DICTYOSPHAERIUM							140	3	430	12
....OOCYSTIS	--	-	190	5	42	2	*	0	28	1
...QUADRIGULA									71	2
...TETRAEDRON	--	-	23	1	--	-	*	0	--	-
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	190	5	21	1	--	-	110	3
...SCENEDESMUS	--	-	46	1	270	11	200	4	190	5
...TETRASPORALES										
...PALMELLACEAE										
...SPHAEROCYSTIS	--	-	--	-	--	-	--	-	64	2
...TETRASPORACEAE										
...TETRASPORA	--	-	--	-	--	-	57	1	--	-
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	140	4	--	-	--	-	*	0
...ZYGNEATALES										
...DESMIDIACEAE										
...COSMARIUM	--	-	--	-	--	-	--	-	*	0
...EUASTRUM	--	-	--	-	--	-	*	0	--	-
CHRYSTOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
...COSCINODISCEACEAE										
...CYCLOTELLA	72#	50	93	3	--	-	--	-	100	3
....MELOSIRA	--	-	--	-	32	1	28	1	*	0
...PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	160	5	--	-	--	-	--	-
...COCCONEIS	--	-	--	-	--	-	--	-	21	1
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	--	-	*	0
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
...SYNEDRA	--	-	--	-	*	0	*	0	57	2
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	69	2	--	-	--	-	--	-
...MERIDIONACEAE										
....MERIDION	--	-	--	-	--	-	--	-	*	0
...NAVICULACEAE										
....NAVICULA	72#	50	46	1	--	-	--	-	50	1
...NITZSCHIACEAE										
....NITZSCHIA	--	-	190	5	--	-	--	-	*	0
...TABELLARIACEAE										
....TABELLARIA	--	-	--	-	--	-	--	-	*	0
..CHRYSTOPHYCEAE										
...CHRYSSOMONADALES										
...MALLOMONADACEAE										
....MALLOMONAS	--	-	23	1	--	-	--	-	--	-
...OCHROMONADACEAE										
....DINOBRYON	--	-	210	6	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01015000 ST. JOHN RIVER AT VAN BUREN, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	MAY 11,78 1245		JUL 6,78 1245		AUG 3,78 1130		AUG 30,78 1500		AUG 30,78 1800		SEP 19,78 1200	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CYANOPHYTA (BLUE-GREEN ALGAE)												
..CYANOPHYCEAE												
...CHROCCOCCALES												
...CHROCCOCCAEAE												
....AGMENELLUM	--	-	--	-	--	-	340	7	--	-	--	-
....ANACYSTIS	--	-	790#	22	2100#	83	2300#	49	410	11	--	-
....COCCOCHLORIS	--	-	--	-	--	-	*	0	--	-	--	-
...HORMOGONALES												
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	740#	21	--	-	1300#	27	1800#	49	--	-
EUGLENOPHYTA (EUGLENOIDS)												
..EUGLENOPHYCEAE												
...EUGLENALES												
...EUGLENACEAE												
....TRACHELOMONAS	--	-	--	-	--	-	*	0	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)												
..DINOPHYCEAE												
...GYMNODINIALES												
...GYMNODINIACEAE												
....GYMNODINIUM	--	-	--	-	*	0	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIPHYTON

DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS(G/SQ M)		CHLOROPHYLL A (MG/SQ M)	CHLOROPHYLL B (MG/SQ M)	BIOMASS PIGMENT RATIO	SAMPLING METHOD
		DRY WEIGHT	ASH WEIGHT				
AUG 03	28	6.46	2.28	1.32	.590	3170	ARTIFICIAL SUBSTRATE
AUG 30	27	2.76	1.57	.380	.110	3130	ARTIFICIAL SUBSTRATE
SEP 19	20	2.13	1.34	.350	.080	2260	ARTIFICIAL SUBSTRATE

ST. JOHN RIVER BASIN

01015800 AROOSTOOK RIVER NEAR MASARDIS, ME

LOCATION.--Lat 46°31'21", long 68°22'23", Aroostook County, Hydrologic Unit 01010004, on left bank 180 ft (55 m) upstream from new highway bridge, and 1.8 miles (2.9 km) downstream from St. Croix Stream and Masardis.

DRAINAGE AREA.--888 mi² (2,300 km²).

PERIOD OF RECORD.--September 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 530.0 ft (161.54 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. Considerable regulation by Millinocket Lake, capacity 1,110,000,000 ft³ (31,400,000 m³) used for power. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--21 years, 1,514 ft³/s (42.88 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,500 ft³/s (609 m³/s) Apr. 25, 1958, gage height, 16.30 ft (4.968 m); minimum, 41 ft³/s (1.16 m³/s) Sept. 26, 27, 1968, gage height, 1.89 ft (0.576 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,800 ft³/s (306 m³/s) Apr. 30, gage height, 12.71 ft (3.874 m); maximum gage height, 13.99 ft (4.264 m) Apr. 23 (backwater from ice); minimum discharge, 111 ft³/s (3.14 m³/s) Aug. 26, gage height, 2.73 ft (0.832 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3280	1490	825	725	1680	510	670	9670	840	1080	448	231
2	4240	1380	855	690	1600	500	650	8140	796	1400	384	196
3	5940	1290	840	660	1500	580	630	7180	735	1340	346	174
4	5330	1240	800	640	1420	640	610	6890	681	1110	365	162
5	4190	1260	770	620	1360	640	600	7070	613	889	607	155
6	3260	1250	745	615	1280	615	585	7400	680	724	629	158
7	2610	1170	715	605	1220	595	580	7860	766	560	520	296
8	2110	1100	690	605	1160	575	570	8270	827	489	423	691
9	1800	1040	670	800	1100	555	570	8720	1220	458	357	655
10	2150	1010	645	1050	1050	545	570	10300	1790	493	312	644
11	3040	1020	630	1300	1000	530	600	10600	1730	581	274	604
12	2920	1070	605	1600	970	515	645	9350	1350	577	243	552
13	2550	1090	595	1750	930	505	720	7740	1050	494	218	530
14	2180	1130	585	1650	885	495	840	6360	1020	408	204	458
15	2080	1080	575	1540	855	485	1000	5330	1300	370	191	391
16	3070	999	565	1400	830	475	1200	4320	1230	423	178	359
17	4010	986	550	1300	795	465	1420	3450	1040	490	169	334
18	5990	1740	545	1200	765	450	1730	3080	872	558	160	304
19	6760	2850	540	1140	740	445	2100	2750	838	593	154	270
20	6160	2760	535	1080	705	435	2650	2460	1240	539	145	244
21	5620	2270	530	1050	680	430	3150	2650	2520	495	137	227
22	4970	1860	525	1000	650	430	3950	3130	2500	461	132	217
23	4370	1620	520	970	630	440	4800	2920	2020	463	126	201
24	3690	1420	540	945	605	465	5700	2460	1640	748	121	189
25	2980	1340	600	930	590	485	6900	2050	1430	859	116	182
26	2540	1230	775	955	570	510	8200	1750	1230	673	112	179
27	2260	1160	940	1070	550	540	9500	1520	1040	511	114	170
28	2030	898	980	1220	530	570	10400	1360	1020	522	117	163
29	1920	915	910	1400	---	600	10700	1200	1090	747	149	159
30	1790	830	810	1610	---	630	10800	1050	975	673	273	153
31	1620	---	765	1720	---	660	---	922	---	552	284	---
TOTAL	107460	40498	21175	33840	26650	16315	93040	157952	36083	20280	8008	9248
MEAN	3466	1350	683	1092	952	526	3101	5095	1203	654	258	308
MAX	6760	2850	980	1750	1680	660	10800	10600	2520	1400	629	691
MIN	1620	830	520	605	530	430	570	922	613	370	112	153
CAL YR 1977	TOTAL	684300	MEAN	1875	MAX	15000	MIN	195				
WTR YR 1978	TOTAL	570549	MEAN	1563	MAX	10800	MIN	112				

ST. JOHN RIVER BASIN

45

01016500 MACHIAS RIVER NEAR ASHLAND, ME

LOCATION.--Lat 46°37'42", long 68°26'07", Aroostook County, Hydrologic Unit 01010004, on right bank 100 ft (30 m) upstream from highway bridge, 0.8 mi (1.3 km) upstream from mouth, and 1.5 mi (2.4 km) west of Ashland.

DRAINAGE AREA.--330 mi² (855 km²).

PERIOD OF RECORD.--June 1951 to current year.

REVISED RECORDS.--WSP 1501: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 535 ft (163 m), from topographic map.

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

AVERAGE DISCHARGE.--27 years, 573 ft³/s (16.23 m³/s), 23.58 in/yr (599 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,600 ft³/s (470 m³/s) June 29, 1954, gage height, 11.94 ft (3.639 m), from rating curve extended above 7,900 ft³/s (220 m³/s); minimum, 5.4 ft³/s (0.15 m³/s) Sept. 17, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,200 ft³/s (91 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 21	1500	ice jam	*8.35 2.545	May 11	0800	*4820 137	5.48 1.670
Apr. 30	0200	4000 113	4.96 1.512				

Minimum discharge, 45 ft³/s (1.27 m³/s) Aug. 28, gage height, 0.56 ft (0.171 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	876	522	320	265	635	185	255	3430	342	377	152	73
2	1440	482	310	250	575	180	250	2850	343	408	154	64
3	2180	451	300	240	520	175	240	2480	331	358	144	61
4	2090	425	285	230	490	165	235	2390	315	307	188	68
5	1810	430	270	225	460	165	225	2510	292	267	297	66
6	1410	410	260	220	435	160	220	2780	320	235	280	70
7	1130	392	250	220	420	155	215	3150	306	212	248	175
8	921	362	240	245	395	150	215	3490	324	202	215	228
9	798	344	230	300	375	150	215	3940	406	253	189	182
10	1300	344	225	400	365	145	215	4620	524	422	172	170
11	1660	343	220	495	345	145	225	4730	513	466	149	162
12	1630	342	220	610	335	145	245	4260	436	365	131	173
13	1420	343	215	660	315	140	265	3590	366	291	118	175
14	1170	342	210	600	310	140	300	3030	407	246	109	157
15	1080	326	205	530	295	140	350	2590	490	233	100	143
16	1340	306	200	485	285	140	410	2240	484	280	92	138
17	1730	297	200	450	270	140	500	1910	432	289	86	143
18	2760	493	195	420	260	135	600	1640	374	300	79	136
19	2870	695	190	395	250	135	700	1390	336	267	74	123
20	2580	702	190	370	240	135	850	1160	435	276	68	114
21	2160	640	185	350	235	135	1050	1060	773	258	64	107
22	1760	590	185	330	225	140	1250	1110	732	228	60	103
23	1520	536	185	315	220	145	1550	1030	635	211	56	96
24	1320	491	200	305	210	160	1900	873	535	214	53	88
25	1140	467	230	295	205	170	2250	719	465	205	50	84
26	990	451	300	310	200	185	2600	601	406	186	48	81
27	867	427	400	365	195	200	3200	527	361	181	48	78
28	775	285	370	440	190	220	3590	469	358	240	47	73
29	704	347	335	535	---	240	3810	419	332	241	87	70
30	632	332	305	600	---	260	3930	378	313	200	112	70
31	567	---	285	680	---	260	---	340	---	178	89	---
TOTAL	44630	12917	7715	12135	9255	5140	31860	65706	12686	8396	3759	3471
MEAN	1440	431	249	391	331	166	1062	2120	423	271	121	116
MAX	2870	702	400	680	635	260	3930	4730	773	466	297	228
MIN	567	285	185	220	190	135	215	340	292	178	47	61
CFSM	4.36	1.31	.76	1.19	1.00	.50	3.22	6.42	1.28	.82	.37	.35
IN.	5.03	1.46	.87	1.37	1.04	.58	3.59	7.41	1.43	.95	.42	.39
CAL YR 1977 TOTAL	255811			MEAN 701	MAX 6350	MIN 45	CFSM 2.12	IN 28.84				
WTR YR 1978 TOTAL	217670			MEAN 596	MAX 4730	MIN 47	CFSM 1.81	IN 24.54				

ST. JOHN RIVER BASIN

01017000 AROOSTOOK RIVER AT WASHBURN, ME

LOCATION.--Lat 46°46'36", long 68°09'29", Aroostook County, Hydrologic Unit 01010004, on right bank 50 ft (15 m) upstream from Bangor and Aroostook Railroad bridge, 0.1 mi (0.2 km) downstream from Salmon Brook, and 1.0 mi (1.6 km) south of railroad station at Washburn.

DRAINAGE AREA.--1,652 mi² (4,279 km²).

PERIOD OF RECORD.--August 1930 to current year.

REVISED RECORDS.--WSP 951: 1935. WSP 1301: 1933-50 (adjusted monthly runoff). WSP 1501: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 436.40 ft (133.015 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1948, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Considerable regulation by Squa Pan Lake, capacity, 2,893,000,000 ft³ (81,900,000 m³), and by Millinocket Lake, capacity, 1,110,000,000 ft³ (31,400,000 m³) used for power. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--48 years, 2,649 ft³/s (75.02 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43,100 ft³/s (1,220 m³/s) Apr. 30, 1973, gage height, 13.68 ft (4.170 m, present datum); maximum gage height, 20.91 ft (6.373 m) Dec. 24, 1973 (backwater from ice); minimum daily discharge, 75 ft³/s (2.12 m³/s) Feb. 13-15, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,200 ft³/s (544 m³/s) Apr. 30, gage height, 9.20 ft (2.804 m); maximum gage height, 11.93 ft (3.636 m) Apr. 22 (backwater from ice); minimum daily discharge, 210 ft³/s (5.95 m³/s) Aug. 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5370	2740	1460	1400	3350	1060	1260	16800	1520	2020	808	430
2	7440	2540	1500	1320	3200	1040	1240	13800	1420	2510	709	360
3	10700	2370	1550	1270	3050	1050	1180	12300	1320	2380	625	320
4	10100	2350	1480	1220	2900	1210	1130	11800	1230	1910	660	295
5	8180	2240	1390	1180	2780	1270	1100	12000	1150	1510	1100	295
6	6370	2370	1340	1170	2650	1260	1060	12500	1220	1250	1130	295
7	5100	2160	1280	1150	2530	1250	1040	13200	1320	1040	950	484
8	4090	2010	1240	1330	2440	1240	1020	13900	1480	901	800	836
9	3490	1880	1200	1750	2390	1180	1010	14700	1900	1050	690	1040
10	4460	1820	1180	2300	2250	1160	1000	17100	3000	3610	620	909
11	6140	1810	1140	2900	2150	1130	1050	18200	2900	3660	540	878
12	6190	1810	1120	3400	2050	1100	1110	16500	2150	2540	480	850
13	5410	1890	1090	3600	1960	1080	1200	13700	1950	1750	430	814
14	4500	1840	1070	3350	1900	1060	1330	11000	1800	1340	390	764
15	4240	1820	1050	3010	1800	800	1500	9200	2300	1090	355	680
16	5630	1740	1040	2720	1730	780	1750	7200	2150	1080	335	625
17	7610	1690	1020	2500	1660	770	2130	6000	1800	1150	315	580
18	11300	2720	1000	2300	1600	765	2600	5600	1600	1340	300	530
19	11900	4400	980	2150	1530	740	3100	4950	1550	1330	285	490
20	11200	4480	970	2000	1480	735	3850	4550	2050	1310	270	460
21	10100	3890	970	1900	1430	720	5000	5000	2660	1210	260	430
22	8510	3230	970	1800	1380	730	6620	5700	3580	1040	245	400
23	7300	2830	980	1740	1330	760	9300	5300	3090	961	235	370
24	6480	2540	1040	1700	1290	790	10300	4500	2580	1100	225	360
25	5440	2270	1160	1660	1250	830	15500	3600	2180	1330	215	350
26	4680	2230	1400	1720	1220	885	16400	3100	1870	1190	210	335
27	4260	2180	1620	1900	1190	935	17900	2650	1590	962	215	320
28	3870	1380	1800	2180	1170	990	18300	2400	1480	904	220	310
29	3490	1680	1750	2600	---	1050	18500	2150	1510	1030	300	300
30	3300	1400	1610	3050	---	1130	18900	1920	1640	1100	480	295
31	2990	---	1500	3400	---	1200	---	1650	---	943	510	---
TOTAL	199840	70310	38900	65670	55660	30700	167380	272970	57990	46541	14907	15405
MEAN	6446	2344	1255	2118	1988	990	5579	8805	1933	1501	481	514
MAX	11900	4480	1800	3600	3350	1270	18900	18200	3580	3660	1130	1040
MIN	2990	1380	970	1150	1170	720	1000	1650	1150	901	210	295
CAL YR 1977 TOTAL	1241613			MEAN 3402	MAX 26400	MIN 427						
WTR YR 1978 TOTAL	1036273			MEAN 2839	MAX 18900	MIN 210						

NOTE.--No gage-height record Dec. 31 to Feb. 10, May 14 to June 20, Aug. 4 to Sept. 6.

ST. JOHN RIVER BASIN

47

01017100 AROOSTOOK RIVER AT CARIBOU, ME
(National stream-quality accounting network station)

LOCATION.--Lat 46°50'57", long 68°00'12", Aroostook County, Hydrologic Unit 01010004, on left bank of powerhouse intake pool of Maine Public Service Corporation at Caribou Dam.

DRAINAGE AREA.--1,943 mi² (5,030 km²).

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to current year.

WATER TEMPERATURES: October 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1975.

REMARKS.--Interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 194 micromhos July 20, 1976; minimum, 41 micromhos May 5, 9, 1976.

WATER TEMPERATURES: Maximum, 27.5°C Aug. 17, 19, 1978; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 148 micromhos Sept. 2; minimum, 43 micromhos May 11-13.

WATER TEMPERATURES: Maximum, 27.5°C Aug. 17, 19; minimum, 0.0°C on many days during winter periods.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
28...	1045	4550	81	7.0	8.0	8.0	1	--	11.3	97	160	4500
NOV												
28...	1400	1630	98	7.0	-4.0	.0	1	--	--	--	250	340
DEC												
20...	1530	1150	110	6.7	-8.0	.0	2	--	12.0	83	K70	140
JAN												
24...	1530	2000	98	6.6	-2.0	.0	8	--	10.2	71	740	>2000
FEB												
28...	1600	1380	91	6.7	-1.5	.0	1	--	11.6	81	K20	900
MAR												
27...	1100	1110	112	6.7	-3.0	.0	2	--	10.8	75	36	100
APR												
27...	1400	21100	58	6.7	18.0	2.5	7	--	11.4	84	110	>1000
MAY												
10...	1715	20100	--	--	17.5	--	5	--	--	--	270	81
10...	1830	20100	43	6.6	17.5	7.5	3	--	11.6	98	120	97
JUL												
05...	1700	1770	67	7.2	28.5	20.0	--	1.0	8.5	94	81	34
AUG												
02...	1600	835	100	7.3	27.0	22.0	--	6.0	8.4	97	35	K2
30...	1015	563	138	7.8	21.5	17.5	--	1.0	9.4	99	K10	K2
SEP												
18...	1900	622	100	7.4	12.5	12.5	--	4.0	10.6	101	130	<1

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)
OCT												
28...	34	8	11	1.7	1.7	10	.1	.4	32	0	26	5.1
NOV												
28...	38	10	12	1.9	1.8	9	.1	.5	34	0	28	5.4
DEC												
20...	44	12	14	2.2	2.1	9	.1	.9	39	0	32	12
JAN												
24...	38	13	12	1.9	2.1	10	.1	1.0	30	0	25	12
FEB												
28...	32	9	10	1.8	2.0	12	.2	.8	29	0	24	9.3
MAR												
27...	39	9	12	2.1	2.8	13	.2	1.3	36	--	30	11
APR												
27...	21	0	6.7	1.1	1.1	10	.1	.7	30	0	25	9.6
MAY												
10...	17	3	5.2	1.0	1.1	12	.1	.4	17	0	14	--
10...	19	2	5.9	1.0	1.0	10	.1	.4	20	0	16	8.0
JUL												
05...	22	3	7.0	1.2	1.5	12	.1	.5	--	--	19	--
AUG												
02...	44	5	14	2.3	1.8	8	.1	.5	--	--	39	--
30...	60	11	19	3.1	3.2	10	.2	1.0	--	--	49	--
SEP												
18...	42	13	13	2.2	2.3	11	.2	.7	--	--	29	--

ST. JOHN RIVER BASIN

01017100 AROOSTOOK RIVER AT CARIBOU, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+NH4 + ORG. SUSP. TOTAL (MG/L AS N)
OCT 28...	7.2	2.7	.0	5.0	62	45	762	.43	.00	--	--	--
NOV 28...	8.8	3.1	.0	5.4	67	50	295	.46	.01	--	--	--
DEC 20...	8.2	2.5	.0	5.0	71	54	220	.50	.05	--	--	--
JAN 24...	8.4	2.0	.0	5.2	73	47	394	.47	.00	.62	.62	.45
FEB 28...	7.4	2.1	.0	5.1	61	44	227	.37	.02	.30	.32	.01
MAR 27...	8.5	2.1	.0	5.7	60	52	180	.44	.03	.30	.33	.03
APR 27...	5.4	1.2	.0	3.8	52	35	2960	.25	.01	.17	.18	.00
MAY 10...	5.4	1.5	.0	3.4	38	27	2060	.09	.02	.39	.41	.23
10...	5.7	1.2	.0	3.4	40	29	2170	.12	.01	.25	.26	.16
JUL 05...	5.0	1.4	.0	3.3	61	31	292	.05	.01	.22	.23	.00
AUG 02...	5.1	2.4	.0	3.0	68	53	153	.14	.01	.67	.68	.23
30...	7.3	3.7	.0	1.5	92	68	140	.23	.07	.45	.52	.00
SEP 18...	7.8	2.4	.0	3.1	67	49	113	.09	.05	.32	.37	.07

DATE	NITRO- GEN+AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 28...	.31	--	--	.02	.01	--	--	--	--	--	--	--
NOV 28...	.63	--	--	.04	.01	1	1	0	0	0	0	0
DEC 20...	.31	--	--	.02	.01	--	--	--	--	--	--	--
JAN 24...	.17	1.1	4.8	.09	.01	--	--	--	--	--	--	--
FEB 28...	.31	.69	3.1	.03	.02	0	0	0	0	0	0	0
MAR 27...	.30	.77	3.4	.06	.05	--	--	--	--	--	--	--
APR 27...	.28	.43	1.9	.02	.01	--	--	--	--	--	--	--
MAY 10...	.18	.50	2.2	.02	.01	1	0	1	0	0	0	4
10...	.10	.38	1.7	.02	.00	0	0	0	0	0	0	0
JUL 05...	.29	.28	1.2	.01	.01	--	--	--	--	--	--	--
AUG 02...	.45	.82	3.6	.06	.01	--	--	--	--	--	--	--
30...	.55	.75	3.3	.11	.05	2	--	1	0	0	0	4
SEP 18...	.30	.46	2.0	.06	.04	--	--	--	--	--	--	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

[illegible]

ST. JOHN RIVER BASIN

01017100 AROOSTOOK RIVER AT CARIBOU, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MERCURY SUS- PENDE RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT									
28...	--	--	--	--	--	--	--	--	--
NOV									
28...	.0	<.5	0	0	0	0	0	0	10
DEC									
20...	--	--	--	--	--	--	--	--	--
JAN									
24...	--	--	--	--	--	--	--	--	--
FEB									
28...	.1	<.5	0	0	0	1	1	0	0
MAR									
27...	--	--	--	--	--	--	--	--	--
APR									
27...	--	--	--	--	--	--	--	--	--
MAY									
10...	.0	<.5	0	0	0	0	0	0	30
10...	.0	<.5	0	0	0	0	0	0	10
JUL									
05...	--	--	--	--	--	--	--	--	--
AUG									
02...	--	--	--	--	--	--	--	--	--
30...	.0	<.5	0	0	0	0	0	0	10
SEP									
18...	--	--	--	--	--	--	--	--	--

DATE	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT								
28...	--	--	6.3	--	--	7	86	56
NOV								
28...	0	10	--	--	--	7	31	100
DEC								
20...	--	--	12	--	--	11	34	100
JAN								
24...	--	--	17	--	--	7	38	100
FEB								
28...	0	0	--	.6	.2	--	--	--
MAR								
27...	--	--	5.9	--	--	3	9.0	100
APR								
27...	--	--	9.1	--	--	17	968	89
MAY								
10...	10	20	--	10	--	8	434	100
10...	10	0	--	12	.4	6	326	100
JUL								
05...	--	--	7.0	--	--	4	19	100
AUG								
02...	--	--	11	--	--	14	32	100
30...	10	0	--	5.7	.6	15	23	100
SEP								
18...	--	--	8.6	--	--	13	22	100

01017100 AROOSTOOK RIVER AT CARIBOU, ME--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ATHA- ZINE, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)
NOV 28...	ND	ND	ND	ND	ND	ND	ND	ND
FEB 28...	ND	ND	ND	ND	ND	ND	ND	ND
MAY 10...	--	ND	ND	ND	ND	ND	ND	ND

DATE	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)
NOV 28...	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 28...	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY 10...	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	PCB, TOTAL (UG/L)	AROCLOR TOTAL 1254 PCB SERIES (UG/L)	SIMA- ZINE TOTAL COUL- SON COND. (UG/L)
NOV 28...	ND	ND	--	--	--	ND	--	ND
FEB 28...	ND	ND	ND	ND	ND	--	.0	ND
MAY 10...	ND	ND	--	--	--	ND	--	--

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

		PERIPHYTON						
DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS(G/SQ M)		CHLOROPHYLL A	CHLOROPHYLL B	BIOMASS	SAMPLING METHOD	
		DRY WEIGHT	ASH WEIGHT	(MG/SQ M)	(MG/SQ M)	PIGMENT RATIO		
AUG 30	28	7.32	5.98	5.75	.000	233	ARTIFICIAL SUBSTRATE	
SEP 18	19	5.20	3.54	7.44	5.79	223	ARTIFICIAL SUBSTRATE	

01017100 AROOSTOOK RIVER AT CARIBOU, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	NOV 28,77 1400	MAR 27,78 1100	MAY 10,78 1715	MAY 10,78 1830
TOTAL CELLS/ML	350	3900	95	27
DIVERSITY: DIVISION	1.3	0.2	0.7	0.0
..CLASS	1.3	0.2	0.7	0.0
...ORDER	2.0	0.2	0.7	0.0
...FAMILY	2.7	0.2	1.9	1.0
....GENUS	2.7	0.2	1.9	1.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....OOCYSTACEAE								
....ANKISTROUESMUS	8	2	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	--	-
....SCENEDESMACEAE								
....SCENEDESMUS	16	4	--	-	--	-	--	-
....TETRASTRUM	--	-	--	-	--	-	--	-
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	19#	20	--	-
..ZYGEMATALES								
...DESMIDIACEAE								
....CLOSTERIUM	--	-	--	-	--	-	--	-
....COSMARIUM	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	16	4	--	-	--	-	--	-
....MELOSIRA	--	-	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	16	4	120	3	--	-	--	-
....COCconeis	--	-	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	8	2	--	-	--	-	--	-
...FRAGILARIACEAE								
....SYNEDRA	8	2	--	-	--	-	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	8	2	--	-	38#	40	--	-
...MERIDIONACEAE								
....MERIDION	--	-	--	-	--	-	14#	50
...NAVICULACEAE								
....NAVICULA	31	9	--	-	19#	20	--	-
...PINNULARIA	--	-	--	-	--	-	14#	50
...NITZSCHIA								
....NITZSCHIA	16	4	--	-	--	-	--	-
...SURIPELLACEAE								
....SURIPELLA	--	-	--	-	19#	20	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCOCCALES								
....CHROCOCCACEAE								
....AGMENELLUM	--	-	--	-	--	-	--	-
....ANACYSTIS	63#	18	--	-	--	-	--	-
...HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	160#	44	3800#	97	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
....EUGLENA	8	2	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01017100 AROOSTOOK RIVER AT CARIBOU, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	JUL 5.78 1700	AUG 2.78 1600	AUG 30.78 1015	SEP 18.78 1900
TOTAL CELLS/ML	1200	340	5000	2300
DIVERSITY: DIVISION	1.4	1.3	1.0	1.5
..CLASS	1.4	1.3	1.0	1.5
..ORDER	1.4	1.8	1.8	1.9
...FAMILY	2.4	2.3	2.1	2.7
....GENUS	2.7	2.3	2.1	3.1

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....OOCYSTACEAE								
....ANKISTROUESMUS	--	-	5	2	90	2	44	2
....KIRCHNERIELLA	--	-	--	-	--	-	180	8
....SCENEDESMACEAE								
....SCENEDESMUS	140	12	170#	50	1600#	31	400#	17
....TETRASTRUM	--	-	--	-	--	-	180	8
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	20	6	600	12	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	120	2	--	-
..ZYGNEMATALES								
...DESMIDIACEAE								
....CLOSTERIUM	--	-	5	2	--	-	--	-
....COSMARIUM	--	-	7	2	--	-	--	-
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCEAE								
....CYCLOTELLA	--	-	* 0		2200#	45	330	14
....MELOSIRA	--	-	--	-	--	-	22	1
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	250#	22	--	-	--	-	180	8
....COCONEIS	--	-	--	-	120	2	22	1
...CYMBELLACEAE								
....CYMBELLA	23	2	--	-	--	-	--	-
..DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	22	1
...FRAGILARIACEAE								
....SYNEDRA	23	2	22	6	30	1	--	-
...GOMPHONEMACEAE								
....GOMPHONEMA	46	4	* 0		--	-	67	3
...MERIDIONACEAE								
....MERIDION	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	190#	16	15	4	150	3	270	11
....PINNULARIA	--	-	--	-	--	-	--	-
...NITZSCHACEAE								
....NITZSCHIA	69	6	12	4	120	2	67	3
...SURIRELLACEAE								
....SURIRELLA	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCOCCOCCALES								
....CHROCOCCOCCAEAE								
....AGMENELLUM	370#	31	--	-	--	-	--	-
....ANACYSTIS	69	6	--	-	--	-	--	-
...HORMOGONALES								
....OSCILLATORIACEAE								
....OSCILLATORIA	--	-	73#	22	--	-	560#	24
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
....EUGLENA	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01017100 AROOSTOOK RIVER AT CARIBOU, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) * WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	78	63	69	88	86	87	111	106	108	80	78	79
2	78	62	71	93	89	90	107	105	106	81	79	80
3	71	58	63	92	89	91	109	105	107	82	81	82
4	57	56	57	97	92	95	106	101	104	84	82	83
5	59	57	58	97	93	95	102	99	101	89	81	85
6	65	59	62	95	89	93	109	101	105	89	83	86
7	68	64	67	93	87	89	111	106	107	89	83	86
8	73	69	72	96	90	93	113	110	112	90	85	87
9	76	73	75	97	91	93	117	108	112	92	77	86
10	89	76	83	97	93	95	112	107	110	110	95	102
11	84	67	76	99	93	96	117	111	115	100	86	94
12	70	68	69	100	95	98	121	118	120	86	79	82
13	69	61	68	95	91	94	120	115	117	80	77	79
14	73	69	70	97	93	96	115	108	111	81	78	79
15	88	70	78	100	95	97	110	108	109	80	79	80
16	91	80	84	99	91	96	110	105	108	82	80	81
17	81	70	76	97	90	95	109	104	106	84	81	83
18	80	62	71	114	96	108	107	102	104	86	82	84
19	62	59	60	111	84	97	105	102	104	86	83	84
20	61	59	59	84	76	79	107	102	104	91	86	88
21	62	61	62	78	75	77	107	100	103	94	89	91
22	71	62	65	83	78	81	103	99	101	96	89	93
23	71	66	69	86	83	85	110	103	107	94	90	92
24	71	67	70	89	85	87	105	98	102	100	92	96
25	75	70	73	92	88	90	101	91	94	98	91	95
26	80	75	78	94	91	92	102	92	97	97	92	94
27	82	75	80	97	93	95	103	93	97	115	97	108
28	85	78	82	100	95	98	93	83	89	111	100	106
29	86	84	85	113	100	105	84	79	82	107	93	99
30	87	84	85	118	107	112	81	78	80	95	87	91
31	86	84	85	---	---	---	81	78	79	105	85	89
MONTH	91	56	72	118	75	93	121	78	103	115	77	89

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	90	84	87	95	91	93	---	---	---	49	47	48
2	90	84	87	95	89	92	---	---	---	52	47	50
3	90	86	88	96	89	92	---	---	---	54	52	53
4	92	87	90	102	91	95	---	---	---	56	53	54
5	92	88	90	104	93	98	---	---	---	56	52	55
6	92	88	90	104	92	96	---	---	---	53	51	53
7	125	88	96	97	93	95	---	---	---	53	50	52
8	---	---	---	97	93	95	---	---	---	52	49	50
9	---	---	---	99	92	95	---	---	---	49	47	49
10	---	---	---	97	91	94	---	---	---	50	46	48
11	---	---	---	98	93	95	---	---	---	47	43	45
12	---	---	---	101	96	98	---	---	---	43	43	43
13	---	---	---	100	93	96	---	---	---	47	43	45
14	---	---	---	98	93	95	---	---	---	48	46	47
15	---	---	---	99	95	97	---	---	---	50	46	48
16	---	---	---	107	98	102	---	---	---	53	50	51
17	---	---	---	110	106	108	---	---	---	58	52	54
18	---	---	---	111	104	107	---	---	---	59	57	58
19	---	---	---	110	103	106	---	---	---	64	58	61
20	---	---	---	115	105	109	---	---	---	74	60	67
21	---	---	---	116	109	112	---	---	---	79	73	76
22	---	---	---	123	111	115	---	---	---	---	---	---
23	---	---	---	122	112	118	---	---	---	---	---	---
24	---	---	---	122	113	118	---	---	---	---	---	---
25	---	---	---	122	113	116	---	---	---	---	---	---
26	---	---	---	115	111	113	---	---	---	---	---	---
27	---	---	---	113	110	112	---	---	---	---	---	---
28	---	---	---	126	114	120	55	53	54	---	---	---
29	---	---	---	130	126	129	54	50	53	---	---	---
30	---	---	---	129	115	120	52	48	50	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	125	84	90	130	89	104	55	48	52	79	43	53

01017100 AROOSTOOK RIVER AT CARIBOU, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	92	70	77	98	94	96	147	145	146
2	---	---	---	94	77	86	102	98	99	148	129	138
3	---	---	---	77	69	73	98	94	97	132	127	130
4	---	---	---	68	66	67	102	98	99	130	123	127
5	---	---	---	67	64	66	107	103	104	127	122	124
6	---	---	---	76	67	69	105	96	102	127	120	122
7	---	---	---	73	70	72	95	85	90	127	119	122
8	---	---	---	80	74	77	88	86	87	133	127	130
9	85	81	84	87	80	83	89	87	88	133	119	130
10	85	73	81	117	83	99	96	89	92	117	97	106
11	73	61	66	94	82	87	97	94	95	97	92	95
12	62	59	60	85	82	83	100	97	98	96	91	93
13	61	59	60	86	81	84	102	99	101	97	93	96
14	67	61	64	93	86	89	109	102	105	97	93	95
15	73	68	70	101	93	97	110	107	108	97	96	97
16	72	67	69	105	100	103	113	109	111	100	96	99
17	67	65	66	109	105	107	118	113	115	101	98	100
18	66	64	65	111	107	109	122	115	118	101	99	100
19	70	65	67	117	102	105	122	118	120	106	100	103
20	72	70	71	102	97	99	127	120	123	106	104	105
21	73	69	71	102	99	101	128	122	125	106	104	105
22	69	54	60	102	100	101	128	125	127	111	106	108
23	54	54	54	105	101	102	128	126	127	111	107	109
24	57	54	56	113	104	109	132	127	129	110	103	106
25	58	56	57	111	107	109	133	131	132	109	103	105
26	63	57	59	108	96	101	134	129	132	118	109	113
27	70	60	62	96	93	95	135	131	134	126	112	117
28	67	61	64	99	93	96	141	135	137	115	110	113
29	71	67	69	104	100	103	143	140	141	117	110	113
30	71	69	70	105	100	104	142	140	141	124	109	113
31	---	---	---	101	94	97	147	141	143	---	---	---
MONTH	85	54	66	117	64	92	147	85	113	148	91	112
YEAR	148	43	91									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.0	9.5	9.5	4.5	4.0	4.0	.0	.0	.0	.0	.0	.0
2	10.0	9.0	9.5	4.0	4.0	4.0	.0	.0	.0	.0	.0	.0
3	10.0	9.5	9.5	5.0	4.0	4.5	.0	.0	.0	.0	.0	.0
4	9.5	9.0	9.0	6.5	5.0	5.5	.0	.0	.0	.0	.0	.0
5	9.0	8.5	9.0	6.0	5.5	6.0	.0	.0	.0	.0	.0	.0
6	9.0	9.0	9.0	5.5	4.5	5.0	.0	.0	.0	.0	.0	.0
7	9.0	8.0	8.5	4.5	4.0	4.0	.0	.0	.0	.0	.0	.0
8	8.0	7.0	7.5	4.0	3.0	3.0	.0	.0	.0	.0	.0	.0
9	7.5	7.0	7.0	4.0	2.5	3.0	.0	.0	.0	.0	.5	.0
10	8.5	7.0	8.0	5.5	4.0	5.0	.0	.0	.0	.0	.5	.0
11	9.0	8.0	8.5	7.5	5.5	7.0	.0	.0	.0	.5	.0	.0
12	9.0	8.0	8.5	7.5	6.0	6.5	.0	.0	.0	.0	.0	.0
13	8.0	7.0	8.0	6.0	4.0	5.0	.0	.0	.0	.0	.0	.0
14	7.5	6.5	7.0	3.5	2.5	3.0	.0	.0	.0	.0	.0	.0
15	6.5	6.0	6.5	2.5	1.0	1.5	.0	.0	.0	.0	.0	.0
16	6.0	6.0	6.0	1.0	.5	1.0	.0	.0	.0	.0	.0	.0
17	6.0	5.5	6.0	2.0	1.0	1.5	.0	.0	.0	.0	.0	.0
18	6.5	6.0	6.5	3.0	2.0	2.5	.0	.0	.0	.0	.0	.0
19	7.0	6.5	6.5	3.0	2.0	2.0	.0	.0	.0	.0	.0	.0
20	6.5	6.5	6.5	2.0	1.0	1.5	.0	.0	.0	.0	.0	.0
21	6.5	6.5	6.5	1.0	.5	.5	.0	.0	.0	.0	.0	.0
22	6.5	6.0	6.5	.5	.5	.5	.0	.0	.0	.0	.0	.0
23	6.0	4.5	5.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
24	5.0	4.0	4.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
25	4.5	3.5	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26	6.0	4.5	5.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
27	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
28	8.0	7.0	8.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
29	7.5	6.5	7.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
30	6.5	5.5	6.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	5.5	4.5	5.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	10.0	3.5	7.0	7.5	.0	2.5	.0	.0	.0	.5	.0	.0

01017100 AROOSTOOK RIVER AT CARIBOU, ME--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	---	---	---	2.0	1.5	1.5
2	.0	.0	.0	.0	.0	.0	---	---	---	3.5	1.5	2.5
3	.0	.0	.0	.5	.0	.0	---	---	---	4.0	3.0	3.5
4	.0	.0	.0	.0	.0	.0	---	---	---	5.0	3.5	4.5
5	.0	.0	.0	.0	.0	.0	---	---	---	6.5	4.0	5.0
6	.0	.0	.0	.0	.0	.0	---	---	---	7.0	5.5	6.0
7	.0	.0	.0	.0	.0	.0	---	---	---	7.5	6.0	7.0
8	.0	.0	.0	.0	.0	.0	---	---	---	8.0	6.5	7.5
9	.0	.0	.0	.0	.0	.0	---	---	---	8.0	7.5	7.5
10	.0	.0	.0	.0	.0	.0	---	---	---	7.5	7.0	7.0
11	.0	.0	.0	.0	.0	.0	---	---	---	8.0	6.5	7.0
12	.0	.0	.0	.0	.0	.0	---	---	---	9.5	7.5	8.5
13	.0	.0	.0	.0	.0	.0	---	---	---	10.0	8.5	9.5
14	.0	.0	.0	.0	.0	.0	---	---	---	11.0	10.0	11.0
15	.0	.0	.0	.0	.0	.0	---	---	---	13.5	11.0	12.5
16	.0	.0	.0	.0	.0	.0	---	---	---	13.0	12.5	13.0
17	.0	.0	.0	.0	.0	.0	---	---	---	13.0	12.5	12.5
18	.0	.0	.0	.0	.0	.0	---	---	---	12.5	12.0	12.5
19	.0	.0	.0	.0	.0	.0	---	---	---	12.5	11.0	12.0
20	.0	.0	.0	.0	.0	.0	---	---	---	22.0	10.5	17.5
21	.0	.0	.0	.0	.0	.0	---	---	---	22.5	17.0	20.0
22	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
23	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
24	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
25	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
26	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
27	.0	.0	.0	.0	.0	.0	---	---	---	---	---	---
28	.0	.0	.0	.0	.0	.0	3.0	1.5	2.5	---	---	---
29	---	---	---	.0	.0	.0	4.0	2.0	3.0	---	---	---
30	---	---	---	.0	.0	.0	3.5	2.0	2.5	---	---	---
31	---	---	---	.0	.0	.0	---	---	---	---	---	---
MONTH	.0	.0	.0	.5	.0	.0	4.0	1.5	2.5	22.5	1.5	9.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	21.0	17.5	19.0	23.0	22.5	23.0	19.5	16.5	18.0
2	---	---	---	18.0	17.0	17.5	22.5	21.5	22.0	19.5	18.0	19.0
3	---	---	---	20.0	18.0	18.5	21.5	19.0	20.5	19.0	18.5	18.5
4	---	---	---	21.0	20.0	20.5	22.5	21.0	22.0	19.0	18.5	18.5
5	---	---	---	22.0	21.0	21.5	22.5	21.5	22.0	19.0	18.5	19.0
6	---	---	---	23.5	22.0	22.5	22.5	21.5	22.0	18.5	17.5	18.0
7	---	---	---	24.0	22.5	23.5	23.0	22.0	22.5	17.5	14.5	16.0
8	---	---	---	24.5	23.5	24.0	23.5	22.5	23.0	14.5	12.0	13.0
9	18.5	18.0	18.0	26.5	24.5	25.5	24.0	23.0	23.5	13.0	12.0	12.5
10	18.0	16.0	16.5	24.5	22.0	23.0	24.0	23.5	24.0	13.5	12.5	13.0
11	17.0	16.0	16.5	22.0	20.5	21.5	24.0	23.0	23.5	13.5	12.5	13.0
12	19.5	17.0	18.0	20.5	20.0	20.5	24.5	22.5	23.5	13.5	12.5	13.0
13	20.5	20.0	20.5	21.0	20.5	20.5	24.5	23.0	23.5	13.5	12.0	13.0
14	21.0	20.0	20.5	22.5	21.5	22.0	24.0	23.5	24.0	12.5	11.5	12.0
15	19.5	16.0	17.5	22.5	22.0	22.0	26.0	23.5	24.5	13.0	12.0	12.5
16	16.5	15.0	15.5	22.0	21.0	21.5	26.5	24.0	25.0	12.0	11.5	11.5
17	19.0	17.0	17.5	21.5	21.0	21.5	27.5	25.0	26.0	12.5	11.0	11.5
18	19.5	19.0	19.0	22.0	21.0	21.5	26.5	25.5	26.0	12.5	11.5	12.0
19	19.5	19.0	19.5	23.5	22.5	23.0	27.5	25.0	26.0	12.0	11.5	12.0
20	20.0	19.5	20.0	23.0	22.5	23.0	26.5	24.0	24.5	13.5	11.5	12.0
21	20.0	18.5	19.5	24.0	23.0	23.5	24.5	23.0	24.0	13.5	12.0	12.5
22	21.0	17.5	19.5	25.0	24.0	24.5	23.5	21.5	22.5	14.0	12.5	13.5
23	19.5	17.5	18.0	26.5	25.0	26.0	23.5	22.0	22.5	15.0	13.5	14.0
24	19.5	18.5	19.0	25.5	24.0	25.0	22.0	21.0	21.5	14.0	13.0	13.5
25	20.5	18.5	19.0	24.5	23.5	24.0	21.0	19.5	20.5	14.0	13.0	13.5
26	21.5	20.5	21.0	25.0	23.5	24.0	19.5	19.0	19.5	13.5	13.0	13.0
27	22.5	22.0	22.0	25.0	24.0	24.5	19.0	18.5	19.0	13.0	12.0	12.5
28	23.0	22.0	22.5	25.5	24.0	25.0	19.0	18.0	18.5	12.5	11.5	12.0
29	24.0	23.0	23.5	25.0	23.5	24.5	18.5	16.5	18.0	12.0	11.0	11.5
30	24.0	21.0	23.0	23.5	23.0	23.5	17.0	16.0	16.5	11.0	10.0	10.5
31	---	---	---	24.0	22.5	23.0	17.5	16.5	17.0	---	---	---
MONTH	24.0	15.0	19.5	26.5	17.0	22.5	27.5	16.0	22.5	19.5	10.0	14.0
YEAR	27.5	.0	8.5									

01017900 MARLEY BROOK NEAR LUDLOW, ME

LOCATION.--Lat 46°08'42", long 68°03'42", Aroostook County, Hydrologic Unit 01010005, on left bank at upstream entrance of culvert under U.S. Route 2, 2,200 ft (671 m) upstream from mouth, and 1.1 mi (1.8 km) west of Ludlow.

DRAINAGE AREA.--1.47 mi² (3.81 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 610 ft (186 m), from topographic map.

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

AVERAGE DISCHARGE.--14 years (water years 1965-78), 2.75 ft³/s (0.078 m³/s), 25.40 in/yr (645 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 335 ft³/s (9.49 m³/s) July 5, 1973, gage height, 10.36 ft (3.158 m); minimum discharge, 0.01 ft³/s (<0.001 m³/s) Sept. 8, 11-14, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 25 ft³/s (0.71 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	0800	*66 1.87	5.63 1.716	Jan. 9	2215	38 1.08	4.98 1.518
Oct. 17	1515	35 0.99	4.91 1.497	Apr. 26	1915	34 0.96	4.89 1.490

Minimum discharge, 0.03 ft³/s (<0.001 m³/s) Aug. 19, Sept. 1-6, gage height, 3.48 ft (1.061 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	1.9	1.9	2.5	3.1	.56	4.0	9.2	.42	.91	.07	.04
2	26	1.4	2.0	2.2	2.5	.54	3.5	8.5	.42	1.2	.07	.03
3	7.1	1.3	2.3	2.0	2.3	.53	2.9	9.8	.49	.48	.07	.03
4	3.9	2.5	2.1	1.8	2.1	.52	2.6	9.9	.51	.26	.14	.03
5	2.3	3.7	1.1	1.7	1.9	.51	2.5	9.2	.65	.19	.17	.03
6	2.6	2.3	.98	1.6	1.6	.50	2.5	8.4	1.8	.17	.11	.09
7	2.6	1.8	.91	1.5	1.5	.49	2.4	7.7	.81	.17	.07	.54
8	2.3	1.7	.90	1.4	1.4	.48	2.7	6.7	3.0	.14	.06	.17
9	2.4	1.5	.87	5.0	1.3	.48	2.7	8.1	3.3	.14	.06	.11
10	8.1	2.2	.85	25	1.2	.48	2.8	8.2	2.9	.17	.06	.09
11	4.7	3.2	.82	14	1.1	.48	3.6	5.3	1.7	.17	.06	.07
12	3.3	3.1	.80	8.5	1.0	.48	5.8	3.8	1.3	.14	.06	.17
13	3.0	2.8	.78	5.9	.97	.48	6.7	3.0	.92	.11	.06	.11
14	2.2	3.7	.76	4.1	.93	.48	9.1	2.5	1.5	.09	.06	.09
15	7.5	2.6	.75	3.6	.89	2.0	10	2.3	1.5	.09	.06	.07
16	11	2.4	.74	3.0	.85	1.5	11	2.0	1.2	.07	.06	.07
17	18	3.8	.73	2.6	.82	1.1	12	2.0	1.1	.07	.06	.07
18	17	13	.72	2.4	.79	.96	13	2.6	1.1	.07	.05	.07
19	8.6	7.4	.72	2.2	.77	.83	16	2.0	.57	.07	.04	.06
20	11	4.7	.72	2.0	.74	.79	19	1.7	2.8	.07	.04	.05
21	11	3.9	.72	1.9	.71	.70	22	3.6	2.5	.09	.04	.05
22	7.2	4.0	2.0	1.8	.69	3.6	19	3.4	1.0	.14	.04	.05
23	6.1	3.1	6.7	1.7	.66	4.1	17	2.0	1.1	.60	.04	.05
24	4.5	3.0	5.4	1.6	.65	2.5	16	1.5	.59	.48	.04	.05
25	4.0	2.9	5.4	1.6	.63	2.0	21	1.1	.37	.17	.04	.05
26	3.5	2.9	17	4.0	.61	1.7	23	.96	.22	.11	.04	.06
27	2.9	3.5	11	14	.60	1.8	21	.80	.15	.11	.05	.06
28	2.8	2.4	7.0	8.2	.58	6.6	20	.66	.54	.26	.06	.06
29	2.2	2.0	5.5	5.0	---	6.0	19	.58	.24	.14	.11	.06
30	1.9	1.9	4.0	4.1	---	5.1	15	.42	.23	.11	.06	.05
31	1.9	---	3.1	3.8	---	4.4	---	.42	---	.09	.04	---
TOTAL	194.4	96.6	89.27	140.7	32.89	52.69	327.8	128.34	34.93	7.08	1.99	2.53
MEAN	6.27	3.22	2.88	4.54	1.17	1.70	10.9	4.14	1.16	.23	.064	.084
MAX	26	13	17	25	3.1	6.6	23	9.9	3.3	1.2	.17	.54
MIN	1.9	1.3	.72	1.4	.58	.48	2.4	.42	.15	.07	.04	.03
CFSM	4.27	2.19	1.96	3.09	.80	1.16	7.42	2.82	.79	.16	.04	.06
IN.	4.92	2.44	2.26	3.56	.83	1.33	8.29	3.25	.88	.18	.05	.06
CAL YR 1977	TOTAL	1262.12	MEAN	3.46	MAX	28	MIN	.01	CFSM	2.35	IN	31.92
WTR YR 1978	TOTAL	1109.22	MEAN	3.04	MAX	26	MIN	.03	CFSM	2.07	IN	28.05

ST. JOHN RIVER BASIN

01018000 MEDUXNEAG RIVER NEAR HOULTON, ME

LOCATION.--Lat 46°06'17", long 67°52'00", Aroostook County, Hydrologic Unit 01010005, on right bank 0.3 mi (0.5 km) downstream from South Branch and 2.0 mi (3.2 km) upstream from Houlton.

DRAINAGE AREA.--175 mi² (453 km²).

PERIOD OF RECORD.--October 1940 to current year. October 1940 monthly discharge only, published in WSP 1301.

REVISED RECORDS.--WSP 1031: 1944.

GAGE.--Water-stage recorder. Datum of gage is 333.92 ft (101.779 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period and period of no gage-height record, Aug. 1 to Sept. 5, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--38 years, 294 ft³/s (8.326 m³/s), 22.81 in/yr (579 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,640 ft³/s (188 m³/s) Apr. 3, 1976, gage height, 9.98 ft (3.042 m); maximum gage height, 10.83 ft (3.301 m) Mar. 27, 1953 (backwater from ice); minimum discharge, 3.6 ft³/s (0.10 m³/s) Sept. 19, 1946, gage height, 2.09 ft (0.637 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,100 ft³/s (59 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 12	0200	ice jam	*6.81 2.076	Apr. 27	0200	2280 64.6	6.14 1.871
Apr. 22	2100	*2450 69.4	6.30 1.920				

Minimum discharge not determined, occurred during period of no gage-height record; minimum daily, 6.6 ft³/s (0.19 m³/s) Sept. 5.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	540	249	188	165	420	120	360	1480	96	70	27	11
2	912	232	194	150	370	120	310	1150	89	77	26	9.5
3	1390	220	208	135	345	115	280	1050	84	81	30	8.0
4	1080	222	194	125	315	115	255	1030	81	70	40	7.0
5	700	289	237	115	295	110	245	1010	77	59	34	6.6
6	493	270	160	115	280	110	230	962	102	50	28	8.0
7	387	239	150	110	260	110	225	904	102	44	24	24
8	318	215	140	170	245	110	220	844	118	41	20	28
9	280	202	130	270	230	110	250	831	182	39	18	25
10	450	200	120	470	220	105	300	973	212	37	16	23
11	540	211	115	660	215	105	370	879	175	55	15	22
12	473	220	110	480	200	105	460	713	134	54	13	25
13	408	225	105	420	195	105	600	585	104	44	12	22
14	346	297	99	365	185	120	740	487	96	37	11	20
15	475	278	96	325	175	150	920	420	102	34	11	19
16	857	252	92	295	170	175	1020	362	94	34	10	17
17	1060	250	89	270	165	170	1150	340	81	39	9.8	16
18	1430	531	86	250	160	155	1290	353	68	41	9.7	14
19	1280	732	83	235	155	135	1490	331	59	37	9.6	12
20	1020	607	82	215	150	125	1820	300	68	36	9.5	11
21	995	479	115	210	145	135	2190	337	164	33	9.4	10
22	879	414	175	200	140	160	2350	435	190	50	9.1	11
23	753	362	160	190	135	225	2300	369	179	79	8.7	9.8
24	634	323	155	185	135	320	2040	296	147	182	8.3	9.2
25	534	302	175	220	130	245	2000	244	118	115	7.8	9.8
26	472	260	270	330	125	205	2190	201	99	74	8.4	9.8
27	429	245	400	460	125	250	2220	186	81	57	9.2	9.8
28	377	220	310	600	120	370	2120	161	74	48	14	10
29	335	210	250	580	---	600	1960	143	74	44	19	9.6
30	302	243	215	520	---	520	1840	124	68	37	17	9.6
31	274	---	185	465	---	410	---	107	---	30	13	---
TOTAL	20423	8999	5088	9300	5805	5910	33745	17607	3318	1728	497.5	426.7
MEAN	659	300	164	300	207	191	1125	568	111	55.7	16.0	14.2
MAX	1430	732	400	660	420	600	2350	1480	212	182	40	28
MIN	274	200	82	110	120	105	220	107	59	30	7.8	6.6
CFSM	3.77	1.71	.94	1.71	1.18	1.09	6.43	3.25	.63	.32	.09	.08
IN.	4.34	1.91	1.08	1.98	1.23	1.26	7.17	3.74	.71	.37	.11	.09

CAL YR 1977 TOTAL 134638.0 MEAN 369 MAX 2910 MIN 29 CFSM 2.11 IN 28.62
WTR YR 1978 TOTAL 112847.2 MEAN 309 MAX 2350 MIN 6.6 CFSM 1.77 IN 23.99

01018500 ST. CROIX RIVER AT VANCEBORO, ME
(International gaging station)

LOCATION.--Lat 45°34'08", long 67°25'47", Washington County, Hydrologic Unit 01050001, on right bank at international highway bridge in Vanceboro and 400 ft (120 m) downstream from outlet of Spednik Lake.

DRAINAGE AREA.--417 mi² (1,080 km²).

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 1431: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 367.75 ft (112.090 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of doubtful or no gage-height record, which are fair. Flow regulated by Chiputneticook Lakes, combined usable capacity, about 13,200,000,000 ft³ (374,000,000 m³). Final regulation is at Spednik Lake Dam about 400 ft (120 m) upstream. Several observations of water temperature and specific conductance were made during the year.

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

AVERAGE DISCHARGE.--50 years, 715 ft³/s (20.25 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,670 ft³/s (189 m³/s) Apr. 4, 1976, gage height, 10.88 ft (3.316 m); minimum daily, 1.9 ft³/s (0.054 m³/s) Oct. 22, Nov. 4, 1936, when flow was held back by cofferdam during repairs to dam just upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,510 ft³/s (99.4 m³/s) Feb. 7, gage height, 8.46 ft (2.579 m); minimum daily, 220 ft³/s (6.23 m³/s) Oct. 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	285	528	510	345	1990	2320	485	330	1530	721	357	529
2	285	524	510	346	1980	2250	485	330	1700	716	357	529
3	254	524	510	346	3480	2180	480	330	1810	601	357	525
4	220	524	510	458	3470	2110	480	330	1800	416	357	525
5	227	524	510	506	3460	2050	490	335	1770	413	357	525
6	225	519	510	645	3450	1990	490	335	1740	413	357	517
7	225	520	510	666	3440	1920	490	394	1720	410	357	517
8	225	528	510	839	3420	1870	490	456	1710	372	394	517
9	225	528	510	924	3400	1800	490	460	1520	372	447	513
10	225	528	510	1060	3400	1730	490	461	1420	372	447	513
11	225	528	510	1060	3390	1660	480	474	1390	369	502	509
12	226	528	512	1060	3390	1620	475	491	1380	369	536	509
13	235	528	515	1200	3370	1240	420	509	1370	369	536	513
14	233	528	511	1350	3350	930	320	517	1370	369	536	506
15	233	528	510	1600	3310	764	320	634	1360	369	548	506
16	235	528	510	1590	3300	764	320	692	1350	369	560	502
17	233	528	510	1580	3200	764	320	941	1330	366	560	502
18	236	528	510	1580	3150	764	320	1200	1320	366	560	498
19	239	528	510	1570	3050	764	320	1190	1190	366	560	494
20	240	528	510	1560	2970	764	320	1160	1030	366	556	494
21	245	528	543	1550	2880	760	320	1140	975	363	556	491
22	245	528	580	1540	2800	605	325	1140	836	363	556	437
23	248	523	531	1530	2700	480	325	1130	659	363	552	390
24	248	513	431	1950	2620	480	325	1440	581	363	552	387
25	246	510	431	2550	2600	480	325	1630	581	363	548	320
26	246	510	377	2560	2520	480	330	1620	581	363	540	285
27	248	522	336	2620	2450	480	330	1600	479	360	540	282
28	248	521	336	2680	2400	480	330	1590	416	360	532	282
29	246	510	336	2000	---	480	330	1580	416	357	532	285
30	246	510	338	2000	---	485	330	1560	621	357	532	282
31	402	---	338	2000	---	485	---	1540	---	357	529	---
TOTAL	7599	15702	14785	43265	84940	35949	11755	27539	35955	12453	15210	13684
MEAN	245	523	477	1396	3034	1160	392	888	1199	402	491	456
MAX	402	528	580	2680	3480	2320	490	1630	1810	721	560	529
MIN	220	510	336	345	1980	480	320	330	416	357	357	282
CAL YR 1977 TOTAL	305579		MEAN 837	MAX 3840	MIN 220							
WTR YR 1978 TOTAL	318836		MEAN 874	MAX 3480	MIN 220							

NOTE.--Doubtful or no gage-height record Jan. 29 to Feb. 14, Mar. 23 to May 16.

ST. CROIX RIVER BASIN

01019000 GRAND LAKE STREAM AT GRAND LAKE STREAM, ME

LOCATION.--Lat 45°10'23", long 67°46'06", Washington County, Hydrologic Unit 01050001, on left bank at Big Falls, 0.5 mi (0.8 km) southeast of village of Grand Lake Stream, and 0.8 mi (1.3 km) downstream from outlet dam of Grand Lake.

DRAINAGE AREA.--224 mi² (580 km²).

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 971: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 273.96 ft (83.503 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period and periods of no gage-height record Oct 1 to Nov. 7, Jan. 13 to Mar. 1, which are fair. Flow completely regulated by Grand Lake, 0.8 mi (1.3 km) upstream, and other lakes, combined usable capacity, about 8,250,000,000 ft³ (234,000,000 m³). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--50 years, 396 ft³/s (11.21 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,840 ft³/s (80.4 m³/s) June 12, 1952, gage height, 6.35 ft (1.935 m); minimum daily, 5 ft³/s (0.14 m³/s) Dec. 3-6, 11, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 1,240 ft³/s (35.1 m³/s) Mar. 1, gage height, 4.28 ft (1.305 m), but may have been higher during period of no gage-height record Jan. 13 to Mar. 1; maximum gage height, 4.98 ft (1.518 m) Dec. 13 (backwater from ice); minimum daily discharge, 198 ft³/s (5.61 m³/s) Aug. 2, 6, 7.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	275	353	241	860	1200	365	305	569	274	199	248
2	230	335	436	241	900	1200	365	307	566	273	198	248
3	220	340	436	241	950	1140	360	309	567	271	201	247
4	220	340	436	241	950	1130	360	309	569	269	201	248
5	220	340	436	346	950	1120	360	308	566	267	200	245
6	220	340	437	483	950	1080	360	307	565	267	198	243
7	220	340	441	540	950	1110	360	306	562	250	198	245
8	220	344	438	540	950	1130	355	305	411	214	219	243
9	220	344	437	567	950	1100	355	307	286	213	238	244
10	220	395	443	590	950	1080	350	306	287	213	238	243
11	220	437	445	440	950	1070	335	306	284	213	235	241
12	220	436	445	300	950	1020	310	305	283	212	233	244
13	220	439	445	260	1000	1020	310	305	281	210	257	244
14	220	439	445	260	1000	964	310	305	283	210	274	241
15	220	436	445	260	1000	900	310	305	284	210	271	241
16	220	428	445	260	1150	859	310	305	282	210	267	241
17	220	423	442	250	1150	847	310	305	281	210	267	241
18	220	432	441	250	1150	845	310	295	281	209	267	240
19	220	436	480	250	1150	817	310	293	280	207	265	238
20	220	433	516	400	1150	794	310	291	281	207	264	238
21	215	423	464	400	1220	804	310	292	279	207	262	237
22	215	352	447	400	1220	665	310	292	277	207	261	258
23	215	228	356	400	1220	520	310	293	277	207	259	280
24	215	225	228	700	1220	447	310	292	278	206	256	278
25	215	225	237	870	1220	445	310	291	277	204	253	277
26	215	225	250	870	1220	441	310	291	275	204	251	275
27	215	228	241	860	1200	445	310	291	274	202	251	272
28	215	226	241	860	1200	459	306	291	284	202	249	270
29	215	225	241	860	---	458	309	291	287	201	248	271
30	215	225	241	860	---	457	305	291	274	201	248	322
31	215	---	241	860	---	430	---	390	---	200	248	---
TOTAL	6795	10314	12029	14900	29730	25997	9805	9389	10550	6850	7476	7603
MEAN	219	344	388	481	1062	839	327	303	352	221	241	253
MAX	240	439	516	870	1220	1200	365	390	569	274	274	322
MIN	215	225	228	241	860	430	305	291	274	200	198	237
CAL YR 1977	TOTAL	181695	MEAN 498	MAX	1370	MIN 215						
WTR YR 1978	TOTAL	151438	MEAN 415	MAX	1220	MIN 198						

01020000 ST. CROIX RIVER NEAR BAILEYVILLE, ME
(International gaging station)

LOCATION.--Lat 45°15'55", long 67°28'36", Washington County, Hydrologic Unit 01050001, in township of Baileyville, on right bank 700 ft (213 m) downstream from powerhouse of Georgia-Pacific Corporation at Grand Falls, and 8 mi (13 km) upstream from village of Woodland.

DRAINAGE AREA.--1,320 mi² (3,419 km²).

PERIOD OF RECORD.--October 1919 to current year. Monthly discharge only for some periods, published in WSP 1301.

REVISED RECORDS.--WSP 1231: 1922.

GAGE.--Water-stage recorder. Datum of gage is 148.8 ft (45.42 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Chiputneticook Lakes, Grand and other lakes, combined capacity, about 25,000,000,000 ft³ (708,000,000 m³). Final regulation is at Grand Falls Dam about 700 ft (213 m) upstream. Several observations of water temperature and specific conductance were made during the year.

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

AVERAGE DISCHARGE.--59 years, 2,322 ft³/s (65.8 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 23,300 ft³/s (660 m³/s) May 1, 1923, gage height, 13.90 ft (4.237 m); minimum daily, 64 ft³/s (1.81 m³/s) Oct. 13, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,030 ft³/s (256 m³/s) Jan. 31, gage height, 6.58 ft (2.006 m); minimum daily, 657 ft³/s (18.6 m³/s) Sept. 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1890	1690	1730	4380	8710	4100	3910	5460	2550	1040	811	794
2	3320	1840	1710	3860	8260	4040	3910	4640	2780	2170	824	794
3	5130	1790	1660	3420	7060	3770	3880	4340	2390	1250	1010	794
4	5010	1840	1650	3040	7210	3640	3850	4330	2390	1020	901	720
5	3710	1850	1650	3000	7030	3630	3780	3700	2630	913	885	856
6	3040	1850	1650	2970	6740	3580	3560	3040	2390	1340	876	772
7	2990	1820	1650	2960	6480	3560	3340	3040	2390	1370	872	766
8	2960	1740	1730	2950	6280	3390	3020	2810	2330	1700	856	999
9	2570	1730	1790	2070	6520	3090	3060	2570	2160	1370	866	1330
10	2630	1920	1770	3530	6410	3000	3070	2150	2360	1050	845	759
11	2710	2040	1740	5070	6280	2870	3490	2400	2350	1070	822	718
12	2580	2040	1750	6240	6140	2680	3830	2530	2410	893	797	657
13	2470	2040	1770	6580	5880	3010	3880	2490	2600	955	796	767
14	2300	1850	1930	6440	5560	2840	4440	2580	2860	950	780	816
15	2320	1770	2090	6030	5600	2660	4730	2540	2410	914	779	835
16	2410	1760	2100	5400	5640	2710	4760	2350	2250	901	785	855
17	3400	1530	2090	4890	5620	2860	5150	2220	2260	881	783	855
18	5210	1800	2090	4880	5560	2850	5600	2110	2310	863	706	855
19	5800	1920	2080	4850	5530	2840	5620	2410	2280	867	798	855
20	5660	1910	2110	4420	5340	2830	6830	2630	2280	863	787	855
21	4570	1790	2180	4180	5030	2840	8150	2630	2140	865	800	925
22	4190	1790	2150	4160	4980	2860	8900	2700	1670	869	755	702
23	4720	1800	2020	4130	4930	3010	8870	2630	1230	880	764	768
24	4220	1790	2960	4090	4410	3090	8470	2460	1140	1180	774	768
25	3340	1800	3270	4090	4180	3070	8050	2390	1140	831	785	937
26	2380	1790	4780	5500	4180	3050	7900	2490	1030	810	794	930
27	2010	1800	5440	6880	4190	3030	7770	2390	912	830	794	927
28	1750	1810	5710	7290	4170	3040	7090	2390	881	819	794	926
29	2090	1790	5690	8290	---	3060	6740	2420	1320	827	794	912
30	2100	1770	5460	8870	---	3080	6200	2420	993	821	794	879
31	1980	---	5250	8900	---	3440	---	2390	---	813	794	---
TOTAL	101460	54660	81650	153360	163920	97520	161850	87650	60836	31925	25221	25326
MEAN	3273	1822	2634	4947	5854	3146	5395	2827	2028	1030	814	844
MAX	5800	2040	5710	8900	8710	4100	8900	5460	2860	2170	1010	1330
MIN	1750	1530	1650	2070	4170	2660	3020	2110	881	810	706	657
CAL YR 1977 TOTAL	1091615	MEAN	2991	MAX	8270	MIN	426					
WTR YR 1978 TOTAL	1045378	MEAN	2864	MAX	8900	MIN	657					

ST. CROIX RIVER BASIN

01021000 ST. CROIX RIVER AT BARING, ME
(International gaging station)

LOCATION.--Lat 45°08'12", long 67°19'05", Washington County, Hydrologic Unit 01050001, on right bank at site of destroyed international highway bridge at Baring.

DRAINAGE AREA.--1,370 mi² (3,548 km²).

PERIOD OF RECORD.--Discharge: October 1958 to current year.
Water temperatures: October 1959 to September 1976.

GAGE.--Water-stage recorder. Datum of gage is 66.231 ft (20.187 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Chiputneticook Lakes, Grand, and other lakes, combined capacity, about 25,000,000 ft³ (708,000,000 m³). Final regulation is at Woodland 5.6 mi (9.0 km) upstream from gage. Several observations of water temperature and specific conductance were made during the year.

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

AVERAGE DISCHARGE.--19 years (water years 1960-78), 2,708 ft³/s (76.69 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft³/s (666 m³/s) May 29, 1961, gage height, 12.76 ft (3.889 m); minimum daily, 262 ft³/s (7.42 m³/s) Oct. 20, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,960 ft³/s (282 m³/s) Apr. 21, gage height, 9.72 ft (2.963 m); minimum daily, 667 ft³/s (18.9 m³/s) Aug. 18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2160	1980	1720	4860	9270	4110	4330	5600	2600	885	802	776
2	3650	1920	1760	3890	8890	4220	4350	4790	2810	2000	804	770
3	5920	1760	1770	3530	7620	3880	4210	4410	2450	1620	825	766
4	5490	1850	1750	3060	7640	3630	4100	4410	2450	1140	832	695
5	4250	1810	1720	3060	7450	3640	4170	3810	2700	994	811	820
6	2990	1790	1760	2990	7120	3720	3880	3010	2500	1010	815	967
7	3140	1820	1740	3150	6880	3720	3610	3010	2420	1040	810	949
8	2970	1810	1680	2970	6920	3420	3240	2980	2370	1540	799	889
9	2810	1790	1690	2850	6330	3090	3280	2440	2030	1770	802	958
10	2860	1910	1730	4180	6640	2990	3330	2310	2290	839	803	940
11	2870	1960	1800	5430	6460	2880	3760	2450	2420	848	805	888
12	2700	2030	1850	6760	6320	2660	4360	2510	2560	925	787	898
13	2800	2070	1900	7170	6100	2960	4460	2630	2520	801	759	876
14	2130	2080	2100	6980	5640	2960	5190	2570	2560	801	723	863
15	2720	1990	2200	6450	5530	2740	5280	2420	2520	804	686	864
16	2750	1980	2210	5890	5670	2960	5270	2380	2440	802	722	865
17	3810	1800	2230	4950	5580	2850	5450	2210	2290	801	792	853
18	5780	1620	2190	5100	5610	2830	6070	2200	2120	799	667	854
19	6370	1760	2180	5220	5520	2850	6150	2410	2080	807	780	856
20	6290	1990	2150	5030	5490	2850	7670	2580	2170	809	776	856
21	5420	1970	2130	4680	5130	2850	9190	2600	2280	799	778	852
22	4340	1950	2430	4450	5060	2990	9730	2590	1720	806	781	856
23	4860	1890	2530	4260	4900	3050	9590	2470	1380	796	768	853
24	4570	1880	3180	4200	4520	3140	9210	2460	842	1040	781	848
25	3610	1870	3640	4150	4150	3130	8540	2540	1040	885	787	843
26	2640	1870	5480	5990	4150	3150	8280	2540	1150	795	774	839
27	2140	1830	6090	7830	4140	3350	8010	2380	973	799	775	831
28	2040	1730	6120	7940	4150	3500	7430	2240	840	794	779	847
29	1980	1720	6110	8660	---	3570	6930	2240	1020	795	770	843
30	1980	1720	5870	9430	---	3580	6460	2350	949	791	781	844
31	2010	---	5530	9290	---	3790	---	2370	---	793	789	---
TOTAL	110050	56150	87240	164400	168880	101060	175530	87910	60494	30128	24163	25659
MEAN	3550	1872	2814	5303	6031	3260	5851	2836	2016	972	779	855
MAX	6370	2080	6120	9430	9270	4220	9730	5600	2810	2000	832	967
MIN	1980	1620	1680	2850	4140	2660	3240	2200	840	791	667	695
CAL YR 1977 TOTAL	1157199			MEAN 3170	MAX 9280	MIN 746						
WTR YR 1978 TOTAL	1091664			MEAN 2991	MAX 9730	MIN 667						

ST. CROIX RIVER BASIN

63

01021050 ST. CROIX RIVER AT MILLTOWN, ME
(National stream-quality accounting network station)

LOCATION.--Lat 45°10'11", long 67°17'50", Washington County, Hydrologic Unit 01050001, on right bank, 30 ft (9 m) downstream from international highway bridge at Milltown.

DRAINAGE AREA.--1,460 mi² (3,780 km²).

PERIOD OF RECORD.--Water years 1969 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1972 to current year.

pH: July 1972 to current year.

WATER TEMPERATURES: September 1969 to current year.

DISSOLVED OXYGEN: September 1969 to current year.

INSTRUMENTATION.--Water-quality monitor since August 1969.

REMARKS.--Monitor not operated during winter periods, water years 1969 to 1975. Other interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 200 micromhos (monitor limitation) Oct. 21, 22, 1975; minimum, 27 micromhos July 7, 8, 1973.

pH: Maximum, 11.6 units Sept. 28, 1974; minimum, 5.3 units Oct. 18, 1973.

WATER TEMPERATURES: Maximum, 28.0°C July 21, 22, 1977; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 14.7 mg/L Nov. 23, 1975; minimum, 0.5 mg/L Aug. 19, 1975.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 160 micromhos Aug. 19; minimum, 35 micromhos Apr. 24-28.

pH: Maximum, 7.4 units Jan. 10; minimum, 6.1 units Jan. 28.

WATER TEMPERATURES: Maximum, 26.5°C July 22, 23, Aug. 15, 16, 18, 19; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 14.2 mg/L Dec. 30, 31, Jan. 1; minimum, 4.3 mg/L July 20-23.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCUCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
28...	1530	2050	74	6.6	13.0	9.0	1	--	10.2	88	>600	190
NOV												
29...	1000	1720	89	6.7	-5.0	2.0	5	--	12.8	92	230	180
DEC												
21...	1330	2130	84	6.5	-1.0	.5	2	--	12.4	86	15	220
JAN												
25...	1400	4090	62	6.5	2.0	.5	7	--	12.6	88	17	K980
MAR												
01...	1230	539	60	6.4	-2.0	.0	2	--	12.8	88	K2	K8
28...	1245	3450	67	6.5	5.5	2.0	4	--	10.8	78	60	--
APR												
26...	1500	8410	36	6.3	12.5	6.0	2	--	10.6	85	K5	K1
MAY												
18...	1730	2190	--	--	17.0	--	2	--	--	--	K8	41
18...	1800	2190	69	6.6	17.0	15.0	2	--	8.4	82	K11	52
JUL												
07...	1400	479	63	6.5	29.5	23.0	--	2.0	5.7	66	60	27
31...	1510	793	129	6.6	--	24.5	--	--	--	--	--	--
AUG												
04...	1045	806	127	6.7	20.0	21.5	--	2.0	5.6	63	77	120
23...	1730	755	139	6.5	29.5	25.5	--	2.0	5.3	64	25	K14
SEP												
21...	1000	847	115	6.7	14.0	16.0	--	1.0	7.4	74	34	120

ST. CROIX RIVER BASIN

01021050 ST. CROIX RIVER AT MILLTOWN, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)
OCT												
28...	14	3	4.6	.7	8.1	54	.9	.5	14	0	11	5.6
NOV												
29...	17	0	5.5	.7	9.0	53	1.0	.8	21	0	17	6.7
DEC												
21...	16	0	4.9	.8	8.8	54	1.0	.8	24	0	20	12
JAN												
25...	12	3	3.8	.6	6.0	51	.8	.5	11	0	9	5.6
MAR												
01...	14	2	4.4	.7	5.2	44	.6	.5	14	0	11	8.9
28...	13	1	3.9	.7	6.2	50	.8	.7	14	0	11	7.1
APR												
26...	10	0	3.0	.5	2.9	39	.4	.4	21	0	17	17
MAY												
18...	12	0	4.0	.6	7.0	54	.9	.6	20	0	16	--
18...	13	0	4.1	.6	7.6	55	.9	.6	21	--	17	8.4
JUL												
07...	12	0	4.0	.6	6.9	52	.8	.8	--	--	13	--
31...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
04...	16	0	5.4	.7	18	69	1.9	1.1	--	--	25	--
23...	17	0	5.8	.7	20	69	2.1	1.4	--	--	23	--
SEP												
21...	14	0	4.5	.7	17	71	2.0	.9	--	--	17	--

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)
OCT												
28...	7.2	8.1	.0	3.1	55	39	304	.01	.01	--	--	--
NOV												
29...	8.9	9.4	.0	3.0	64	48	297	.06	.04	--	--	--
DEC												
21...	8.6	7.5	.0	2.6	64	46	368	.05	.01	--	--	--
JAN												
25...	6.2	4.4	.0	2.9	44	30	486	.07	.02	.33	.35	.14
MAR												
01...	7.1	5.1	.0	2.7	54	33	78.6	.11	.02	.28	.30	.00
28...	7.8	6.3	.0	3.1	49	36	456	.08	.01	.45	.46	.17
APR												
26...	4.7	3.1	.1	2.7	32	28	727	.03	.01	.15	.16	.00
MAY												
18...	6.4	7.4	.0	1.9	46	38	272	.02	.06	.41	.47	.05
18...	6.2	8.5	.0	1.8	53	40	313	.02	.07	.27	.34	.00
JUL												
07...	6.5	6.2	.1	1.3	46	34	59.5	.04	.08	.24	.32	.14
31...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
04...	9.2	17	.1	1.3	79	68	172	.03	.05	1.2	1.2	.59
23...	11	18	.0	1.4	90	72	183	.08	.06	.54	.60	.05
SEP												
21...	9.3	15	.1	1.5	76	59	174	.00	.06	.39	.45	.14

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

[illegible]

01021050 ST. CROIX RIVER AT MILLTOWN, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

[illegible][illegible]

ST. CROIX RIVER BASIN

01021050 ST. CROIX RIVER AT MILLTOWN, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ZINC, SUS- PENDE RECUV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 28...	--	--	6.9	--	--	5	28	71
NOV 29...	0	10	12	--	--	16	74	68
DEC 21...	--	--	9.7	--	--	2	12	71
JAN 25...	--	--	14	--	--	5	55	28
MAR 01...	0	10	--	11	1.0	16	23	46
28...	--	--	6.7	--	--	5	47	100
APR 26...	--	--	5.0	--	--	3	68	100
MAY 18...	20	0	--	9.5	--	3	18	100
18...	10	0	--	8.5	.9	5	30	81
JUL 07...	--	--	8.1	--	--	3	3.9	100
AUG 04...	--	--	--	--	--	4	8.7	100
23...	--	--	7.6	--	--	3	6.1	100
SEP 21...	--	--	7.6	--	--	5	11	100

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIPHYTON							
DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS(G/SQ M)		CHLOROPHYLL A (MG/SQ M)	CHLOROPHYLL B (MG/SQ M)	BIOMASS PIGMENT RATIO	SAMPLING METHOD
		DRY WEIGHT	ASH WEIGHT				
NOV 29	32	.551	.394	1.07	.000	147	ARTIFICIAL SUBSTRATE
JUL 31	24	1.34	.394	.790	.360	1200	ARTIFICIAL SUBSTRATE
AUG 23	19	3.86	2.20	26.5	3.35	62.6	ARTIFICIAL SUBSTRATE
SEP 21	29	10.5	7.24	20.7	6.40	157	ARTIFICIAL SUBSTRATE

ST. CROIX RIVER BASIN

01021050 ST. CROIX RIVER AT MILLTOWN, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	NOV 29,77 1000	MAR 28,78 1130	MAY 18,78 1730	MAY 18,78 1800
TOTAL CELLS/ML	940	360	410	150
DIVERSITY: DIVISION	1.0	1.2	0.7	0.8
..CLASS	1.1	1.2	1.3	1.6
...ORDER	1.1	1.5	1.3	1.9
...FAMILY	1.2	2.4	2.0	1.9
....GENUS	2.0	2.4	2.0	1.9
ORGANISM	CELLS /ML PER- CENT	CELLS /ML PER- CENT	CELLS /ML PER- CENT	CELLS /ML PER- CENT
CHLOROPHYTA (GREEN ALGAE)				
..CHLOROPHYCEAE				
...CHLOROCOCCALES				
....OOCYSTACEAE				
.....ANKISTRODESMUS	16 2	-- --	14 3	-- --
.....DICTYOSPHAERIUM	-- --	-- --	-- --	-- --
.....KIRCHNERIELLA	8 1	-- --	-- --	-- --
....OOCYSTIS	-- --	-- --	-- --	-- --
....QUADRIGULA	-- --	-- --	-- --	-- --
....TETRAEDRON	-- --	-- --	-- --	-- --
...SCENEDESMACEAE				
....CRUCIGENIA	-- --	-- --	-- --	-- --
....SCENEDESMUS	-- --	-- --	-- --	-- --
....TETRALANTOS	-- --	-- --	-- --	-- --
..TETRASPOALES				
...COCCOMYXACEAE				
....ELAKATOTHRIX	-- --	-- --	-- --	-- --
....PALMELLACEAE	-- --	-- --	-- --	-- --
....GLOEOCYSTIS	-- --	-- --	-- --	-- --
....SPHAEROCYSTIS	-- --	-- --	-- --	-- --
..VOLVOCALES				
...CHLAMYDOMONADACEAE				
....CHLAMYDOMONAS	25 3	86# 24	-- --	-- --
CHRYSOPHYTA				
..BACILLARIOPHYCEAE				
...CENTRALES				
....COSCINODISCAEAE				
.....CYCLOTELLA	-- --	29 8	-- --	19 13
....MELOSIRA	-- --	-- --	-- --	-- --
..PENNALES				
...DIATOMACEAE				
....DIATOMA	8 1	110# 32	-- --	38# 25
....FRAGILARIACEAE	-- --	-- --	-- --	-- --
....ASTERIONELLA	-- --	-- --	-- --	-- --
....FRAGILARIA	-- --	-- --	-- --	-- --
....SYNEDRA	-- --	43 12	27 7	-- --
...GOMPHONEMACEAE				
....GOMPHONEMA	-- --	-- --	-- --	-- --
....NAVICULACEAE	-- --	-- --	-- --	-- --
....NAVICULA	-- --	-- --	-- --	-- --
...NITZSCHACEAE				
....NITZSCHIA	16 2	-- --	41 10	-- --
....TABELLARIACEAE	16 2	57# 16	220# 53	-- --
....TABELLARIA	-- --	-- --	-- --	-- --
..CHRYSOPHYCEAE				
...CHRYSOMONADALES				
....OCHROMONADACEAE				
.....DINOBRYON	16 2	-- --	68# 17	-- --
.....OCHROMONAS	-- --	-- --	-- --	57# 38
CRYPTOPHYTA (CRYPTOMONADS)				
..CRYPTOPHYCEAE				
...CRYPTOMONIDALES				
....CRYPTOCHRYSIDACEAE				
.....CHROOMONAS	-- --	-- --	41 10	-- --
....CRYPTOMONODACEAE				
.....CRYPTOMONAS	33 3	-- --	-- --	-- --
CYANOPHYTA (BLUE-GREEN ALGAE)				
..CYANOPHYCEAE				
...CHROCOCCALES				
....CHROCOCCACEAE				
.....ANACYSTIS	-- --	-- --	-- --	-- --
...HORMOGONALES				
....OSCILLATORIAEAE				
.....LYNGBYA	480# 51	-- --	-- --	-- --
....OSCILLATORIA	290# 31	-- --	-- --	-- --
EUGLENOPHYTA (EUGLENOIDS)				
..EUGLENOPHYCEAE				
...EUGLENALES				
....EUGLENACEAE				
.....EUGLENA	16 2	-- --	-- --	-- --
....TRACHELOMONAS	8 1	29 8	-- --	38# 25
PYRRHOPHYTA (FIRE ALGAE)				
..DINOPHYCEAE				
...PERIDINIALES				
....PERIDINIACEAE				
.....PERIDINIUM	-- --	-- --	-- --	-- --

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01021050 ST. CROIX RIVER AT MILLTOWN, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	JUL 7,78 1400	AUG 4,78 1030	AUG 23,78 1730	SEP 21,78 1000				
TOTAL CELLS/ML	1700	17000	15000	28000				
DIVERSITY: DIVISION	1.5	0.2	0.1	0.1				
..CLASS	1.5	0.2	0.1	0.1				
..ORDER	1.6	0.2	0.1	0.1				
...FAMILY	1.8	0.2	0.1	0.1				
....GENUS	2.1	0.2	0.1	0.2				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	440# 26		* 0		* 0		--	-
....DICTYOSPHAERIUM	--	--	--	--	--		* 0	
....KIRCHNERIELLA	--	--	--	--	--		--	--
...OOCYSTIS	93 5	--	--	--	--		--	--
....QUADRIGULA	--	--	* 0	--	--		--	--
....TETRAEDRON	--	--	--	--	--		* 0	
...SCENEDESMACEAE								
....CRUCIGENIA	--	--	* 0		* 0		--	--
....SCENEDESMUS	--	--	* 0		* 0		* 0	
....TETRALANTOS	--	--	250 1	--	--		--	--
...TETRASPORALES								
...COCCOMYXACEAE								
....ELAKATOTHRIX	--	--	--	--	* 0		--	--
...PALMELLACEAE								
....GLOEOCYSTIS	--	--	--	--	--		* 0	
....SPHAEROCYSTIS	--	--	* 0	--	--		* 0	
...VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	--	--	--	--		--	--
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCEACEAE								
...CYCLOTELLA	23 1	--	--	--	--		--	--
....MELOSIRA	23 1	--	--	--	--		--	--
..PENNALES								
...DIATOMACEAE								
...DIATOMA	--	--	--	--	--		--	--
...FRAGILARIACEAE								
....ASTERIONELLA	--	--	--	--	* 0		--	--
....FRAGILARIA	69 4	--	--	--	--		--	--
....SYNEDRA	--	--	--	--	--		--	--
...GOMPHONEMACEAE								
....GOMPHONEMA	23 1	--	--	--	--		--	--
...NAVICULACEAE								
....NAVICULA	46 3	--	--	--	--		--	--
...NITZSCHIAEAE								
....NITZSCHIA	46 3	--	--	--	--		* 0	
...TABELLARIACEAE								
....TABELLARIA	--	--	--	--	--		--	--
..CHRYSTOPHYCEAE								
...CHRYSONOMADALES								
...OCHROMONADACEAE								
....DINOBRYON	--	--	--	--	--		--	--
....OCHROMONAS	--	--	--	--	--		--	--
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONIDALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	--	--	--	--		--	--
...CRYPTOMONODACEAE								
....CRYPTOMONAS	--	--	--	--	--		--	--
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCOCCOCEALES								
...CHROCOCCOCEAE								
....ANACYSTIS	900# 53	--	--	--	--		--	--
...HORMOGONALES								
...OSCILLATORIAEAE								
....LYNGBYA	--	--	17000# 98	14000# 99	--		--	--
....OSCILLATORIA	--	--	* 0	--	--		28000# 98	
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	--	--	--	--		--	--
....TRACHELOMONAS	46 3	--	--	--	--		--	--
PYRRHOPHYTA (FIRE ALGAE)								
..DINOPHYCEAE								
...PERIDINIALES								
...PERIDINIAEAE								
....PERIDINIUM	--	--	--	--	* 0		--	--

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

ST. CROIX RIVER BASIN

01021050 ST. CROIX RIVER AT MILLTOWN, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	87	66	76	85	79	81	---	---	---	59	54	58
2	77	57	68	84	79	80	---	---	---	67	58	63
3	57	46	50	85	80	80	105	94	96	67	57	62
4	53	47	50	88	74	81	95	84	93	77	60	69
5	57	48	52	84	74	81	96	85	94	76	63	68
6	64	54	62	89	79	85	97	86	94	71	62	67
7	63	58	60	84	73	81	98	87	95	75	66	71
8	64	58	60	79	72	76	98	87	96	78	68	72
9	67	62	64	83	78	81	109	96	102	95	69	80
10	75	62	67	87	82	83	110	100	108	113	59	78
11	69	64	66	82	77	81	---	---	---	78	59	66
12	69	64	65	82	77	80	---	---	---	58	48	53
13	69	63	65	86	77	82	---	---	---	54	40	50
14	75	62	69	87	80	85	---	---	---	55	51	52
15	76	69	71	87	80	85	---	---	---	58	52	55
16	70	65	67	87	80	84	---	---	---	62	55	58
17	66	59	65	86	76	83	88	75	83	67	56	62
18	60	53	57	106	79	91	85	80	81	67	61	64
19	55	50	54	99	84	89	85	80	82	67	63	65
20	55	50	53	94	79	87	85	80	83	69	64	67
21	57	50	54	98	85	92	89	80	84	---	---	---
22	60	56	57	93	83	88	98	83	89	---	---	---
23	60	55	57	92	83	86	90	69	76	---	---	---
24	57	54	56	88	82	85	69	62	66	---	---	---
25	61	56	58	93	81	88	63	57	60	---	---	---
26	68	61	64	97	86	91	61	48	56	71	65	68
27	78	67	74	93	82	90	57	47	52	---	---	---
28	79	74	76	102	91	96	57	51	56	59	51	55
29	81	74	78	110	91	95	60	50	56	53	47	50
30	80	74	77	110	90	96	60	50	55	51	46	48
31	81	74	76	---	---	---	60	53	58	51	43	48
MONTH	87	46	63	110	72	85	110	47	79	113	40	62
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	54	48	50	---	---	---	56	54	55	42	39	40
2	51	48	50	---	---	---	57	55	56	45	41	42
3	58	48	52	---	---	---	56	54	55	47	44	45
4	59	51	55	---	---	---	55	54	54	48	46	47
5	55	50	54	---	---	---	60	54	56	53	47	49
6	58	50	53	---	---	---	60	54	56	60	54	58
7	59	51	55	---	---	---	61	57	59	62	58	60
8	61	54	58	---	---	---	59	56	57	62	60	61
9	59	54	56	---	---	---	60	57	58	66	60	62
10	60	54	57	---	---	---	60	58	59	75	66	71
11	61	54	58	---	---	---	59	53	57	67	62	64
12	---	---	---	---	---	---	53	52	53	66	61	63
13	---	---	---	---	---	---	54	50	52	67	63	65
14	---	---	---	---	---	---	53	45	50	68	63	66
15	---	---	---	65	60	63	49	45	47	70	66	67
16	---	---	---	67	61	63	48	46	47	71	67	69
17	---	---	---	62	57	59	48	47	47	73	70	72
18	---	---	---	63	59	61	48	45	46	73	71	72
19	---	---	---	63	61	62	47	45	46	73	68	71
20	---	---	---	62	60	61	46	40	44	73	66	69
21	---	---	---	64	60	62	41	38	39	70	66	68
22	---	---	---	66	63	64	38	36	37	69	65	67
23	---	---	---	66	64	65	37	36	36	69	65	66
24	---	---	---	67	65	66	38	35	36	71	65	67
25	---	---	---	66	64	65	38	35	36	67	64	66
26	---	---	---	66	64	65	38	35	36	68	64	66
27	---	---	---	66	62	65	37	35	36	69	64	67
28	---	---	---	65	62	64	37	35	36	73	68	70
29	---	---	---	62	59	60	38	36	37	73	69	71
30	---	---	---	60	58	59	39	36	37	72	68	70
31	---	---	---	59	56	58	---	---	---	73	68	70
MONTH	61	48	54	67	56	62	61	35	47	75	39	63

01021050 ST. CROIX RIVER AT MILLTOWN, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	72	67	70	120	100	112	130	127	129	137	130	134
2	70	66	68	133	72	104	131	127	129	135	119	131
3	68	60	63	70	62	64	129	124	126	120	113	116
4	64	59	62	72	65	70	129	116	123	127	115	121
5	71	65	67	71	66	69	127	119	124	132	115	127
6	68	61	65	74	66	71	132	125	129	111	73	90
7	70	67	68	69	63	65	130	122	125	74	68	70
8	70	65	67	69	48	61	130	120	125	85	71	77
9	75	67	70	48	42	46	126	119	123	106	87	97
10	80	69	73	60	47	51	---	---	---	111	104	107
11	69	64	66	107	63	86	---	---	---	111	105	108
12	68	62	65	111	102	107	131	125	128	119	112	115
13	65	60	63	116	102	109	135	126	131	124	118	121
14	68	64	66	121	114	118	136	130	133	125	115	120
15	---	---	---	122	116	119	139	132	135	119	114	117
16	---	---	---	119	113	116	142	136	139	119	115	117
17	67	63	65	116	111	114	141	131	137	121	116	118
18	70	65	67	118	111	115	138	127	132	119	114	117
19	71	68	70	122	117	119	160	131	142	119	115	117
20	72	69	71	126	116	121	145	135	138	121	114	118
21	71	66	68	124	118	121	138	134	136	120	114	117
22	89	65	72	120	115	118	141	136	138	121	115	118
23	85	71	77	115	109	113	140	131	138	123	119	121
24	107	80	91	112	91	103	144	138	141	127	122	124
25	150	108	127	119	92	106	142	137	139	127	120	124
26	105	89	94	127	116	122	143	137	140	129	124	126
27	100	91	97	125	120	123	146	139	142	126	117	120
28	119	99	108	127	120	123	142	137	140	119	111	116
29	123	114	119	126	121	124	141	136	138	116	111	114
30	120	92	103	130	124	126	142	137	139	116	110	112
31	---	---	---	132	126	129	139	134	137	---	---	---
MONTH	150	59	77	133	42	101	160	116	134	137	68	114
YEAR	160	35	78									

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.8	6.6	6.7	6.8	6.7	6.8	---	---	---	6.4	6.4	6.4
2	6.7	6.5	6.5	6.9	6.8	6.8	---	---	---	6.5	6.4	6.4
3	6.5	6.4	6.5	6.9	6.7	6.8	6.7	6.7	6.7	6.5	6.4	6.4
4	6.4	6.3	6.4	6.8	6.7	6.8	6.7	6.6	6.6	6.5	6.4	6.5
5	6.4	6.2	6.3	6.8	6.7	6.8	6.7	6.6	6.6	6.5	6.4	6.5
6	6.4	6.2	6.4	6.8	6.8	6.8	6.7	6.7	6.7	6.5	6.4	6.5
7	6.4	6.4	6.4	6.8	6.8	6.8	6.8	6.7	6.7	6.6	6.5	6.5
8	6.4	6.4	6.4	6.8	6.8	6.8	6.7	6.7	6.7	6.6	6.5	6.6
9	6.5	6.4	6.4	6.9	6.8	6.8	6.7	6.6	6.7	7.0	6.5	6.6
10	6.5	6.4	6.5	6.9	6.8	6.9	6.8	6.7	6.7	7.4	6.4	6.7
11	6.5	6.4	6.4	6.9	6.8	6.9	---	---	---	6.7	6.3	6.4
12	6.5	6.4	6.5	6.9	6.9	6.9	---	---	---	6.5	6.4	6.4
13	6.5	6.4	6.5	6.9	6.7	6.7	---	---	---	6.5	6.4	6.5
14	6.5	6.4	6.4	6.8	6.7	6.8	---	---	---	6.5	6.5	6.5
15	6.5	6.4	6.4	6.8	6.8	6.8	---	---	---	6.5	6.5	6.5
16	6.4	6.3	6.4	6.8	6.7	6.9	---	---	---	6.5	6.4	6.4
17	6.5	6.4	6.4	6.8	6.7	6.8	6.4	6.2	6.2	6.5	6.5	6.5
18	6.4	6.4	6.4	7.0	6.6	6.7	6.3	6.2	6.2	6.5	6.5	6.5
19	6.4	6.4	6.4	7.0	6.7	6.8	6.3	6.2	6.3	6.5	6.5	6.5
20	6.4	6.3	6.4	6.8	6.7	6.8	6.4	6.3	6.4	6.5	6.5	6.5
21	6.4	6.3	6.3	6.8	6.7	6.7	6.5	6.4	6.4	---	---	---
22	6.3	6.3	6.3	6.7	6.6	6.6	6.6	6.5	6.5	---	---	---
23	6.4	6.3	6.4	6.7	6.6	6.7	6.5	6.3	6.4	---	---	---
24	6.5	6.4	6.4	6.7	6.6	6.7	6.4	6.3	6.4	---	---	---
25	6.4	6.3	6.4	6.8	6.6	6.7	6.4	6.4	6.4	---	---	---
26	6.4	6.4	6.4	6.7	6.6	6.7	6.4	6.4	6.4	6.8	6.6	6.6
27	6.5	6.4	6.5	6.8	6.7	6.8	6.4	6.3	6.3	---	---	---
28	6.5	6.5	6.5	6.9	6.8	6.8	6.5	6.4	6.4	6.2	6.1	6.1
29	6.7	6.5	6.6	7.2	6.7	6.8	6.4	6.4	6.4	6.4	6.4	6.4
30	6.7	6.6	6.7	7.3	6.7	6.9	6.4	6.3	6.4	6.4	6.3	6.3
31	6.8	6.7	6.8	---	---	---	6.4	6.4	6.4	6.3	6.2	6.3
MONTH	6.8	6.2	6.5	7.3	6.6	6.8	6.8	6.2	6.5	7.4	6.1	6.5

01021050 ST. CROIX RIVER AT MILLTOWN, ME--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	6.3	6.2	6.2	---	---	---	6.4	6.4	6.4	6.6	6.5	6.5
2	6.3	6.2	6.2	---	---	---	6.5	6.4	6.4	6.6	6.5	6.6
3	6.3	6.2	6.2	---	---	---	6.5	6.4	6.4	6.6	6.6	6.6
4	6.3	6.3	6.3	---	---	---	6.5	6.4	6.4	6.6	6.5	6.6
5	6.3	6.3	6.3	---	---	---	6.4	6.4	6.4	6.6	6.6	6.6
6	6.3	6.3	6.3	---	---	---	6.5	6.4	6.4	6.7	6.6	6.6
7	6.4	6.3	6.3	---	---	---	6.4	6.4	6.4	6.7	6.6	6.6
8	6.4	6.3	6.3	---	---	---	6.4	6.4	6.4	6.7	6.6	6.6
9	6.4	6.3	6.4	---	---	---	6.5	6.4	6.4	6.6	6.6	6.6
10	6.4	6.3	6.4	---	---	---	6.5	6.4	6.4	6.7	6.6	6.6
11	6.4	6.3	6.4	---	---	---	6.5	6.4	6.4	6.7	6.6	6.6
12	---	---	---	---	---	---	6.5	6.4	6.4	6.7	6.6	6.6
13	---	---	---	---	---	---	6.4	6.4	6.4	6.6	6.6	6.6
14	---	---	---	---	---	---	6.4	6.4	6.4	6.6	6.5	6.6
15	---	---	---	6.7	6.6	6.6	6.4	6.3	6.3	6.7	6.5	6.6
16	---	---	---	6.7	6.6	6.6	6.3	6.3	6.3	6.6	6.5	6.5
17	---	---	---	6.6	6.5	6.6	6.3	6.3	6.3	6.6	6.5	6.5
18	---	---	---	6.6	6.5	6.6	6.3	6.3	6.3	6.6	6.5	6.5
19	---	---	---	6.6	6.6	6.6	6.3	6.3	6.3	6.7	6.6	6.6
20	---	---	---	6.7	6.6	6.6	6.4	6.3	6.3	6.7	6.6	6.6
21	---	---	---	6.6	6.6	6.6	6.4	6.3	6.3	6.7	6.6	6.6
22	---	---	---	6.6	6.6	6.6	---	---	---	6.7	6.6	6.6
23	---	---	---	6.6	6.6	6.6	---	---	---	6.7	6.6	6.7
24	---	---	---	6.6	6.6	6.6	---	---	---	6.8	6.6	6.7
25	---	---	---	6.6	6.6	6.6	---	---	---	6.8	6.6	6.7
26	---	---	---	6.6	6.5	6.6	---	---	---	6.8	6.6	6.7
27	---	---	---	6.6	6.6	6.6	6.3	6.2	6.2	6.8	6.7	6.7
28	---	---	---	6.6	6.5	6.5	6.4	6.3	6.3	6.8	6.7	6.7
29	---	---	---	6.5	6.4	6.4	6.5	6.4	6.4	6.8	6.7	6.8
30	---	---	---	6.4	6.4	6.4	6.5	6.4	6.5	6.8	6.6	6.7
31	---	---	---	6.5	6.4	6.4	---	---	---	6.8	6.6	6.7
MONTH	6.4	6.2	6.3	6.7	6.4	6.6	6.5	6.2	6.4	6.8	6.5	6.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	6.8	6.6	6.7	6.6	6.5	6.6	6.6	6.5	6.6	6.7	6.6	6.7
2	6.7	6.6	6.6	6.6	6.5	6.6	6.6	6.6	6.6	6.7	6.6	6.7
3	6.7	6.6	6.6	6.6	6.4	6.5	6.6	6.6	6.6	6.9	6.6	6.7
4	6.7	6.6	6.7	6.6	6.5	6.5	6.7	6.6	6.6	6.8	6.7	6.8
5	6.8	6.6	6.7	6.5	6.4	6.5	6.7	6.6	6.6	6.7	6.6	6.7
6	6.7	6.6	6.7	6.6	6.5	6.5	6.7	6.6	6.7	6.7	6.4	6.6
7	6.8	6.6	6.7	6.5	6.4	6.5	6.8	6.7	6.7	6.4	6.3	6.4
8	6.8	6.5	6.7	6.7	6.5	6.6	6.8	6.7	6.7	6.4	6.3	6.4
9	6.5	6.4	6.5	6.5	6.3	6.4	6.9	6.7	6.8	6.6	6.4	6.5
10	6.6	6.5	6.5	6.5	6.4	6.4	---	---	---	6.6	6.5	6.5
11	6.6	6.5	6.5	6.6	6.4	6.5	---	---	---	6.7	6.5	6.6
12	6.7	6.5	6.6	6.7	6.6	6.6	6.8	6.6	6.7	6.7	6.6	6.7
13	6.7	6.5	6.6	6.7	6.6	6.7	6.8	6.7	6.7	6.7	6.6	6.7
14	6.7	6.5	6.6	6.7	6.6	6.7	6.9	6.7	6.8	6.7	6.6	6.6
15	---	---	---	6.7	6.6	6.7	6.9	6.7	6.8	6.7	6.6	6.6
16	---	---	---	6.6	6.6	6.6	6.9	6.7	6.8	6.8	6.7	6.7
17	6.7	6.5	6.6	6.7	6.6	6.6	6.9	6.7	6.8	6.8	6.6	6.7
18	6.7	6.5	6.6	6.7	6.6	6.6	6.8	6.7	6.8	6.7	6.6	6.6
19	6.6	6.5	6.5	6.7	6.6	6.6	6.8	6.6	6.7	6.7	6.6	6.6
20	6.6	6.5	6.5	6.6	6.6	6.6	6.7	6.6	6.6	6.8	6.5	6.6
21	6.6	6.5	6.6	6.6	6.6	6.6	6.7	6.6	6.6	7.3	6.7	6.9
22	6.6	6.4	6.5	6.6	6.5	6.6	6.7	6.5	6.6	7.2	6.9	7.0
23	6.6	6.5	6.5	6.5	6.5	6.5	6.8	6.6	6.7	6.9	6.7	6.8
24	6.6	6.6	6.6	6.7	6.5	6.6	6.8	6.6	6.7	6.8	6.7	6.8
25	6.7	6.6	6.6	6.8	6.7	6.7	6.7	6.5	6.6	6.8	6.8	6.8
26	6.6	6.5	6.6	6.8	6.7	6.8	6.7	6.6	6.6	6.8	6.7	6.7
27	6.6	6.5	6.5	6.8	6.7	6.8	6.7	6.6	6.6	6.8	6.6	6.7
28	6.6	6.5	6.5	6.7	6.7	6.7	6.7	6.5	6.6	6.8	6.7	6.8
29	6.6	6.5	6.6	6.7	6.7	6.7	6.6	6.6	6.6	6.8	6.7	6.7
30	6.6	6.5	6.5	6.7	6.6	6.6	6.8	6.6	6.7	6.8	6.6	6.7
31	---	---	---	6.6	6.5	6.6	6.8	6.6	6.7	---	---	---
MONTH	6.8	6.4	6.6	6.8	6.3	6.6	6.9	6.5	6.7	7.3	6.3	6.7
YEAR	7.4	6.1	6.6									

01021050 ST. CROIX RIVER AT MILLTOWN, ME--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.0	13.5	13.5	8.0	6.5	7.5	---	---	---	.5	.0	.0
2	14.5	13.5	14.0	8.5	7.0	8.0	---	---	---	.5	.0	.0
3	14.0	13.0	13.5	8.5	7.5	8.5	2.0	1.0	1.5	.5	.0	.0
4	13.0	12.5	13.0	9.5	8.0	8.5	2.0	1.0	1.0	.0	.0	.0
5	13.5	12.0	13.0	9.5	8.5	9.0	1.0	.0	.5	.5	.0	.0
6	13.0	12.0	12.5	8.5	7.0	8.0	1.0	.0	.0	.5	.0	.5
7	12.5	11.5	12.0	8.5	7.5	7.5	.0	.0	.0	.5	.0	.0
8	12.5	11.0	11.5	7.5	6.5	7.0	.0	.0	.0	.5	.0	.0
9	12.0	11.0	11.5	8.5	7.0	7.5	.0	.0	.0	1.0	.5	.5
10	12.0	11.5	12.0	9.0	8.5	8.5	.0	.0	.0	1.0	.0	.5
11	12.5	11.0	11.5	9.5	8.5	9.0	---	---	---	.5	.0	.5
12	12.0	11.0	11.5	9.0	8.0	8.0	---	---	---	.5	.0	.5
13	11.5	11.0	11.0	8.0	7.0	7.5	---	---	---	.0	.0	.0
14	11.0	10.0	10.0	7.0	6.0	6.5	---	---	---	.0	.0	.0
15	10.5	9.5	10.0	6.0	5.0	5.5	---	---	---	.0	.0	.0
16	11.0	9.5	10.0	6.5	6.0	6.0	---	---	---	.0	.0	.0
17	10.5	10.0	10.0	7.5	6.0	6.5	.5	.5	.5	.0	.0	.0
18	10.0	9.5	10.0	8.0	7.0	7.5	.5	.0	.5	.0	.0	.0
19	9.5	9.0	9.5	7.0	5.5	6.0	.0	.0	.0	.5	.0	.0
20	9.5	9.0	9.0	5.0	4.5	5.0	.0	.0	.0	.5	.0	.5
21	9.0	9.0	9.0	5.0	4.0	4.5	.5	.5	.0	---	---	---
22	9.0	8.5	8.5	5.0	4.5	5.0	1.0	.5	1.0	---	---	---
23	8.5	7.5	8.0	4.5	3.5	4.0	1.0	.5	.5	---	---	---
24	8.0	7.0	7.5	4.5	3.5	4.0	1.0	.5	1.0	---	---	---
25	8.5	7.0	7.5	4.0	3.5	4.0	1.5	.5	1.0	---	---	---
26	9.0	7.5	8.0	4.0	3.5	3.5	1.5	.5	1.0	.5	.5	.5
27	10.0	9.0	9.0	4.0	2.0	3.0	1.0	.5	.5	---	---	---
28	9.5	8.5	9.0	2.0	1.0	1.5	.5	.5	.5	.5	.0	.5
29	9.0	8.0	8.5	2.0	1.0	1.0	.5	.0	.5	.5	.0	.0
30	8.5	7.0	8.0	1.0	.0	1.0	.5	.0	.0	.0	.0	.0
31	8.0	7.0	7.5	---	---	---	.5	.0	.5	.0	.0	.0
MONTH	14.5	7.0	10.5	9.5	.0	6.0	2.0	.0	.5	1.0	.0	.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	---	---	---	1.5	1.0	1.5	6.5	4.5	5.5
2	.0	.0	.0	---	---	---	2.0	1.0	1.5	7.0	5.0	6.0
3	.0	.0	.0	---	---	---	2.0	.0	1.0	7.0	6.0	6.5
4	.0	.0	.0	---	---	---	1.5	.5	1.0	8.0	6.0	7.0
5	.0	.0	.0	---	---	---	1.5	1.0	1.0	9.0	6.5	7.5
6	.0	.0	.0	---	---	---	2.0	1.0	1.5	10.5	7.5	9.0
7	.0	.0	.0	---	---	---	3.0	1.0	2.0	11.5	8.0	9.5
8	.0	.0	.0	---	---	---	2.5	1.5	2.0	12.5	9.0	11.0
9	.0	.0	.0	---	---	---	3.5	1.5	2.5	11.0	9.5	10.0
10	.0	.0	.0	---	---	---	4.0	1.5	2.5	13.0	10.0	11.5
11	.0	.0	.0	---	---	---	3.5	2.0	3.0	14.0	11.0	12.5
12	---	---	---	---	---	---	3.5	2.0	2.5	15.0	12.0	13.5
13	---	---	---	---	---	---	3.0	2.5	2.5	16.0	12.5	14.0
14	---	---	---	---	---	---	3.0	2.5	2.5	15.0	13.0	14.0
15	---	---	---	1.5	1.0	1.0	3.5	2.0	3.0	16.0	13.5	14.5
16	---	---	---	1.5	.0	1.0	3.5	2.0	3.0	15.5	13.5	14.0
17	---	---	---	1.5	.0	.5	4.0	2.0	3.0	14.0	13.5	13.5
18	---	---	---	1.5	.0	.5	4.5	2.5	3.5	15.0	14.0	14.5
19	---	---	---	1.0	.0	.5	5.0	3.0	4.0	16.5	14.0	15.5
20	---	---	---	1.5	.0	.5	4.0	3.5	3.5	17.0	14.5	16.0
21	---	---	---	1.0	.0	.5	3.5	3.0	3.5	16.5	14.5	15.0
22	---	---	---	1.5	1.0	1.0	4.0	3.0	3.5	16.0	13.5	14.5
23	---	---	---	1.0	.5	.5	4.5	3.0	3.5	16.5	13.5	15.0
24	---	---	---	1.5	1.0	1.0	4.5	3.5	4.0	18.0	14.5	16.0
25	---	---	---	2.0	.0	1.0	4.5	3.5	4.0	18.0	15.0	16.5
26	---	---	---	2.0	.0	1.0	5.5	3.5	4.5	18.5	15.5	17.0
27	---	---	---	1.0	.5	1.0	6.5	4.0	6.0	19.0	16.5	17.5
28	---	---	---	2.0	1.0	1.5	6.0	5.0	5.5	21.0	17.0	18.5
29	---	---	---	2.5	.5	1.5	6.5	4.5	5.5	22.0	18.5	20.0
30	---	---	---	2.5	1.0	1.5	6.5	5.0	6.0	22.0	19.0	20.5
31	---	---	---	3.0	1.0	2.0	---	---	---	22.0	19.5	21.0
MONTH	.0	.0	.0	3.0	.0	1.0	6.5	.0	3.0	22.0	4.5	13.5

ST. CROIX RIVER BASIN

01021050 ST. CROIX RIVER AT MILLTOWN, ME--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	21.5	19.5	20.0	21.0	19.0	20.0	21.5	20.0	20.5	22.0	21.0	21.5
2	19.5	18.5	19.0	20.5	18.5	19.5	22.5	21.5	22.0	22.5	20.5	21.5
3	20.0	18.5	19.0	22.0	19.0	20.5	22.0	21.5	21.5	22.5	21.0	21.5
4	20.5	18.5	19.5	21.5	19.5	20.5	21.5	21.5	21.5	22.5	21.0	21.5
5	20.0	18.5	19.5	21.0	19.5	20.0	22.5	21.0	22.0	21.5	20.0	21.0
6	19.5	17.5	18.5	22.0	21.5	21.5	23.0	21.5	22.5	20.0	18.5	19.0
7	20.5	17.5	19.0	23.5	22.0	22.5	24.0	21.5	22.5	18.5	17.0	17.5
8	20.0	17.0	18.0	24.5	23.0	23.5	24.0	23.0	23.5	17.5	16.5	17.0
9	17.0	17.0	17.0	24.5	21.5	23.0	25.0	23.5	24.0	18.0	16.0	17.0
10	18.5	16.0	17.0	23.5	22.5	23.0	---	---	---	16.5	15.5	16.0
11	18.5	16.0	17.5	25.0	22.5	23.5	---	---	---	17.0	16.0	16.5
12	19.5	16.5	18.0	23.0	22.5	22.5	25.0	24.0	24.5	17.0	16.0	16.5
13	19.0	17.0	18.0	24.0	22.5	23.0	24.5	23.5	24.0	16.5	15.5	16.0
14	18.5	17.5	18.0	25.0	23.5	24.0	25.5	23.5	24.5	16.0	15.5	15.5
15	---	---	---	24.0	22.5	23.5	26.5	24.5	25.5	16.0	14.5	15.5
16	---	---	---	23.5	22.5	23.0	26.5	25.0	25.5	16.0	14.5	15.5
17	20.5	17.0	18.5	24.0	22.0	23.5	26.0	25.0	25.5	16.5	15.0	15.5
18	20.0	17.5	18.0	24.0	22.0	23.0	26.5	25.0	25.5	15.5	14.5	15.0
19	18.0	17.5	17.5	25.0	23.5	24.0	26.5	25.0	25.5	15.5	14.5	15.0
20	18.5	17.0	17.5	25.0	23.5	24.0	25.5	24.0	25.0	15.5	14.5	15.0
21	19.5	17.5	18.0	26.0	24.0	25.0	24.5	23.0	23.5	17.0	15.5	16.5
22	19.0	17.0	17.5	26.5	25.0	25.5	25.0	23.5	24.0	17.5	15.5	17.0
23	19.5	17.5	18.0	26.5	25.0	26.0	25.5	24.0	24.5	15.5	15.0	15.5
24	20.0	19.5	19.5	26.0	23.0	24.5	24.0	22.0	23.5	16.0	15.0	15.5
25	21.0	19.5	20.5	24.5	23.0	24.0	23.0	21.5	22.0	16.0	15.0	15.5
26	21.5	20.5	21.0	24.0	23.0	23.5	23.0	21.5	22.5	15.0	14.0	14.5
27	21.5	19.5	20.5	24.0	22.5	23.0	22.0	21.0	21.5	15.0	14.0	14.5
28	22.0	20.0	21.0	23.5	22.5	23.0	22.0	20.5	21.0	15.5	14.5	15.0
29	23.0	21.0	22.0	23.5	23.0	23.0	20.5	20.0	20.0	14.5	13.5	14.0
30	23.5	21.0	22.0	23.0	21.5	22.0	22.5	20.0	21.5	14.0	13.0	13.5
31	---	---	---	22.5	21.0	22.0	23.0	21.5	22.0	---	---	---
MONTH	23.5	16.0	19.0	26.5	18.5	23.0	26.5	20.0	23.0	22.5	13.0	16.5
YEAR	26.5	.0	11.0									

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.4	8.2	8.3	10.4	10.3	10.4	---	---	---	14.2	13.9	14.1
2	8.5	8.2	8.4	10.3	10.2	10.2	---	---	---	13.8	13.6	13.8
3	8.7	8.4	8.6	10.2	10.1	10.2	12.6	12.4	12.5	13.8	13.6	13.7
4	9.0	8.6	8.8	10.2	9.9	10.0	12.7	12.5	12.6	13.6	13.5	13.5
5	9.0	8.4	8.8	10.1	9.8	10.0	12.7	12.7	12.7	13.5	13.5	13.5
6	8.8	8.4	8.6	10.2	10.0	10.1	12.7	12.7	12.7	13.6	12.6	13.2
7	9.1	8.7	8.9	10.4	10.0	10.2	12.7	12.5	12.6	12.9	12.5	12.7
8	9.1	8.9	9.0	10.5	10.4	10.4	12.9	12.7	12.7	12.6	12.4	12.5
9	9.2	8.9	9.0	10.5	10.2	10.3	12.9	12.4	12.6	12.5	11.8	12.2
10	9.1	8.8	9.0	10.2	9.9	10.0	12.7	12.4	12.5	12.6	11.8	12.1
11	9.2	8.9	9.0	10.0	9.8	9.8	---	---	---	12.6	11.9	12.2
12	9.1	8.9	9.0	10.2	9.8	10.0	---	---	---	12.7	12.5	12.6
13	9.3	8.9	9.1	10.2	10.0	10.1	---	---	---	12.8	12.2	12.5
14	9.5	9.0	9.2	10.7	10.2	10.4	---	---	---	12.3	12.1	12.2
15	9.5	9.1	9.3	10.8	10.6	10.7	---	---	---	12.4	12.2	12.3
16	9.3	9.1	9.2	10.8	10.5	10.6	---	---	---	12.2	11.7	11.9
17	9.5	9.2	9.3	10.6	10.2	10.4	12.5	12.4	12.5	11.8	11.7	11.8
18	9.8	9.4	9.5	10.2	10.0	10.1	12.6	12.5	12.5	12.5	11.7	12.0
19	10.0	9.8	9.9	10.8	10.1	10.5	12.7	12.5	12.6	12.7	12.0	12.6
20	10.1	10.0	10.0	11.2	10.8	11.0	12.9	12.7	12.7	12.7	12.5	12.6
21	10.1	10.0	10.1	11.3	11.2	11.2	13.0	12.8	12.8	---	---	---
22	10.0	9.9	10.0	11.4	11.0	11.2	12.9	12.4	12.7	---	---	---
23	10.6	10.0	10.3	11.4	11.3	11.3	12.7	12.5	12.6	---	---	---
24	10.6	10.5	10.6	11.4	11.2	11.3	13.1	12.6	12.7	---	---	---
25	10.5	10.2	10.4	11.4	11.1	11.2	13.1	13.0	13.1	---	---	---
26	10.2	10.0	10.1	11.4	11.1	11.2	13.6	13.1	13.3	12.3	11.4	11.9
27	9.9	9.8	9.8	11.9	11.1	11.4	13.7	13.5	13.6	---	---	---
28	10.1	9.7	10.1	12.0	11.8	11.9	14.0	13.8	13.9	12.3	12.2	12.2
29	10.1	9.9	10.0	13.0	12.0	12.8	14.0	13.9	14.0	12.6	12.3	12.4
30	10.2	10.0	10.1	13.0	12.6	12.8	14.2	14.0	14.1	12.6	12.5	12.6
31	10.4	10.1	10.2	---	---	---	14.2	14.1	14.1	12.7	12.6	12.6
MONTH	10.6	8.2	9.4	13.0	9.8	10.7	14.2	12.4	13.0	14.2	11.4	12.6

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	12.8	12.7	12.7	---	---	---	10.8	10.6	10.7	10.2	9.9	10.0
2	12.8	12.7	12.8	---	---	---	11.0	10.5	10.8	10.0	9.7	9.9
3	12.8	12.2	12.6	---	---	---	11.3	11.0	11.1	10.0	9.8	9.9
4	12.8	12.5	12.7	---	---	---	11.1	11.0	11.1	10.1	9.9	10.0
5	12.8	12.6	12.7	---	---	---	11.0	10.8	10.9	10.0	9.6	9.9
6	12.8	12.7	12.7	---	---	---	11.1	10.8	10.9	9.8	9.5	9.7
7	12.7	11.5	12.4	---	---	---	10.9	10.5	10.7	9.7	9.3	9.6
8	11.8	9.8	10.8	---	---	---	10.7	10.5	10.6	9.4	9.1	9.3
9	12.1	11.0	11.7	---	---	---	10.7	10.5	10.6	9.2	9.0	9.2
10	12.2	10.7	11.9	---	---	---	10.7	10.4	10.6	9.1	8.7	8.9
11	12.3	12.1	12.2	---	---	---	10.6	10.4	10.5	8.9	8.5	8.8
12	---	---	---	---	---	---	10.6	10.2	10.5	8.7	8.3	8.6
13	---	---	---	---	---	---	10.6	10.4	10.5	8.6	8.3	8.5
14	---	---	---	---	---	---	10.7	10.3	10.5	8.5	8.3	8.3
15	---	---	---	11.7	11.1	11.4	10.8	10.5	10.6	8.6	8.3	8.4
16	---	---	---	11.5	11.3	11.4	10.9	10.6	10.8	8.4	8.3	8.4
17	---	---	---	11.4	11.2	11.3	10.9	10.8	10.8	8.4	8.3	8.4
18	---	---	---	11.4	11.2	11.2	11.0	10.8	10.9	8.4	8.2	8.3
19	---	---	---	11.4	11.2	11.3	10.9	10.7	10.8	8.2	7.9	8.0
20	---	---	---	11.5	11.2	11.4	10.8	10.7	10.7	8.0	7.8	7.9
21	---	---	---	11.3	11.2	11.3	10.9	10.7	10.8	8.1	7.8	7.9
22	---	---	---	11.2	11.0	11.1	11.0	10.7	10.8	8.5	8.1	8.3
23	---	---	---	11.2	11.0	11.1	10.9	10.8	10.8	8.6	8.1	8.3
24	---	---	---	11.2	11.0	11.1	10.8	10.7	10.8	8.2	8.1	8.2
25	---	---	---	11.3	11.2	11.2	10.8	10.7	10.7	8.3	8.1	8.2
26	---	---	---	11.3	11.1	11.2	10.7	10.5	10.6	8.2	7.9	8.0
27	---	---	---	11.3	11.2	11.3	10.5	10.2	10.4	8.1	7.8	7.9
28	---	---	---	11.1	10.6	10.8	10.2	10.0	10.4	7.9	7.6	7.8
29	---	---	---	10.7	10.5	10.6	10.1	9.9	10.2	7.9	7.5	7.7
30	---	---	---	10.7	10.4	10.5	10.1	9.9	10.0	7.7	7.4	7.6
31	---	---	---	10.7	10.5	10.6	---	---	---	7.7	7.2	7.4
MONTH	12.8	9.8	12.3	11.7	10.4	11.1	11.3	9.9	10.7	10.2	7.2	8.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	7.5	7.2	7.4	6.3	6.0	6.1	5.7	5.0	5.3	6.1	5.5	5.8
2	7.9	7.4	7.6	6.9	5.6	6.4	5.5	5.3	5.4	6.1	5.7	5.9
3	7.8	7.6	7.7	7.3	6.7	7.0	5.6	5.3	5.4	6.5	6.0	6.2
4	7.9	7.6	7.7	7.1	6.5	6.7	5.5	5.3	5.4	6.5	5.9	6.2
5	7.9	7.6	7.7	7.0	6.6	6.7	5.7	5.5	5.5	6.4	5.9	6.1
6	8.1	7.6	7.9	6.7	6.1	6.3	5.8	5.4	5.6	7.0	6.3	6.5
7	8.3	7.9	8.1	6.4	5.9	6.1	6.0	5.6	5.8	7.3	7.1	7.2
8	8.3	8.1	8.2	5.9	4.7	5.4	6.0	5.8	5.9	7.4	7.0	7.2
9	8.1	7.8	7.9	6.1	5.9	6.0	6.1	5.7	5.9	7.5	7.2	7.3
10	8.4	7.8	8.1	6.0	5.4	5.7	---	---	---	7.5	7.2	7.4
11	8.5	8.1	8.3	5.4	4.9	5.1	---	---	---	7.5	7.1	7.2
12	8.6	8.1	8.4	5.5	5.2	5.3	6.2	5.8	6.0	7.2	7.1	7.1
13	8.5	8.2	8.4	5.6	4.8	5.2	6.1	5.6	5.8	7.7	7.3	7.5
14	8.3	7.9	8.2	5.1	4.7	4.9	5.9	5.3	5.7	7.8	7.4	7.6
15	---	---	---	5.2	4.8	5.0	5.7	5.2	5.5	7.9	7.6	7.7
16	---	---	---	5.1	4.8	5.0	5.7	5.1	5.4	7.9	7.4	7.6
17	8.2	7.8	8.0	5.1	4.7	4.9	5.6	5.1	5.3	7.7	7.4	7.5
18	7.8	7.6	7.7	5.1	4.8	5.0	5.5	4.7	5.2	7.9	7.7	7.8
19	7.7	7.4	7.6	5.0	4.4	4.7	5.4	4.7	5.0	7.9	7.6	7.8
20	7.6	7.4	7.5	4.8	4.3	4.6	5.5	5.0	5.2	7.8	7.3	7.5
21	7.5	7.2	7.4	4.7	4.3	4.6	5.8	5.4	5.6	7.5	6.9	7.2
22	7.3	6.8	7.0	4.8	4.3	4.6	5.9	5.3	5.6	7.2	6.7	6.9
23	7.8	6.8	7.4	4.8	4.3	4.6	5.9	5.3	5.6	7.2	7.0	7.1
24	7.8	7.1	7.4	5.4	4.9	5.2	6.0	5.5	5.8	7.3	7.0	7.1
25	7.2	4.8	6.0	5.6	5.3	5.5	6.3	5.8	6.1	7.4	6.7	7.0
26	7.2	6.7	6.9	5.6	5.4	5.5	6.4	5.8	6.1	7.1	6.8	6.9
27	7.2	6.6	6.8	5.7	5.1	5.5	6.3	6.0	6.2	7.3	7.1	7.2
28	6.8	6.1	6.5	5.4	5.0	5.2	6.6	6.1	6.4	7.4	6.9	7.2
29	6.3	5.8	6.1	5.4	5.1	5.2	6.7	5.9	6.4	7.8	7.2	7.5
30	6.2	5.7	6.0	5.4	5.0	5.2	6.1	5.6	5.9	7.9	7.7	7.8
31	---	---	---	5.3	5.0	5.2	6.2	5.4	5.8	---	---	---
MONTH	8.6	4.8	7.5	7.3	4.3	5.4	6.7	4.7	5.7	7.9	5.5	7.1
YEAR	14.2	4.3	9.2									

DENNY'S RIVER BASIN

01021200 DENNY'S RIVER AT DENNYVILLE, ME

LOCATION.--Lat 44°54'03", long 67°14'56", Washington County, Hydrologic Unit 01050002, on right bank 100 ft (30 m) upstream from railroad bridge, 0.9 mi (1.4 km) upstream from Cathance Stream, and 1 mi (1.6 km) west of Dennyville.

DRAINAGE AREA.--92.4 mi² (239.3 km²).

PERIOD OF RECORD.--Discharge: October 1955 to current year.

Water temperatures: October 1958 to September 1972.

GAGE.--Water-stage recorder. Datum of gage is 54.78 ft (16.700 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. Flow slightly regulated by dam at outlet of Meddybemps Lake 14 mi (22 km) upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--23 years, 192 ft³/s (5.44 m³/s), 28.22 in/yr (717 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,930 ft³/s (111 m³/s) Apr. 29, 1973, gage height, 9.35 ft (2.850 m) from rating curve extended above 1,400 ft³/s (40 m³/s); minimum, 8.4 ft³/s (0.24 m³/s) Oct. 1, 1957, gage height, 0.28 ft (0.085 m).

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	1600	1070 30.3	4.60 1.402	Jan. 10	0600	1050 29.7	4.54 1.384
Oct. 17	2000	1010 28.6	4.45 1.356	Jan. 27	0700	1250 35.4	5.01 1.527
Dec. 22	2000	982 27.8	4.38 1.335	Apr. 20	2100	*1490 42.2	5.52 1.682
Dec. 26	0800	1160 32.9	4.81 1.466				

Minimum discharge, 24 ft³/s (0.68 m³/s) Sept. 5, 6, gage height, 0.55 ft (0.168 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	109	116	225	450	86	401	468	104	203	37	27
2	821	107	147	213	350	84	381	443	98	181	37	26
3	744	105	160	198	280	82	318	415	97	154	37	26
4	447	101	146	183	240	81	249	265	120	137	37	25
5	260	108	139	174	210	80	235	209	129	127	37	25
6	183	106	102	172	190	79	287	196	118	121	37	25
7	152	106	112	156	175	78	266	190	107	118	37	28
8	130	101	111	156	160	77	279	185	110	115	36	27
9	123	101	110	290	150	76	290	186	132	112	35	30
10	300	109	195	987	140	75	346	301	185	102	34	30
11	289	114	183	800	135	74	354	261	149	71	33	30
12	217	121	152	650	130	74	415	212	123	55	33	34
13	192	121	136	450	125	74	538	153	107	51	33	34
14	176	143	125	320	120	74	504	116	105	49	32	30
15	404	133	240	260	120	164	489	105	100	52	30	28
16	424	123	332	220	115	178	483	99	95	52	29	30
17	742	126	289	200	115	151	445	108	89	52	27	31
18	835	287	245	190	110	127	427	116	85	52	27	29
19	529	258	210	180	110	109	452	110	84	51	27	27
20	486	195	184	170	105	86	991	100	85	50	26	26
21	477	155	169	160	105	87	1330	104	85	49	25	29
22	336	146	694	155	100	163	1110	120	86	48	26	32
23	251	136	854	150	98	192	922	106	91	50	26	34
24	194	133	652	145	96	168	791	95	91	48	25	33
25	166	149	531	145	94	148	722	89	90	47	25	32
26	153	145	1070	550	92	130	669	85	100	43	26	32
27	143	154	827	1240	90	141	624	81	117	40	26	31
28	130	137	557	1150	88	620	582	79	124	39	26	32
29	119	122	383	1000	---	732	541	80	123	39	27	33
30	115	120	288	790	---	655	503	78	133	38	27	33
31	114	---	258	610	---	511	---	97	---	38	27	---
TOTAL	9833	4071	9717	12289	4293	5456	15944	5252	3262	2384	947	889
MEAN	317	136	313	396	153	176	531	169	109	76.9	30.5	29.6
MAX	835	287	1070	1240	450	732	1330	468	185	203	37	34
MIN	114	101	102	145	88	74	235	78	84	38	25	25
CFSM	3.43	1.47	3.39	4.29	1.66	1.91	5.75	1.83	1.18	.83	.33	.32
IN.	3.96	1.64	3.91	4.95	1.73	2.20	6.42	2.11	1.31	.96	.38	.36

CAL YR 1977	TOTAL	89852	MEAN 246	MAX 1070	MIN 39	CFSM 2.66	IN 36.17
WTR YR 1978	TOTAL	74337	MEAN 204	MAX 1330	MIN 25	CFSM 2.21	IN 29.93

01022500 NARRAGUAGUS RIVER AT CHERRYFIELD, ME
(National stream-quality accounting network station)

LOCATION.--Lat 44°36'29", long 67°56'10", Washington County, Hydrologic Unit 01050002, on left bank 800 ft (244 m) upstream from railroad bridge at Cherryfield and 0.7 mi (1.1 km) downstream from West Branch of Narraguagus River.

DRAINAGE AREA.--232 mi² (601 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1948 to current year.

REVISED RECORDS.--WSP 1301: 1948(M).

GAGE.--Water-stage recorder. Datum of gage is 44.2 ft (13.47 m) National Geodetic Vertical Datum of 1929. Prior to July 1, 1948, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--30 years, 497 ft³/s (14.08m³/s), 29.09 in/yr (739 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s (295 m³/s) May 28, 1961, gage height, 17.40 ft (5.304 m); minimum, 3.0 ft³/s (0.085 m³/s) Sept. 2, 4, 5, 1978, gage height, 6.41 ft (1.954 m), caused by unusual regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (57 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	2300	2500 70.8	12.10 3.688	Jan. 10	1100	2780 78.7	12.38 3.773
Oct. 18	0800	2210 62.6	11.79 3.594	Jan. 27	-	3000 85	-
Dec. 22	2100	2510 71.1	12.11 3.691	Mar. 28	1800	2320 65.7	11.91 3.630
Dec. 26	-	2900 82	a*13.30 4.054	Apr. 21	Unknown	*3110 88.1	b12.70 3.871

a Ice jam.

b From peak-stage indicator.

Minimum discharge, 3.0 ft³/s (0.085 m³/s) Sept. 2, 4, 5, gage height, 6.41 ft (1.954 m), caused by unusual regulation.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	458	399	314	710	1260	260	1540	765	197	184	66	47
2	1840	380	449	640	998	255	1310	688	186	180	66	17
3	2270	364	480	600	838	250	1030	621	188	170	67	18
4	1770	351	431	560	745	245	770	577	263	159	72	10
5	1210	348	376	530	655	245	720	538	329	150	87	7.1
6	809	343	323	519	560	240	820	502	307	139	91	31
7	623	330	300	529	510	235	740	468	272	130	84	47
8	505	315	285	485	475	235	780	430	277	123	77	48
9	464	326	270	956	435	230	830	557	337	116	74	44
10	1060	383	260	2550	415	230	950	975	388	110	69	45
11	1120	423	260	2250	395	228	1050	868	361	108	63	45
12	973	515	270	1780	380	226	1250	717	317	104	57	55
13	828	501	285	1400	370	227	1480	589	270	100	55	64
14	679	450	315	1000	360	231	1400	502	242	96	55	55
15	909	402	365	770	355	477	1320	449	226	91	51	52
16	1070	370	410	670	350	719	1250	426	207	89	48	57
17	1600	389	385	615	345	677	1180	492	189	87	46	57
18	2180	586	355	575	335	571	1150	536	173	85	45	52
19	1930	515	330	550	330	491	1650	496	162	82	42	47
20	1740	439	315	525	320	426	2250	450	216	82	40	43
21	1720	391	300	505	310	380	3000	420	505	83	39	41
22	1410	406	1950	490	305	502	2780	426	478	81	38	41
23	1160	402	2280	480	300	636	2220	390	428	81	37	38
24	939	402	1990	470	290	597	1730	353	367	120	38	36
25	793	444	1850	460	285	567	1430	323	303	113	38	35
26	685	424	2650	1200	280	516	1260	299	255	92	36	32
27	613	428	2000	2700	275	507	1140	280	220	82	35	31
28	554	386	1550	2550	270	1950	1040	264	233	79	34	32
29	501	345	1250	2350	---	2140	944	246	218	75	61	31
30	458	314	990	2000	---	2110	849	229	185	75	86	33
31	422	---	830	1700	---	1770	---	210	---	71	57	---
TOTAL	33293	12071	24418	33119	12746	18373	39863	15086	8299	3337	1754	1191.1
MEAN	1074	402	788	1068	455	593	1329	487	277	108	56.6	39.7
MAX	2270	586	2650	2700	1260	2140	3000	975	505	184	91	64
MIN	422	314	260	460	270	226	720	210	162	71	34	7.1
CFSM	4.63	1.73	3.40	4.60	1.96	2.56	5.73	2.10	1.19	.47	.24	.17
IN.	5.34	1.94	3.92	5.31	2.04	2.95	6.39	2.42	1.33	.54	.28	.19
CAL YR 1977 TOTAL	226777.0			MEAN 621	MAX 5040	MIN 60	CFSM 2.68	IN 36.36				
WTR YR 1978 TOTAL	203550.1			MEAN 558	MAX 3000	MIN 7.1	CFSM 2.41	IN 32.64				

NOTE.--No gage-height record Jan. 10-13, 27-31, Apr. 4-21.

01022500 NARRAGUAGUS RIVER AT CHERRYFIELD, ME--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January to September 1978.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January to September 1978.

WATER TEMPERATURES: January to September 1978.

INSTRUMENTATION.--Water-quality monitor since January 1978.

REMARKS.--Interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum during period January to September, 49 micromhos Aug. 29; minimum, 20 micromhos Apr. 20-24.

WATER TEMPERATURES: Maximum during period January to September, 26.5°C July 21-23, Aug. 18, 19; minimum, 0.0°C on many days during winter periods.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
JAN 31...	1100	1760	26	5.5	-6.0	.0	2	--	13.3	91	K1	9
MAR 02...	1030	255	34	6.3	-8.5	.0	2	--	13.2	90	K2	K2
MAR 28...	1445	2240	25	5.6	10.5	.5	6	--	13.3	92	K6	--
APR 26...	1100	1270	22	6.0	10.5	6.0	2	--	10.4	83	K4	K2
MAY 19...	1300	492	--	--	--	--	2	--	--	--	14	K5
MAY 19...	1330	492	26	6.2	19.5	13.5	2	--	10.0	95	8	8
JUL 03...	1630	165	29	6.5	20.5	20.5	--	3.0	8.7	96	14	K4
AUG 31...	1430	53	40	6.7	23.5	19.5	--	3.0	8.6	92	K34	18
SEP 31...	1700	53	--	--	--	--	--	3.0	--	--	K36	14
SEP 21...	1400	41	38	6.7	28.5	15.5	--	2.0	9.9	98	K20	K3

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAH- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)
JAN 31...	6	2	1.8	.4	1.7	35	.3	.5	5	0	4	25
MAR 02...	8	2	2.5	.5	2.6	39	.4	.5	8	0	7	6.4
MAR 28...	5	0	1.2	.4	2.0	45	.4	.6	6	--	5	24
APR 26...	6	2	1.8	.4	1.7	36	.3	.4	5	0	4	8.0
MAY 19...	7	2	1.8	.5	2.4	42	.4	.5	6	--	5	--
MAY 19...	6	0	1.8	.3	2.4	45	.4	.6	9	0	7	9.1
JUL 03...	8	0	2.2	.5	2.7	41	.4	.6	--	--	12	--
AUG 31...	10	0	2.5	.8	4.3	47	.6	.8	--	--	12	--
SEP 31...	10	0	2.5	.8	4.3	47	.6	.8	--	--	17	--
SEP 21...	9	0	2.5	.7	3.6	44	.5	.6	--	--	11	--

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

[illegible]

01022500 NARRAGUAGUS RIVER AT CHERRYFIELD, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	IRON, SUS- PENDE REC OV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL REC OV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDE REC OV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL REC OV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE REC OV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL REC OV- ERABLE (UG/L AS HG)
JAN 31...	--	--	--	--	--	--	--	--	--
MAR 02...	--	180	0	0	1	20	0	20	<.5
MAR 28...	--	--	--	--	--	--	--	--	--
APR 26...	--	--	--	--	--	--	--	--	--
MAY 19...	--	200	12	7	5	20	10	10	<.5
MAY 19...	--	180	3	2	1	20	10	10	<.5
JUL 03...	--	--	--	--	--	--	--	--	--
AUG 31...	180	210	21	0	21	20	0	20	<.5
AUG 31...	190	190	58	7	51	20	0	20	<.5
SEP 21...	--	--	--	--	--	--	--	--	--

DATE	MERCURY SUS- PENDE REC OV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL REC OV- ERABLE (UG/L AS SE)	SELE- NIUM, SUS- PENDE REC OV- ERABLE (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL REC OV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE REC OV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL REC OV- ERABLE (UG/L AS ZN)
JAN 31...	--	--	--	--	--	--	--	--	--
MAR 02...	.0	<.5	0	0	0	0	0	0	0
MAR 28...	--	--	--	--	--	--	--	--	--
APR 26...	--	--	--	--	--	--	--	--	--
MAY 19...	.0	<.5	0	0	0	0	0	0	10
MAY 19...	.0	<.5	0	0	0	0	0	0	10
JUL 03...	--	--	--	--	--	--	--	--	--
AUG 31...	.0	<.5	0	0	0	0	0	0	40
AUG 31...	.0	<.5	0	0	0	0	0	0	40
SEP 21...	--	--	--	--	--	--	--	--	--

DATE	ZINC, SUS- PENDE REC OV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN 31...	--	--	4.4	--	--	15	71	57
MAR 02...	0	--	--	2.8	.2	7	4.8	100
MAR 28...	--	--	6.3	--	--	23	139	100
APR 26...	--	--	5.4	--	--	3	10	100
MAY 19...	0	10	--	9.2	.6	1	1.3	100
MAY 19...	0	10	--	5.8	.8	3	4.0	100
JUL 03...	--	--	7.3	--	--	6	2.7	100
AUG 31...	30	10	--	6.3	.2	4	.57	100
AUG 31...	30	10	--	6.6	.5	3	.43	100
SEP 21...	--	--	6.0	--	--	5	.56	100

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIPHYTON							
DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS(G/SQ M)		CHLOROPHYLL A (MG/SQ M)	CHLOROPHYLL B (MG/SQ M)	BIOMASS PIGMENT RATIO	SAMPLING METHOD
JUL 03	45	3.23	2.28	9.50	1.49	100	ARTIFICIAL SUBSTRATE
SEP 21	21	.236	.157	.100	.030	790	ARTIFICIAL SUBSTRATE

01022500 NARRAGUAGUS RIVER AT CHERRYFIELD, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO JULY 1978

DATE TIME	MAR 28,78 1445	MAY 19,78 1300	MAY 19,78 1330	JUL 3,78 1630
TOTAL CELLS/ML	120	57	160	1000
DIVERSITY: DIVISION	0.9	0.9	1.4	1.2
..CLASS	0.9	0.9	1.4	1.3
..ORDER	0.9	0.9	1.4	2.4
...FAMILY	2.1	0.9	2.2	3.0
....GENUS	2.1	0.9	2.2	3.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....OOCYSTACEAE								
.....ANKISTRODESMUS	27#	22	--	-	--	-	69	7
.....OOCYSTIS	--	-	--	-	--	-	140	14
...SCENEDESMACEAE								
....SCENEDESMUS	54#	44	--	-	--	-	140	14
..TETRASPORALES								
...PALMELLACEAE								
....GLOEOCYSTIS	--	-	--	-	--	-	280#	27
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	32#	20	140	14
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...PENNALES								
....ACHNANTHACEAE								
.....ACHNANTHES	--	-	--	-	--	-	23	2
...DIATOMACEAE								
....DIATOMA	14	11	--	-	--	-	--	-
...EUNOTIACEAE								
....EUNOTIA	--	-	--	-	--	-	23	2
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	49#	30	--	-
...GOMPHONEMACEAE								
....GOMPHONEMA	14	11	--	-	16	10	--	-
...NAVICULACEAE								
....NAVICULA	14	11	--	-	--	-	23	2
...NITZSCHIACEAE								
....NITZSCHIA	--	-	19#	33	32#	20	23	2
..CHRYSOPHYCEAE								
...CHRYSOMONADALES								
....MALLOMONADACEAE								
.....MALLOMONAS	--	-	--	-	--	-	23	2
...OCHROMONADACEAE								
....DINOBRYON	--	-	--	-	--	-	23	2
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONIDALES								
....CRYPTOMONODACEAE								
.....CRYPTOMONAS	--	-	--	-	--	-	69	7
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCCOCCALES								
....CHROCCOCCACEAE								
.....ANACYSTIS	--	-	--	-	32#	20	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
.....TRACHELOMONAS	--	-	--	-	--	-	46	5
PYRRHOPHYTA (FIRE ALGAE)								
..DINOPHYCEAE								
...PERIDINIALES								
....GLENODINIACEAE								
.....GLENODINIUM	--	-	38#	67	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01022500 NARRAGUAGUS RIVER AT CHERRYFIELD, ME--Continued

PHYTOPLANKTON ANALYSES, AUGUST 1978 TO SEPTEMBER 1978

DATE TIME	AUG 31,78 1430	AUG 31,78 1700	SEP 21,78 1400
TOTAL CELLS/ML	140	150	530
DIVERSITY: DIVISION	1.5	1.5	1.7
..CLASS	1.5	1.5	2.1
..ORDER	2.2	2.1	2.6
...FAMILY	2.7	2.4	3.0
....GENUS	2.7	2.6	3.1

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
....CHARACIACEAE						
....SCHROEDERIA	--	-	2	1	--	-
....OOCYSTACEAE						
....ANKISTRODESMUS	9	6	2	1	22	4
....DICTYOSPHAERIUM	--	-	--	-	89#	17
....SCENEDESMACEAE						
....SCENEDESMUS	7	5	7	5	--	-
....VOLVOCALES						
....CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	52#	37	55#	36	22	4
....ZYGNEMATALES						
....DESMIDIACEAE						
....STAUSTRUM	2	1	--	-	--	-
CHRYSTOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	7	5	27#	18	--	-
....MELOSIRA	--	-	5	4	--	-
...PENNALES						
....ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	89#	17
....CYMBELLACEAE						
....CYMBELLA	4	3	--	-	--	-
....FRAGILARIACEAE						
....SYNEDRA	5	4	--	-	--	-
....GOMPHONEMACEAE						
....GOMPHONEMA	2	1	--	-	--	-
....NAVICULACEAE						
....GYROSIGMA	--	-	2	1	--	-
....NAVICULA	32#	23	16	11	22	4
....NITZSCHACEAE						
....NITZSCHIA	--	-	--	-	44	8
....SURIPELLACEAE						
....SURIPELLA	--	-	2	1	--	-
....TABELLARIACEAE						
....TABELLARIA	2	1	2	1	--	-
..CHRYSTOPHYCEAE						
...CHRYSSOMONADALES						
...OCHROMONADACEAE						
....OCHROMONAS	--	-	--	-	67	13
CRYPTOPHYTA (CRYPTOMONADS)						
..CRYPTOPHYCEAE						
...CRYPTOMONIDALES						
...CRYPTOMONODACEAE						
....CRYPTOMONAS	--	-	--	-	22	4
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROCOCCOCCALES						
....CHROCOCCACEAE						
....ANACYSTIS	--	-	--	-	89#	17
...HORMOGONALES						
....NOSTOCACEAE						
....ANABAENA	--	-	30#	20	--	-
....OSCILLATORIACEAE						
....LYNGBYA	--	-	--	-	67	13
....OSCILLATORIA	18	13	--	-	--	-
....RIVULARIACEAE						
....RAPHIIDIOPSIS	--	-	2	1	--	-
PYRRHOPHYTA (FIRE ALGAE)						
..DINOPHYCEAE						
...GYMNODINIALES						
...GYMNODINIACEAE						
....GYMNODINIUM	2	1	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01022500 NARRAGUAGUS RIVER AT CHERRYFIELD, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										27	26	27
7										27	27	27
8										28	27	27
9										29	27	28
10										28	23	27
11										28	22	26
12										28	28	28
13										29	28	28
14										29	27	28
15										28	27	27
16										28	27	27
17										28	23	27
18										28	28	28
19										28	28	28
20										28	28	28
21										29	28	28
22										29	28	28
23										30	28	28
24										29	28	28
25										29	28	29
26										30	26	28
27										26	24	25
28										26	25	26
29										27	26	26
30										27	26	26
31										27	26	26
MONTH										30	22	27

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	26	26	26	34	31	32	27	27	27	26	25	26
2	27	23	26	34	31	33	28	27	27	27	25	26
3	27	25	26	35	33	34	28	27	28	26	26	26
4	28	23	26	34	33	34	28	27	27	27	26	26
5	28	27	27	35	33	33	29	27	28	27	26	26
6	29	27	28	35	33	34	28	27	28	27	26	27
7	28	28	28	35	33	34	28	27	28	28	26	27
8	29	28	28	35	33	34	27	27	27	28	26	27
9	29	28	28	35	33	34	27	27	27	28	26	27
10	29	28	28	35	34	34	27	26	27	28	26	27
11	29	28	29	35	34	34	26	26	26	27	26	27
12	30	29	29	34	34	34	27	20	25	28	26	27
13	30	29	29	35	34	34	26	25	25	28	26	27
14	30	29	29	35	34	34	26	25	26	28	27	28
15	30	29	29	36	34	35	26	25	25	29	28	28
16	30	29	29	34	33	33	25	24	25	29	28	28
17	30	29	30	33	31	33	25	24	24	29	28	28
18	30	30	30	33	31	32	25	24	24	28	28	28
19	30	30	30	33	33	33	25	24	24	28	26	27
20	31	30	30	33	33	33	24	20	22	27	26	27
21	34	31	31	33	33	33	20	20	20	27	27	27
22	35	31	32	34	33	33	20	20	20	28	27	28
23	33	31	32	33	31	31	20	20	20	29	27	28
24	33	31	32	33	31	31	22	20	21	29	28	28
25	33	31	32	33	31	32	24	21	23	30	28	29
26	34	31	32	33	31	32	24	23	24	30	29	29
27	33	31	32	33	30	31	24	23	24	31	29	29
28	33	31	32	30	26	27	25	24	25	33	29	30
29	---	---	---	27	26	27	26	24	25	35	29	32
30	---	---	---	27	27	27	26	24	25	35	30	33
31	---	---	---	28	27	27	---	---	---	34	28	31
MONTH	35	23	29	36	26	32	29	20	25	35	25	28

LOCATION.--Lat 44°50'25", long 68°22'22", Hancock County, Hydrologic Unit 01050002, on right bank 200 ft (61 m) upstream from site of old tannery dam, 0.6 mi (1.0 km) upstream from Indian Camp Brook, and 0.7 mi (1.1 km) northwest of Amherst.

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

Minimum discharge, 6.4 ft³/s (0.18 m³/s) Aug. 28, gage height, 2.96 ft (0.902 m).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	352	281	169	395	700	150	420	590	112	100	17	7.3
2	957	263	182	365	660	145	390	560	102	95	17	7.0
3	923	242	193	340	620	145	360	520	97	90	16	7.3
4	814	232	196	320	580	140	340	485	179	84	20	7.0
5	727	232	186	305	530	140	320	460	159	78	22	7.3
6	656	225	170	295	480	135	315	440	156	72	19	7.3
7	600	215	165	290	440	135	310	425	142	66	17	11
8	520	203	160	300	400	135	325	410	156	61	17	9.2
9	472	206	160	700	350	130	350	450	196	56	16	10
10	661	215	155	1020	320	130	380	510	249	53	14	10
11	620	228	160	900	295	130	410	490	235	50	14	9.7
12	572	245	165	820	275	130	430	472	215	45	17	14
13	525	245	175	700	260	125	450	424	186	40	16	13
14	472	235	190	610	250	125	440	375	193	37	14	11
15	479	219	200	550	240	180	430	333	189	35	13	11
16	495	212	190	500	235	240	415	305	162	34	12	12
17	625	206	180	460	230	270	400	293	142	32	11	12
18	738	245	170	420	230	280	400	281	125	31	11	11
19	710	278	165	395	220	265	500	270	117	29	11	11
20	710	301	160	365	210	255	720	252	117	28	10	11
21	721	289	160	345	200	250	1280	259	150	22	9.6	11
22	688	285	923	330	190	260	1400	266	200	17	8.8	11
23	667	266	1020	315	180	280	1290	256	180	22	8.1	11
24	615	249	985	300	175	300	1130	238	160	32	7.9	11
25	562	242	910	300	170	290	1020	219	145	25	7.4	10
26	505	232	1080	840	160	280	930	200	130	22	6.9	10
27	464	228	992	1200	155	290	850	179	120	21	6.6	9.8
28	427	206	680	1030	155	340	770	162	110	21	6.4	9.7
29	383	200	570	940	---	400	700	147	105	20	8.1	9.6
30	341	182	490	850	---	480	640	136	100	19	7.3	9.4
31	312	---	440	760	---	460	---	123	---	17	7.0	---
TOTAL	18313	7107	11741	17260	8910	7015	18115	10530	4629	1354	388.1	301.6
MEAN	591	237	379	557	318	226	604	340	154	43.7	12.5	10.1
MAX	957	301	1080	1200	700	480	1400	590	249	100	22	14
MIN	312	182	155	290	155	125	310	123	97	17	6.4	7.0
CFSM	3.99	1.60	2.56	3.76	2.15	1.53	4.08	2.30	1.04	.30	.08	.07
IN.	4.60	1.79	2.95	4.34	2.24	1.76	4.55	2.65	1.16	.34	.10	.08
CAL YR 1977	TOTAL	134157.0	MEAN	368	MAX	2140	MIN	27	CFSM	2.49	IN	33.72

01024200 GARLAND BROOK NEAR MARIAVILLE, ME

LOCATION.--Lat 44°43'17", long 68°24'40", Hancock County, Hydrologic Unit 01050002, on left bank 22 ft (6.7 m) upstream from State Highway 181, 1.2 mi (1.9 km) upstream from mouth, and 1.5 mi (2.4 km) north of Mariaville.

DRAINAGE AREA.--9.80 mi² (25.38 km²).

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

GAGE.--Water-stage recorder and culvert control. Altitude of gage is 125 ft (38 m), from topographic map.

REMARKS.--Records fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--14 years, 22.1 ft³/s (0.626 m³/s), 30.62 in/yr (778 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,230 ft³/s (34.8 m³/s) Dec. 27, 1969, gage height, 13.47 ft (4.106 m); minimum, 0.24 ft³/s (0.007 m³/s) Sept. 22-25, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	0715	424 12.0	8.40 2.560	Jan. 9	2345	*451 12.8	8.61 2.624
Dec. 22	1100	248 7.02	6.88 2.097	Jan. 26	2145	201 5.69	6.41 1.954
Dec. 26	0230	240 6.80	6.80 2.073	Apr. 20	1700	254 7.19	6.93 2.112

Minimum discharge, 0.50 ft³/s (0.014 m³/s) Aug. 28, Sept. 4, 5, gage height, 2.52 ft (0.768 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2 ^a	14	12	23	24	7.4	72	17	5.9	3.6	1.3	.71
2	277	14	16	21	21	7.2	54	16	5.7	3.9	1.3	.64
3	108	13	21	19	19	7.1	37	15	5.5	3.9	1.3	.58
4	54	13	16	17	17	7.0	27	14	23	3.4	2.2	.53
5	34	14	14	16	16	6.8	29	13	15	3.1	4.4	.53
6	24	13	13	15	15	6.7	39	12	13	2.9	2.8	.55
7	21	12	12	14	14	6.6	32	11	9.0	2.6	2.1	1.2
8	18	12	11	13	13	6.5	52	13	12	2.4	1.6	1.2
9	23	13	10	151	12	6.4	55	29	25	2.2	1.4	.96
10	110	17	9.8	200	11	6.3	53	57	29	2.2	1.3	1.1
11	59	20	9.6	79	11	6.2	55	32	14	2.3	.98	.93
12	37	26	9.8	47	11	6.1	92	23	9.2	2.2	.89	1.6
13	31	23	10	32	10	6.0	96	18	7.2	2.0	.89	1.8
14	25	18	11	26	10	6.0	89	16	9.0	1.8	.89	1.2
15	44	16	20	23	10	20	89	15	14	1.7	.86	1.0
16	50	15	18	20	11	50	75	15	8.9	1.9	.83	1.4
17	79	17	15	18	10	33	62	31	6.4	2.0	.83	1.2
18	86	30	13	17	9.6	22	56	31	5.1	2.0	.83	.93
19	51	23	12	16	9.2	17	57	22	4.8	1.8	.76	.86
20	52	20	12	15	8.9	15	185	18	15	1.6	.73	.81
21	72	17	12	14	8.7	13	149	16	42	1.6	.77	.77
22	49	18	180	13	8.6	20	84	17	23	1.5	.70	.72
23	38	16	136	12	8.4	30	63	13	17	2.1	.59	.66
24	31	15	87	12	8.2	28	51	11	13	5.6	.55	.60
25	26	20	82	12	8.0	24	42	10	9.1	3.3	.55	.60
26	23	18	193	106	7.9	21	35	9.5	6.5	2.4	.55	.60
27	22	19	91	171	7.7	27	28	9.2	5.2	1.9	.55	.60
28	20	17	59	80	7.6	117	25	8.1	5.2	1.7	.53	.60
29	18	15	43	52	---	123	22	7.3	4.6	1.6	.76	.60
30	16	13	31	37	---	106	18	7.0	3.9	1.6	.94	.60
31	15	---	27	28	---	85	---	7.0	---	1.6	.76	---
TOTAL	1541	511	1206.2	1319	327.8	843.3	1823	533.1	366.2	74.4	35.44	26.08
MEAN	49.7	17.0	38.9	42.5	11.7	27.2	60.8	17.2	12.2	2.40	1.14	.87
MAX	277	30	193	200	24	123	185	57	42	5.6	4.4	1.8
MIN	15	12	9.6	12	7.6	6.0	18	7.0	3.9	1.5	.53	.53
CFSM	5.07	1.74	3.97	4.34	1.19	2.78	6.20	1.76	1.25	.25	.12	.09
IN.	5.85	1.94	4.58	5.01	1.24	3.20	6.92	2.02	1.39	.28	.13	.10
CAL YR 1977 TOTAL	10022.60			MEAN 27.5	MAX 368	MIN 1.0	CFSM 2.81	IN 38.04				
WTR YR 1978 TOTAL	8606.52			MEAN 23.6	MAX 277	MIN .53	CFSM 2.41	IN 32.67				

NOTE.--No gage-height record Nov. 7 to Dec. 12.

PENOBSCOT RIVER BASIN

01029500 EAST BRANCH PENOBSCOT RIVER AT GRINDSTONE, ME

LOCATION.--Lat 45°43'49", long 68°35'22", Penobscot County, Hydrologic Unit 01020002, on left bank 500 ft (152 m) downstream from Bangor † Aroostook Railroad bridge, 0.5 mi (0.8 km) south of Grindstone, and 9.5 mi (15.3 km) upstream from confluence with West Branch Penobscot River.

DRAINAGE AREA.--1,090 mi² (2,823 km²), including 249 mi² (645 km²) drained by Chamberlain Lake through Telos Canal.

PERIOD OF RECORD.--October 1902 to current year. Monthly discharge only for some periods, published in WSP 1301.

REVISED RECORDS.--WSP 501: Drainage area. WSP 1301: 1907-12, 1914-29(M). WSP 2101: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 294.74 ft (89.837 m) National Geodetic Vertical Datum of 1929. Prior to June 30, 1929, nonrecording gage on railroad bridge at same datum.

REMARKS.--Records good except those for winter period and period of no gage-height record May 18 to July 12, which are fair. Flow regulated by Chamberlain, Telos, Second and Grand Lakes, and Round Pond (Reservoirs in Penobscot River basin). Final regulation at Grand Lake Dam 35 mi (56 km) upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--76 years, 1,941 ft³/s (54.97 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,000 ft³/s (1,050 m³/s) Apr. 30, 1923, gage height, 16.9 ft (5.15 m), site then in use, present datum; minimum daily (1914-78), 77 ft³/s (2.18 m³/s) Nov. 19, 1924.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,100 ft³/s (286 m³/s) May 10, gage height, 9.58 ft (2.920 m); minimum daily, 356 ft³/s (10.1 m³/s) Aug. 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1860	1710	1200	1800	3000	2200	2040	6000	870	550	510	452
2	3840	1590	1200	1600	2800	2570	1920	5700	790	540	564	452
3	4980	1460	1250	1400	2600	2520	1790	5500	730	560	518	554
4	3270	1400	1220	1350	2500	2400	1780	5250	690	580	494	679
5	2340	1560	1170	1250	2400	2250	1690	5100	650	580	576	706
6	1910	1520	1110	1180	2350	2100	1660	4900	640	560	551	707
7	1690	1430	1070	1120	2300	2000	1640	4800	720	540	508	940
8	1520	1350	1030	1090	2250	1900	1680	5600	860	530	485	1000
9	1430	1290	1010	2000	2200	1800	1730	7200	1200	520	472	1090
10	4960	1460	1030	6150	2150	1700	1850	9770	1700	490	461	1350
11	4220	1590	1050	6510	2150	1550	2000	7620	1680	900	443	1220
12	2830	1880	1020	5290	2100	1500	2330	4690	1600	1210	427	1180
13	2320	1630	980	4570	2050	1400	2740	5500	1450	1240	417	1140
14	2050	1640	960	4030	2050	1350	3160	5060	1300	699	414	992
15	2260	1560	1010	3550	2000	1350	3580	4700	1180	515	406	927
16	3640	1480	1040	3000	2000	1400	3840	4680	1030	824	402	865
17	4460	1460	1030	2700	1950	1450	4040	4530	980	684	515	826
18	7830	2510	1020	2500	1950	1400	4300	2250	870	616	496	771
19	7660	3110	1010	2300	1900	1350	5260	2250	800	571	387	636
20	6550	2610	990	2100	1900	1250	6340	2250	730	546	380	625
21	5680	2280	960	2000	1900	1300	7240	2300	740	532	381	623
22	4540	2050	1120	1900	1850	1360	7780	2300	860	590	374	622
23	3580	1850	1500	1800	1850	1440	7670	2300	1000	686	367	829
24	3080	1700	2000	1700	1800	1490	7820	2200	980	739	356	924
25	2850	1580	2580	1700	1800	1380	8380	1900	900	646	423	904
26	2660	1490	3500	2300	1800	1390	7800	1700	820	569	409	891
27	2510	1410	3740	3300	1800	1360	7410	1500	730	520	371	879
28	2370	1350	3160	4260	1800	1630	6900	1300	670	545	360	869
29	2240	1290	2600	4160	---	2060	6600	1150	620	591	492	860
30	2110	1250	2250	3700	---	2130	6300	1050	580	555	542	848
31	1830	---	2000	3300	---	2090	---	950	---	550	471	---
TOTAL	105070	50490	46810	85610	59200	53070	129270	122000	28370	19778	13972	25361
MEAN	3389	1683	1510	2762	2114	1712	4309	3935	946	638	451	845
MAX	7830	3110	3740	6510	3000	2570	8380	9770	1700	1240	576	1350
MIN	1430	1250	960	1090	1800	1250	1640	950	580	490	356	452
CAL YR 1977	TOTAL 885774	MEAN 2427	MAX 12600	MIN 517								
WTR YR 1978	TOTAL 739001	MEAN 2025	MAX 9770	MIN 356								

01030000 PENOBSCOT RIVER NEAR MATTAWAMKEAG, ME

LOCATION.--Lat 45°34'01", long 68°24'10", Penobscot County, Hydrologic Unit 01020005, on left bank 700 ft (200 m) downstream from Mattaseunk Dam and powerhouse, 1.3 mi (2.1 km) upstream from Mattaseunk Brook, and 4.5 mi (7.2 km) upstream from Mattawamkeag.

DRAINAGE AREA.--3,356 mi² (8,692 km²), including 249 mi² (645 km²) drained by Chamberlain Lake through Telos Canal.

PERIOD OF RECORD.--June 1940 to current year.

REVISED RECORDS.--WSP 2101: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 191.72 ft (58.436 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by many reservoirs above station (Reservoirs in Penobscot River basin). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--38 years, 5,781 ft³/s (163.7 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 66,000 ft³/s (1,870 m³/s) Apr. 29, 1973, gage height, 16.89 ft (5.148 m), backwater from Mattawamkeag River; minimum daily, 1,430 ft³/s (40.5 m³/s) Aug. 17, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,900 ft³/s (677 m³/s) Mar. 30, gage height, 8.99 ft (2.740 m); minimum daily, 2,100 ft³/s (59.5 m³/s) Aug. 2, 7.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5300	6680	6050	5000	7840	5800	6720	14000	5380	3600	2160	3500
2	8400	6560	6360	5400	7280	6260	6560	12000	4910	2900	2250	3800
3	9000	5940	6120	5770	7240	6300	6480	11600	4880	3250	2330	2400
4	6900	6120	6080	5800	7680	5770	6720	11400	4760	3050	2380	2650
5	5600	6560	5700	5490	7640	6640	6400	10600	5000	3150	2300	3500
6	5600	6440	5420	5700	6440	6440	5980	10100	4760	3130	2500	4000
7	5400	6160	5380	5400	5940	6520	5700	10000	5000	3100	2150	3900
8	4400	6260	5350	5210	5630	6360	5880	10000	5210	3100	2200	4490
9	5200	6080	5350	6300	6400	6260	6120	10200	5910	3080	2270	4450
10	8500	6050	5250	9750	6480	5880	6220	13300	5910	3090	2300	4730
11	7500	6400	4300	11400	6920	5740	6360	12300	5240	3100	2300	4790
12	5700	6640	4600	10500	6640	5770	6680	11300	4910	3110	2290	4520
13	5900	6330	5900	9700	6330	5740	7240	10900	4970	2950	2240	4430
14	5850	6300	5400	8640	6300	5630	7520	9600	5150	2800	2200	4670
15	6550	6300	5200	8000	6260	5600	8280	8480	5350	2750	2250	5100
16	7900	5800	4900	7840	6260	5630	8440	8840	4790	2350	2400	4490
17	9300	6080	5500	7840	6230	5700	8880	9040	4970	2340	2200	4580
18	14200	6840	5400	6720	6230	5700	9040	9560	5180	2550	2220	4310
19	13400	8240	5250	7000	6330	6020	9360	8600	5000	2440	2220	4640
20	12800	7840	5280	6600	6300	5600	10800	8200	5070	2300	2260	4100
21	11300	7160	5630	6440	6230	5630	12000	7880	5530	2460	2300	3950
22	10500	6300	5630	6190	6160	5420	13100	8440	5530	2590	2300	4190
23	9200	6600	6300	6300	6050	5600	14000	7480	5280	2900	2320	4340
24	8880	6400	5980	6330	5940	5880	13800	8120	5140	2700	2460	4280
25	8800	6560	5040	6260	6230	5040	13200	5800	4970	2900	2500	4100
26	8360	6440	6800	6680	6020	6190	13400	5000	5100	2680	2300	4280
27	8040	6520	7640	7920	5770	6120	14600	4970	5880	2400	2100	4340
28	8000	6160	7280	8920	6020	6330	15400	5770	5380	2300	2160	4130
29	7360	5800	6840	8960	---	6560	15400	5840	5530	2370	2200	4160
30	7280	5880	6600	7160	---	7240	15300	5600	4500	2400	3300	4190
31	6960	---	6000	7280	---	6720	---	5600	---	2280	3260	---
TOTAL	248080	193440	178530	222500	180790	186090	285580	280520	155190	86120	72620	125010
MEAN	8003	6448	5759	7177	6457	6003	9519	9049	5173	2778	2343	4167
MAX	14200	8240	7640	11400	7840	7240	15400	14000	5910	3600	3300	5100
MIN	4400	5800	4300	5000	5630	5040	5700	4970	4500	2280	2100	2400
CAL YR 1977 TOTAL	2535810			MEAN 6947	MAX 21900	MIN 2300						
WTR YR 1978 TOTAL	2214470			MEAN 6067	MAX 15400	MIN 2100						

PENOBSCOT RIVER BASIN

01030500 MATTAWAMKEAG RIVER NEAR MATTAWAMKEAG, ME

LOCATION.--Lat 45°30'18", long 68°18'07", Penobscot County, Hydrologic Unit 01020003, on right bank at Gordon Lower Falls, 1.0 mi (1.6 km) upstream from Mattakeunk Stream, 3.7 mi (6.0 km) upstream from Mattawamkeag, and 4.1 mi (6.6 km) upstream from mouth.

DRAINAGE AREA.--1,418 mi² (3,673 km²).

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.--WSP 1501: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 230 ft (70 m), from topographic map.

REMARKS.--Records good except those for winter period and those below 100 ft³/s (3 m³/s), which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--44 years, 2,478 ft³/s (70.2 m³/s), 23.73 in/yr (603 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,200 ft³/s (827 m³/s) Mar. 23, 1936, gage height, 15.34 ft (4.676 m); minimum, 38 ft³/s (1.08 m³/s) Sept. 19, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,500 ft³/s (467 m³/s) Apr. 28, gage height, 10.46 ft (3.188 m), minimum not determined; minimum daily, 40 ft³/s (1.13 m³/s) Sept. 2, 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2950	2650	1650	4250	5740	790	3470	15600	1010	569	180	41
2	4420	2420	1680	3860	4980	760	3350	14700	882	549	163	40
3	6360	2220	1750	3420	4110	730	3280	13400	834	552	149	40
4	7620	2070	1730	3160	3440	720	3090	11900	804	569	146	44
5	7790	2030	1580	3050	3070	700	2820	10500	765	538	148	48
6	7150	2040	1410	2870	2750	680	2660	9370	753	477	155	68
7	6120	2020	1250	2650	2530	670	2580	8530	730	418	161	97
8	5010	1910	1270	2480	2290	660	2510	7840	841	363	157	99
9	4130	1820	1350	2530	2200	650	2520	7400	1150	328	151	125
10	4040	1730	1290	3890	2090	640	2680	7320	1630	301	158	108
11	4430	1700	1100	5500	2020	620	2980	7430	1840	298	137	112
12	4650	1770	1210	6280	1920	620	3440	7330	1650	293	120	163
13	4490	1790	1420	6520	1790	610	4130	6870	1350	288	109	186
14	4170	1930	1440	6300	1660	618	5270	6050	1130	272	101	188
15	3990	2080	1400	5540	1540	661	5980	5080	1030	258	91	181
16	4590	2100	1440	4920	1640	856	6730	4250	968	245	87	177
17	5740	2050	1490	4340	1510	1200	7350	3700	866	236	83	164
18	6990	2360	1460	3800	1360	1340	8200	3390	766	233	79	143
19	8150	3080	1240	3290	1270	1300	8960	3200	694	222	74	120
20	8730	3550	1150	3070	1200	1200	10100	2990	634	214	69	104
21	9010	3570	1080	2810	1140	1200	11900	2780	638	207	65	89
22	9040	3350	1200	2550	1070	1170	13600	2810	761	217	61	82
23	8670	3080	1700	2430	1020	1410	14800	2850	1040	214	57	78
24	7860	2810	2150	2300	970	1650	15400	2680	1050	223	53	75
25	6880	2600	2510	2160	930	1830	15700	2390	952	235	50	72
26	5850	2430	3230	2210	890	1870	15900	2120	851	252	46	70
27	4920	2290	4080	3140	850	1810	16200	1840	738	252	43	71
28	4230	2020	4590	4400	820	1940	16500	1630	706	242	42	71
29	3730	1870	4800	5600	---	2340	16400	1430	651	232	45	70
30	3300	1700	4860	6380	---	2800	16200	1280	600	218	44	70
31	2950	---	4550	6380	---	3240	---	1130	---	199	42	---
TOTAL	177960	69040	63060	122080	56800	37285	244700	179790	28314	9714	3066	2996
MEAN	5741	2301	2034	3938	2029	1203	8157	5800	944	313	98.9	99.9
MAX	9040	3570	4860	6520	5740	3240	16500	15600	1840	569	180	188
MIN	2950	1700	1080	2160	820	610	2510	1130	600	199	42	40
CFSM	4.05	1.62	1.43	2.78	1.43	.85	5.75	4.09	.67	.22	.07	.07
IN.	4.67	1.81	1.65	3.20	1.49	.98	6.42	4.72	.74	.25	.08	.08
CAL YR 1977 TOTAL	1193640		MEAN	3270	MAX	15800	MIN	235	CFSM	2.31	IN	31.31
WTR YR 1978 TOTAL	994805		MEAN	2725	MAX	16500	MIN	40	CFSM	1.92	IN	26.10

01031500 PISCATAQUIS RIVER NEAR DOVER-FOXCROFT, ME

LOCATION.--Lat 45°10'31", long 69°18'55", Piscataquis County, Hydrologic Unit 01020004, on left bank 30 ft (9 m) downstream from Lows Bridge, 1.0 mi (1.6 km) upstream from Black Stream, and 4.7 mi (7.6 km) upstream from Dover-Foxcroft.

DRAINAGE AREA.--297 mi² (769 km²).

PERIOD OF RECORD.--August 1902 to current year.

REVISED RECORDS.--WSP 279: 1902. WSP 1171: Drainage area. WSP 1201: 1903-17, 1918-30(M), 1934-35. WSP 1301: 1909(M).

GAGE.--Water-stage recorder. Datum of gage is 358.1 ft (109.15 m) National Geodetic Vertical Datum of 1929. Prior to July 20, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period, which are fair. Low flow may be regulated by operation of mills above station. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--76 years, 604 ft³/s (17.11 m³/s), 27.62 in/yr (702 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,800 ft³/s (646 m³/s) Nov. 4, 1966, gage height, 17.89 ft (5.453 m); minimum, 5 ft³/s (0.14 m³/s) Aug. 6, 1905, Nov. 22, 1908.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (100 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	1500	8190 232	9.89 3.014	Jan. 10	0600	*10800 306	11.51 3.508
Oct. 10	1000	6220 176	8.51 2.594	Apr. 22	0200	5100 144	7.64 2.329
Oct. 18	0300	4250 120	6.95 2.118	Apr. 27	0500	4380 124	7.05 2.149

Minimum discharge, 13 ft³/s (0.368 m³/s) Aug. 27, 28, gage height, 1.49 ft (0.454 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1890	470	412	540	880	190	640	2640	422	89	32	17
2	6160	438	480	500	760	190	560	2060	339	78	29	16
3	4430	407	517	460	660	185	500	2000	480	73	28	16
4	2430	392	465	440	610	185	470	2060	591	67	35	20
5	1700	444	433	420	560	180	450	2120	444	62	40	18
6	1280	417	295	400	510	180	430	2080	362	57	42	18
7	1040	402	353	390	470	180	420	2150	300	52	42	27
8	870	387	330	380	440	175	425	2180	397	51	38	28
9	938	1250	300	1300	410	175	500	2520	672	48	35	36
10	5120	2270	280	7500	380	175	640	3260	1320	48	32	37
11	3080	1780	260	5150	360	175	840	2460	826	49	28	35
12	1900	1730	250	2400	340	175	1100	1850	545	45	26	37
13	1430	1290	290	1100	325	175	1400	1490	412	41	24	35
14	1140	1130	360	760	310	190	1640	1230	449	37	22	33
15	1280	946	350	580	290	230	1900	1050	444	38	21	32
16	2060	833	330	460	280	275	1980	931	348	45	20	32
17	2410	833	310	400	270	270	1970	2060	282	60	18	30
18	3780	1680	300	360	260	250	2180	2210	238	59	17	28
19	2380	1640	295	325	250	235	2530	1480	212	49	17	27
20	2400	1220	290	310	245	220	3180	1200	205	46	15	24
21	2360	978	285	295	235	230	4470	1340	216	45	15	22
22	1750	970	700	285	230	250	4760	1220	216	46	14	21
23	1400	870	1350	280	220	275	4570	915	219	52	14	20
24	1140	770	1100	275	215	290	3940	743	202	62	14	18
25	978	698	1000	270	210	260	3410	627	178	69	14	17
26	862	597	1900	1200	205	235	3870	539	152	55	14	17
27	770	659	1400	2500	200	400	4060	480	132	46	13	16
28	678	501	960	1900	195	740	4020	422	124	42	14	16
29	579	491	760	1500	---	1250	3870	362	114	38	17	15
30	501	422	660	1200	---	980	3670	326	103	37	14	15
31	480	---	580	1000	---	760	---	545	---	34	16	---
TOTAL	59216	26915	17595	34880	10320	9680	64395	46550	10944	1620	720	723
MEAN	1910	897	568	1125	369	312	2147	1502	365	52.3	23.2	24.1
MAX	6160	2270	1900	7500	880	1250	4760	3260	1320	89	42	37
MIN	480	387	250	270	195	175	420	326	103	34	13	15
CFSM	6.43	3.02	1.91	3.79	1.24	1.05	7.23	5.06	1.23	.18	.08	.08
IN.	7.42	3.37	2.20	4.37	1.29	1.21	8.07	5.83	1.37	.20	.09	.09

CAL YR 1977	TOTAL	268406	MEAN 735	MAX 6160	MIN 41	CFSM 2.48	IN 33.62
WTR YR 1978	TOTAL	283558	MEAN 777	MAX 7500	MIN 13	CFSM 2.62	IN 35.52

PENOBSCOT RIVER BASIN

01033000 SEBEC RIVER AT SEBEC, ME

LOCATION.--Lat 45°16'12", long 69°06'44", Piscataquis County, Hydrologic Unit 01020004, on right bank 1,000 ft (305 m) downstream from highway bridge and dam at outlet of Sebec Lake at Sebec.

DRAINAGE AREA.--327 mi² (847 km²).

PERIOD OF RECORD.--October 1924 to current year.

REVISED RECORDS.--WSP 1171: Drainage area, 1936(M). WSP 1301: 1925.

GAGE.--Water-stage recorder. Datum of gage is 296.3 ft (90.31 m) National Geodetic Vertical Datum of 1929. Prior to June 22, 1942, at site on opposite bank 60 ft (18 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Sebec Lake (Reservoirs in Penobscot River basin) and other reservoirs upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--54 years, 634 ft³/s (17.95 m³/s), 26.33 in/yr (669 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s (323 m³/s) Mar. 20, 1936, gage height, 14.46 ft (4.407 m), from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of velocity-area studies; minimum, about 2 ft³/s (0.1 m³/s) Oct. 14-17, 1930, gage height, 0.87 ft (0.265 m), when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,640 ft³/s (103 m³/s) Jan. 11, gage height, 7.35 ft (2.240 m); minimum daily, 41 ft³/s (1.16 m³/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	831	676	717	1080	584	761	2890	266	332	279	326
2	1060	781	676	707	1020	532	790	2660	268	332	276	515
3	1230	730	675	686	952	471	764	2460	277	326	268	439
4	2260	691	673	656	885	442	730	2290	289	324	267	388
5	2240	668	668	625	819	406	739	2150	293	322	266	338
6	2120	640	664	602	767	376	741	2030	298	322	261	278
7	2000	612	657	570	753	340	726	1940	292	325	257	261
8	1840	583	652	549	765	334	718	1860	313	323	253	227
9	1680	671	650	1290	748	319	721	1820	369	325	249	205
10	1710	610	648	3030	709	306	722	1880	537	325	244	175
11	2000	610	648	3550	686	295	741	1890	585	321	239	157
12	2000	610	644	3350	661	289	830	1840	591	316	232	157
13	1930	615	631	3010	625	280	937	1770	573	312	227	133
14	1810	620	627	2790	620	274	1060	1670	614	313	224	120
15	1780	623	635	2440	595	296	1170	1590	593	316	220	113
16	1740	624	334	1870	996	298	1280	1500	525	318	216	109
17	1790	622	111	1330	1430	296	1370	1490	497	318	213	100
18	1840	642	114	1270	1320	294	1460	1060	464	319	209	91
19	1800	647	120	1190	1240	294	1590	229	437	315	205	84
20	1820	656	122	1100	1160	289	1790	227	428	307	203	77
21	1820	671	123	1060	1100	288	2150	233	430	304	199	75
22	1790	679	136	998	1040	315	2540	234	417	309	192	72
23	1690	682	144	952	976	333	2830	237	412	307	185	66
24	1580	687	163	896	916	354	2950	239	400	305	178	62
25	1480	687	181	884	855	357	2990	243	369	303	175	61
26	1380	685	223	1380	785	352	3040	245	353	301	171	55
27	1270	685	323	1290	724	388	3090	251	343	297	170	50
28	1060	680	481	850	652	488	3110	248	345	295	165	50
29	974	679	602	1050	---	589	3100	248	336	291	167	47
30	935	677	677	1120	---	681	3050	249	333	288	164	41
31	889	---	724	1110	---	732	---	259	---	283	161	---
TOTAL	50548	19898	14402	42922	24879	11892	48490	37932	12247	9694	6735	4872
MEAN	1631	663	465	1385	889	384	1616	1224	408	313	217	162
MAX	2260	831	724	3550	1430	732	3110	2890	614	332	279	515
MIN	889	583	111	549	595	274	718	227	266	283	161	41
MEAN†	1467	726	754	1308	227	286	2369	1180	442	140	- 7	- 170
CFSM†	4.49	2.22	2.31	4.00	.69	.87	7.24	3.61	1.35	.43	-.02	-.52
IN†	5.18	2.48	2.66	4.61	.72	1.00	8.08	4.16	1.51	.50	-.02	-.58
CAL YR 1977 TOTAL	253100			MEAN 693	MAX 2610	MIN 105	MEAN† 717	CFSM† 2.19	IN† 29.79			
WTR YR 1978 TOTAL	284511			MEAN 779	MAX 3550	MIN 41	MEAN† 729	CFSM† 2.23	IN† 30.30			

† Adjusted for change in contents in Sebec Lake.

NOTE.--Negative figures of adjusted discharge and runoff indicate evaporation and seepage exceeded inflow.

01033500 PLEASANT RIVER NEAR MILO, ME

LOCATION.--Lat 45°16'58", long 69°00'13", Piscataquis County, Hydrologic Unit 01020004, on left bank 2.5 mi (4.0 km) northeast of Milo and 7.9 mi (12.7 km) upstream from mouth.

DRAINAGE AREA.--324 mi² (839 km²).

PERIOD OF RECORD.--June 1920 to current year.

REVISED RECORDS.--WSP 1301: 1921-22(M), 1924-27(M), 1929(M). WSP 2101: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 302 ft (92.0 m), from river-profile map. Prior to June 17, 1929, nonrecording gage at Snows Bridge 2.2 mi (3.5 km) downstream at datum 32 ft (9.8 m) lower.

REMARKS.--Records good except those for winter period, which are fair. Flow may be slightly regulated by small storage dams above station. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--58 years, 711 ft³/s (20.14 m³/s), 29.80 in/yr (757 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,600 ft³/s (810 m³/s) Nov. 4, 1966, gage height, 15.46 ft (4.712 m); minimum, 15 ft³/s (0.42 m³/s) Aug. 17, 1944, gage height, 1.21 ft (0.369 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,700 ft³/s (100 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	1700	5180 147	6.01 1.832	Apr. 21	2200	3980 113	5.39 1.643
Oct. 10	1200	6100 173	6.45 1.966	Apr. 27	0400	3820 108	5.30 1.615
Jan. 10	--	*7300 210	a*8.66 2.640	May 10	1000	6310 179	6.54 1.993

a Ice jam.

Minimum discharge, 42 ft³/s (1.19 m³/s) Aug. 27, 28, gage height, 1.37 ft (0.418 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	523	500	730	1450	210	680	2550	608	304	121	100
2	4070	499	540	660	1300	205	590	2000	496	290	115	85
3	3760	481	560	620	1150	200	520	1890	571	270	112	78
4	2090	470	500	580	1000	195	500	1900	653	246	121	72
5	1410	555	470	550	920	195	480	1930	522	227	134	65
6	1070	553	430	530	840	190	470	1960	459	205	131	61
7	879	519	380	510	760	190	460	2110	413	188	121	82
8	737	484	350	500	700	190	460	2310	557	175	112	126
9	737	603	325	2000	650	185	500	3070	995	167	103	137
10	4880	1090	305	6400	600	185	660	5960	1440	192	95	141
11	4010	1110	295	5530	550	185	820	4380	1000	223	90	141
12	2230	1240	285	2900	510	180	968	3120	737	192	85	148
13	1550	1050	320	1450	480	180	1240	2480	585	167	80	155
14	1190	928	380	950	440	220	1340	2170	585	148	75	141
15	1230	801	450	740	410	300	1480	1970	600	141	73	126
16	1690	726	405	500	385	330	1560	1810	509	196	69	115
17	2010	741	375	440	365	290	1550	2120	435	280	65	110
18	2880	1420	350	390	340	265	1560	2360	391	255	61	102
19	2230	1590	335	360	320	255	1790	1950	365	218	57	98
20	2040	1230	320	340	305	245	2350	1610	418	196	57	90
21	2190	1010	440	325	290	250	3500	1460	660	184	61	85
22	1750	1020	920	315	275	270	3750	1480	615	192	58	82
23	1390	946	1500	305	260	295	3590	1220	529	223	51	78
24	1140	856	1300	300	250	310	3190	1010	453	218	49	70
25	982	803	1100	295	240	290	3000	872	396	192	47	68
26	868	754	2000	700	230	285	3350	777	355	171	44	65
27	791	750	1600	2700	225	300	3620	690	320	144	44	65
28	726	690	1300	3100	220	700	3640	630	350	137	44	60
29	657	620	1100	2500	---	1400	3590	564	375	141	75	60
30	604	560	930	2050	---	1100	3400	522	330	144	137	58
31	556	---	820	1700	---	840	---	713	---	134	122	---
TOTAL	53477	24622	20885	40970	15465	10435	54608	59588	16722	6160	2609	2864
MEAN	1725	821	674	1322	552	337	1820	1922	557	199	84.2	95.5
MAX	4880	1590	2000	6400	1450	1400	3750	5960	1440	304	137	155
MIN	556	470	285	295	220	180	460	522	320	134	44	58
CFSM	5.32	2.53	2.08	4.08	1.70	1.04	5.62	5.93	1.72	.61	.26	.30
IN.	6.14	2.83	2.40	4.70	1.78	1.20	6.27	6.84	1.92	.71	.30	.33

CAL YR 1977	TOTAL	286222	MEAN 784	MAX 4880	MIN 91	CFSM 2.42	IN 32.86
WTR YR 1978	TOTAL	308405	MEAN 845	MAX 6400	MIN 44	CFSM 2.61	IN 35.41

PENOBSCOT RIVER BASIN

01034000 PISCATAQUIS RIVER AT MEDFORD, ME

LOCATION.--Lat 45°15'40", long 68°52'07", Piscataquis County, Hydrologic Unit 01020004, on left bank 2.0 mi (3.2 km) southwest of Medford and 3.3 mi (5.3 km) downstream from Pleasant River.

DRAINAGE AREA.--1,161 mi² (3,007 km²).

PERIOD OF RECORD.--June 1924 to current year.

REVISED RECORDS.--WSP 1171: Drainage area. WSP 1231: 1936. WSP 1301: 1925-29(M).

GAGE.--Water-stage recorder. Datum of gage is 248.68 ft (75.798 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 14, 1929, nonrecording gage at site 1.8 mi (2.9 km) downstream at different datum.

REMARKS.--Records good except those for winter period and period of no gage-height record, June 16 to July 18, which are fair. Flow regulated by Sebec Lake 15 mi (24 km) upstream (Reservoirs in Penobscot River basin) and other small reservoirs and powerplants above station. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--54 years, 2,359 ft³/s (66.81 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,100 ft³/s (1,700 m³/s) Nov. 4, 1966, gage height, 15.58 ft (4.749 m); minimum, 99 ft³/s (2.80 m³/s) Oct. 28, 1947, gage height, 1.28 ft (0.390 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 20.8 ft (6.34 m) May 1, 1923, former site and datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 13,000 ft³/s (370 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 3	0200	16,600 470	8.21 2.502	Jan. 28	0800	13,000 368	7.41 2.259
Oct. 10	2200	15,200 430	7.91 2.411	Apr. 22	1900	16,600 470	8.22 2.505
Jan. 11	0800	*23,200 657	9.58 2.920	Apr. 27	1200	13,300 377	7.48 2.280

Minimum discharge, 116 ft³/s (3.29 m³/s), Sept. 30, gage height, 1.31 ft (0.399 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4760	2110	1850	2500	5900	1230	3660	10000	1660	900	465	300
2	10900	2000	2020	2200	5000	1170	3310	8080	1380	850	430	485
3	14400	1890	2140	2000	4300	1130	3100	7310	1410	800	410	573
4	9230	1820	2060	1950	3800	1100	2590	7070	1780	750	455	531
5	6760	1900	1800	1850	3400	1060	2470	6950	1610	710	474	457
6	5330	1910	1630	1800	3000	1030	2640	6780	1400	660	460	394
7	4530	1820	1500	1750	2750	1000	2760	6780	1260	620	444	378
8	3920	1740	1410	1900	2550	980	2780	6920	1370	590	520	384
9	3600	1990	1340	2800	2300	960	2950	7500	2130	570	448	408
10	10500	4800	1280	11500	2100	940	3210	11800	3450	580	400	383
11	12300	4160	1220	21800	2000	920	3590	10400	3080	620	359	364
12	7730	4370	1200	14600	1850	910	4090	8000	2290	600	343	374
13	5890	3620	1250	7700	1750	900	5190	6570	1880	550	350	367
14	4860	3230	1480	4250	1650	890	5670	5730	1770	530	339	338
15	4780	2840	1500	2000	1550	900	6250	5140	1880	510	326	311
16	6620	2570	1570	1450	1700	1200	6840	4730	1730	560	316	294
17	7020	2490	1350	1250	2300	1300	6890	5470	1600	720	308	272
18	10400	3690	1200	1170	2150	1150	7270	7290	1450	700	300	248
19	8520	4810	1100	1130	2000	1050	8030	4840	1300	664	286	230
20	7240	3820	1070	1100	1900	1000	9990	3640	1280	624	282	216
21	7920	3150	1400	1080	1800	990	13000	3430	1550	596	300	200
22	6570	3050	2430	1060	1700	1020	15300	3560	1700	592	278	193
23	5480	2940	4680	1040	1650	1100	14900	2930	1550	612	266	180
24	4610	2700	4180	1030	1550	1240	13500	2400	1400	627	253	167
25	4040	2570	3470	1900	1450	1300	12100	2080	1250	590	246	156
26	3640	2400	5050	4300	1400	1120	12500	1870	1100	572	239	146
27	3290	2420	6800	9300	1350	1080	13100	1700	1020	547	236	138
28	2980	2090	5400	12200	1260	2200	13000	1560	1000	528	234	130
29	2590	2020	4400	11300	---	4020	12600	1430	1030	507	287	123
30	2350	1840	3600	9470	---	4490	12100	1330	990	496	317	118
31	2200	---	3000	7200	---	4110	---	1750	---	490	330	---
TOTAL	194960	82760	74380	146580	66110	43490	225380	165040	48300	19265	10701	8858
MEAN	6289	2759	2399	4728	2361	1403	7513	5324	1610	621	345	295
MAX	14400	4810	6800	21800	5900	4490	15300	11800	3450	900	520	573
MIN	2200	1740	1070	1030	1260	890	2470	1330	990	490	234	118
CAL YR 1977 TOTAL		986701		MEAN 2703		MAX 14400		MIN 443				
WTR YR 1978 TOTAL		1085824		MEAN 2975		MAX 21800		MIN 118				

01034500 PENOBSCOT RIVER AT WEST ENFIELD, ME
(National stream-quality accounting network station)

LOCATION.--Lat 45°14'12", long 68°38'56", Penobscot County, Hydrologic Unit 01020005, on left bank 30 ft (9 m) downstream from highway bridge, 1,000 ft (305 m) downstream from Piscataquis River, and at West Enfield.

DRAINAGE AREA.--6,670 mi² (17,280 km²), including 249 mi² (645 km²) drained by Chamberlain Lake through Telos Canal.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1901 to current year.

REVISED RECORDS.--WSP 279: 1902-10. WSP 1171: 1940. WSP 1231: 1902-13. WSP 2101: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 125.94 ft (38.387 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 11, 1912, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by many reservoirs above station (Reservoirs in Penobscot River basin).

COOPERATION.--Supplemental water-stage recorder graph furnished by Bangor Hydroelectric Company.

AVERAGE DISCHARGE.--76 years (water years 1903-78), 11,846 ft³/s (335 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 153,000 ft³/s (4,330 m³/s) May 1, 1923, gage height, 25.15 ft (7.666 m); minimum, 1,630 ft³/s (46.2 m³/s) Oct. 29, 1905, gage height, 1.0 ft (0.30 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 53,500 ft³/s (1,520 m³/s) Apr. 23, gage height, 13.14 ft (4.005 m); maximum gage height, 18.99 ft (5.788 m) Jan. 16 (backwater from ice); minimum daily discharge, 3,040 ft³/s (86.1 m³/s) Aug. 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15100	12700	10400	15500	20000	9500	20400	46700	9820	6760	3760	4110
2	24300	12100	10800	14500	18500	9400	19300	41800	9190	5270	3330	4080
3	37500	11500	11500	13500	17500	9250	18900	38300	8440	4720	3260	4960
4	30300	10800	11200	12700	16200	9050	17500	35900	8520	4980	3930	4060
5	24600	11400	10500	12300	15000	9000	16800	33300	8280	5490	4060	3390
6	21000	11700	9670	11600	13500	8950	16000	31400	7960	4990	3980	4350
7	18900	11300	8470	11200	12800	9000	15700	29200	7710	4850	3910	4630
8	16800	11000	9860	10800	12100	9150	15100	28700	8040	4830	3600	4890
9	14600	11000	8820	15000	11800	9000	15700	28800	9180	4670	3510	5530
10	21100	13500	8600	32500	11600	8700	16600	35000	12400	4240	3530	5690
11	30000	13400	8400	50600	11500	8500	17700	36300	12900	4720	3520	5460
12	23200	14200	9000	32500	11300	8400	19000	31900	11000	4560	3330	5660
13	19400	13600	9200	31000	11100	8350	21900	28600	9750	4600	3300	5110
14	17900	12500	9500	26000	10600	8450	24200	25900	9010	4460	3300	5090
15	17100	12600	10300	23000	10400	8700	26100	22500	8830	4140	3320	5430
16	22500	11900	9900	21300	10300	9100	28500	20500	8670	4060	3320	6080
17	26200	11500	10000	19600	11200	9500	29400	20500	8100	3820	3320	5100
18	34600	13400	11000	18500	11200	9600	31100	23100	8010	4100	3270	5390
19	36100	17400	10200	17000	11000	9600	33300	20400	7830	4020	3230	4900
20	33300	17500	10000	15600	10700	9600	38300	17900	7640	4020	3180	5320
21	33400	16300	9800	14800	10500	9700	45500	16600	8480	3770	3100	4580
22	30600	14900	11200	14100	10400	10000	50700	16800	9830	3670	3140	4130
23	27700	14200	14500	13700	10300	10600	53200	16300	8960	3860	3090	4670
24	24700	13600	15300	13500	10200	11300	51700	14500	8700	4860	3080	4930
25	22900	13200	15900	15200	10000	11800	49700	15000	8360	4080	3070	4640
26	21000	12900	18700	18500	9950	11700	49400	12100	7710	4270	3130	4680
27	18900	12600	25100	16500	9800	13500	50700	10500	7900	3790	3110	4650
28	17500	12100	22000	25500	9650	15300	51700	9440	8080	3690	3040	4860
29	16100	10900	19500	26000	---	18100	51300	9540	7940	3700	3060	4540
30	14900	10400	18700	23800	---	20700	50000	9820	7690	3660	3080	4430
31	13900	---	17500	22000	---	20600	---	9670	---	3930	3750	---
TOTAL	726100	386100	385520	608300	339100	334100	945400	736970	264930	136580	104610	145340
MEAN	23420	12870	12440	19620	12110	10780	31510	23770	8831	4406	3375	4845
MAX	37500	17500	25100	50600	20000	20700	53200	46700	12900	6760	4060	6080
MIN	13900	10400	8400	10800	9650	8350	15100	9440	7640	3660	3040	3390
CAL YR 1977 TOTAL	5370110			MEAN 14710		MAX 53300		MIN 3300				
WTR YR 1978 TOTAL	5113050			MEAN 14010		MAX 53200		MIN 3040				

01034500 PENOBSCOT RIVER AT WEST ENFIELD, ME--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1966 to September 1978 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1973 to September 1978 (discontinued).

WATER TEMPERATURES: July 1966 to September 1978 (discontinued).

INSTRUMENTATION.--Water-quality monitor since July 1973.

REMARKS.--Interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 187 micromhos Sept. 25, 1976; minimum, 30 micromhos June 9, 10, 1975.

WATER TEMPERATURES: Maximum, 27.5°C Aug. 2, 3, 1975; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 183 micromhos Aug. 5; minimum, 33 micromhos May 20.

WATER TEMPERATURES: Maximum, 27.0°C July 22; minimum, 0.0°C on many days during winter periods.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE	PH	TEMPER- ATURE, AIR	TEMPER- ATURE	TUR- BID- ITY	TUR- BID- ITY	OXYGEN, DIS- SOLVED	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (CULS. PER 100 ML)	
			(MICRO- MHOS)		(DEG C)	(DEG C)	(JTU)	(NTU)	(MG/L)	(MG/L)	(COLS./ 100 ML)		
OCT 27...	1600	18400	50	6.8	22.0	8.0	1	--	11.2	94	K630	94	
NOV 22...	1030	15000	51	6.7	4.0	3.5	1	--	12.8	96	>600	140	
DEC 20...	1030	9500	60	6.5	-2.5	.0	2	--	14.0	96	K250	140	
JAN 24...	0945	14500	55	6.5	-8.5	.0	6	--	13.1	90	450	160	
FEB 22...	1130	10700	60	6.5	-4.0	.0	3	--	13.8	95	150	120	
MAR 21...	1030	11100	65	6.9	.5	.0	2	--	13.2	90	470	100	
APR 19...	1400	33200	52	6.6	13.0	2.0	2	--	10.4	75	19	14	
MAY 18...	1315	23500	42	6.8	19.5	12.5	2	--	10.4	97	126	50	
JUN 28...	1215	8240	53	6.9	24.0	22.0	--	5.0	7.8	89	72	39	
JUL 27...	1545	3960	63	6.6	25.0	23.0	--	3.0	6.5	75	K79	K440	
AUG 29...	1415	3020	56	6.7	22.5	19.5	--	3.0	8.2	88	140	66	
SEP 12...	1230	5700	47	6.5	15.5	15.0	--	1.0	8.4	82	600	38	
DATE		HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAH- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAH- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)
OCT 27...	18	5	5.6	.9	2.5	23	.3	.5	15	0	12	3.8	
NOV 22...	17	2	5.2	1.0	2.4	23	.3	.6	18	0	15	5.7	
DEC 20...	19	5	5.5	1.3	2.7	23	.3	.7	17	0	14	8.6	
JAN 24...	18	6	5.4	1.1	2.5	23	.3	.5	15	0	12	7.6	
FEB 22...	19	2	5.5	1.3	2.8	23	.3	.6	21	0	17	11	
MAR 21...	18	6	5.2	1.2	2.8	25	.3	.6	14	--	11	2.8	
APR 19...	16	4	5.0	.9	2.2	22	.2	.4	15	0	12	6.0	
MAY 18...	15	8	4.5	.9	1.8	20	.2	.5	9	0	7	2.3	
JUN 28...	16	8	4.6	1.2	3.2	29	.3	.6	--	--	8	--	
JUL 27...	16	0	4.9	1.0	5.4	41	.6	.7	--	--	22	--	
AUG 29...	15	5	4.5	.9	5.1	41	.6	.6	--	--	10	--	
SEP 12...	15	4	4.0	1.1	2.2	24	.3	.6	--	--	11	--	

01034500 PENOBSCOT RIVER AT WEST ENFIELD, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)
OCT												
27...	6.0	2.9	.0	3.8	44	30	2190	.06	.00	--	--	--
NOV												
22...	8.0	2.6	.1	4.2	40	33	1620	.10	.03	--	--	--
DEC												
20...	7.9	2.4	.0	4.0	52	33	1330	.09	.00	--	--	--
JAN												
24...	7.1	1.9	.0	4.5	42	30	1640	.13	.00	.26	.26	.12
FEB												
22...	8.8	2.6	.0	4.3	52	36	1500	.10	.00	.22	.22	.07
MAR												
21...	8.0	2.1	.0	4.4	46	31	1380	.13	.01	.32	.33	.00
APR												
19...	7.9	2.9	.0	3.8	32	30	2870	.12	.00	.08	.08	.00
MAY												
18...	7.8	.3	.0	3.1	36	23	2280	.07	.02	.31	.33	.08
JUN												
28...	8.0	3.6	.0	2.0	44	28	979	.00	.03	.24	.27	.12
JUL												
27...	6.5	1.7	.0	1.4	55	35	588	.00	.01	.77	.78	.00
AUG												
29...	7.2	3.4	.0	1.9	47	30	383	.01	.03	.60	.63	.21
SEP												
12...	8.8	1.6	.1	2.9	41	28	631	.01	.04	.29	.33	.16

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT												
27...	.25	--	--	.01	.01	--	--	--	--	--	--	--
NOV												
22...	.26	--	--	.02	.00	0	0	0	100	0	100	0
DEC												
20...	.23	--	--	.02	.02	--	--	--	--	--	--	--
JAN												
24...	.14	.39	1.7	.01	.01	--	--	--	--	--	--	--
FEB												
22...	.15	.32	1.4	.02	.01	3	0	3	0	0	0	0
MAR												
21...	--	.46	2.0	.02	.01	--	--	--	--	--	--	--
APR												
19...	--	.20	.89	.02	.01	--	--	--	--	--	--	--
MAY												
18...	.25	.40	1.8	.02	.01	1	0	1	0	0	0	0
JUN												
28...	.15	.27	1.2	.03	.00	--	--	--	--	--	--	--
JUL												
27...	--	.78	3.5	.03	.01	--	--	--	--	--	--	--
AUG												
29...	.42	.64	2.8	.02	.00	1	--	1	0	0	0	0
SEP												
12...	.17	.34	1.5	.03	.01	--	--	--	--	--	--	--

01034500 PENOBSCOT RIVER AT WEST ENFIELD, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

[illegible][illegible]

01034500 PENOBSCOT RIVER AT WEST ENFIELD, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MERCURY SUS- PENDE RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT 27...	--	--	--	--	--	--	--	--	--
NOV 22...	.0	<.5	0	0	0	0	0	0	10
DEC 20...	--	--	--	--	--	--	--	--	--
JAN 24...	--	--	--	--	--	--	--	--	--
FEB 22...	.0	<.5	0	0	0	1	1	0	10
MAR 21...	--	--	--	--	--	--	--	--	--
APR 19...	--	--	--	--	--	--	--	--	--
MAY 18...	.0	<.5	0	0	0	0	0	0	10
JUN 28...	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--
AUG 29...	.0	<.5	0	0	0	0	0	0	10
SEP 12...	--	--	--	--	--	--	--	--	--

DATE	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 27...	--	--	7.1	--	--	6	298	90
NOV 22...	0	10	7.6	--	--	9	364	100
DEC 20...	--	--	10	--	--	4	103	79
JAN 24...	--	--	16	--	--	1	39	100
FEB 22...	10	0	--	13	--	5	144	100
MAR 21...	--	--	8.0	--	--	7	210	61
APR 19...	--	--	7.2	--	--	5	448	100
MAY 18...	0	10	--	8.0	.7	5	317	100
JUN 28...	--	--	9.0	--	--	5	111	100
JUL 27...	--	--	--	--	--	5	53	100
AUG 29...	0	10	--	7.2	.5	2	16	100
SEP 12...	--	--	7.6	--	--	3	46	100

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED RADON METHOD (PCI/L)	URANIUM DIS- SOLVED EXTRAC- TION (UG/L)	SOLIDS, RESIDUE AT 105 DEG. C. DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C. SUS- PENDE (MG/L)
OCT 27...	.7	<.4	2.4	<.4	2.3	<.4	.03	.04	48	2
APR 19...	<.4	<.4	2.3	.7	2.2	.7	.07	.02	42	4

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

				PERIPHYTON			SAMPLING METHOD
DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS(G/SQ M)		CHLOROPHYLL A	CHLOROPHYLL B	BIOMASS PIGMENT RATIO	
		DRY WEIGHT	ASH WEIGHT	(MG/SQ M)	(MG/SQ M)		
JUN 28	41	8.66	6.69	2.03	.000	970	ARTIFICIAL SUBSTRATE
SEP 12	12	5.59	4.09	3.52	.720	426	ARTIFICIAL SUBSTRATE

01034500 PENOBSCOT RIVER AT WEST ENFIELD, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	NOV 22.77 1030	MAR 21.78 1030	MAY 18.78 1315	JUN 28.78 1215				
TOTAL CELLS/ML	1100	150	770	16000				
DIVERSITY: DIVISION	1.5	0.0	1.2	0.1				
..CLASS	1.8	0.0	1.2	0.1				
..ORDER	2.5	1.0	1.6	0.2				
...FAMILY	3.2	1.9	2.6	0.2				
....GENUS	3.3	2.2	2.8	0.2				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	--	-
....OOCYSTACEAE								
....ANKISTRODESMUS	61	6	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	--	-	--	-	--	-
....TETRASTRUM	--	-	--	-	--	-	--	-
..VOLVOCELES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	34	3	--	-	--	-	--	-
...VOLVOCEAE								
....GONIUM	--	-	--	-	--	-	--	-
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	48	4	9	6	14	2	--	-
....MELOSIRA	--	-	63#	41	43	6	16000#	98
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	140	13	--	-	29	4	--	-
...COCCONEIS	--	-	--	-	--	-	*	0
...CYMBELLACEAE								
....CYMBELLA	--	-	9	6	14	2	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	29	4	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	54	5	--	-	29	4	*	0
....FRAGILARIA	--	-	--	-	--	-	*	0
....SYNEDRA	14	1	27#	18	200#	26	--	-
...GOMPHONEMACEAE								
....GOMPHONEMA	34	3	--	-	86	11	--	-
...NAVICULACEAE								
....AMPHIPLEURA	--	-	--	-	--	-	--	-
....DIPLONEIS	--	-	--	-	--	-	*	0
...NAVICULA	48	4	9	6	--	-	*	0
....PINNULARIA	--	-	--	-	--	-	*	0
...NITZSCHACEAE								
....NITZSCHIA	--	-	--	-	14	2	--	-
...TABELLARIACEAE								
....TABELLARIA	75	7	36#	24	14	2	--	-
..CHRYSTOPHYCEAE								
...CHRYSSOMONADALES								
...MALLOMONADACEAE								
....MALLOMONAS	--	-	--	-	--	-	--	-
...OCHROMONADACEAE								
....DINOBYRON	68	6	--	-	--	-	--	-
....OCHROMONAS	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONIDALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	41	4	--	-	--	-	--	-
...CRYPTOMONODACEAE								
....CRYPTOMONAS	--	-	--	-	57	7	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...HORMOGONALES								
...OSCILLATORIACEAE								
....PHORMIDIUM	260#	24	--	-	--	-	--	-
...CHROCOCCALES								
...CHROCOCCACEAE								
....ANACYSTIS	200#	18	--	-	--	-	150	1
...HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	240#	31	--	-
...SCYTONEMACEAE								
....PLECTONEMA	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01034500 PENOBSCOT RIVER AT WEST ENFIELD, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	JUL 27,78 1545		AUG 29,78 1415		SEP 12,78 1230	
TOTAL CELLS/ML	10000		5300		4300	
DIVERSITY: DIVISION	1.6		1.4		1.4	
..CLASS	1.6		1.5		1.6	
...ORDER	2.0		2.0		2.3	
...FAMILY	2.4		2.1		2.4	
....GENUS	2.6		2.4		2.6	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
....CHARACIACEAE						
....SCHROEDERIA	* 0		* 0		--	-
....OOCYSTACEAE						
....ANKISTRODESMUS	730	7	48	1	22	1
....DICTYOSPHAERIUM	1400	14	380	7	180	4
....OOCYSTIS	--	-	* 0		--	-
....SELENASTRUM	--	-	--	-	44	1
....TETRAEDRON	--	-	* 0		--	-
....SCENEDESMACEAE						
....CRUCIGENIA	--	-	120	2	--	-
....SCENEDESMUS	130	1	--	-	--	-
....TETRASTRUM	--	-	38	1	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	86	2	89	2
...VOLVOCAEAE						
....GONIUM	360	3	--	-	--	-
CHRYSOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	* 0		200	4	44	1
...MELOSIRA	3800#	37	2600#	49	1900#	44
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	67	2
...COCCONEIS	* 0		* 0		--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	--	-
...DIATOMACEAE						
....DIATOMA	--	-	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	89	1	--	-	--	-
...FRAGILARIA	110	1	--	-	--	-
...SYNEDRA	--	-	58	1	--	-
...GOMPHONEMACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
....AMPHIPLEURA	--	-	--	-	22	1
....DIPLONEIS	--	-	--	-	--	-
....NAVICULA	* 0		38	1	89	2
...PINNULARIA	--	-	--	-	--	-
...NITZSCHIAEAE						
....NITZSCHIA	--	-	* 0		130	3
...TABELLARIACEAE						
....TABELLARIA	--	-	48	1	22	1
..CHRYSOPHYCEAE						
...CHRYSOMONADALES						
...MALLOMONADACEAE						
....MALLOMONAS	* 0		--	-	--	-
...OCHROMONADACEAE						
....DINOBRYON	--	-	* 0		--	-
....OCHROMONAS	--	-	--	-	180	4
CRYPTOPHYTA (CRYPTOMONADS)						
..CRYPTOPHYCEAE						
...CRYPTOMONIDALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	--	-	38	1	--	-
...CRYPTOMONODACEAE						
....CRYPTOMONAS	* 0		--	-	67	2
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...HORMOGONALES						
...OSCILLATORIACEAE						
....PHORMIDIUM	--	-	--	-	--	-
...CHROCOCCALES						
...CHROCOCCACEAE						
....ANACYSTIS	180	2	410	8	1000#	23
...HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	1600#	15	1200#	22	440	10
...SCYTONEMACEAE						
....PLECTONEMA	1900#	18	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

PENOBSCOT RIVER BASIN

01034500: PENOBSCOT RIVER AT WEST ENFIELD, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	67	64	65	48	47	48	59	55	57	53	51	52
2	68	65	66	50	47	48	61	57	59	53	51	52
3	64	61	61	52	48	50	59	56	57	54	51	52
4	61	59	60	53	49	51	58	56	57	53	50	52
5	63	59	61	52	50	51	57	55	56	55	52	54
6	61	60	61	51	49	50	59	55	58	56	53	55
7	60	58	59	52	50	51	59	55	57	56	52	54
8	62	58	60	51	50	51	58	54	56	58	53	55
9	65	61	63	55	50	52	61	54	57	69	55	62
10	65	63	64	56	54	55	58	54	56	57	46	50
11	63	56	59	60	53	56	61	57	59	50	46	48
12	56	54	55	54	52	53	66	60	63	52	46	49
13	57	55	56	53	53	53	61	57	60	50	47	49
14	56	55	56	56	51	53	63	58	60	55	50	53
15	59	55	57	54	51	53	64	60	62	57	55	56
16	58	53	56	58	55	56	63	58	61	57	55	56
17	54	52	53	61	55	58	61	57	59	57	54	55
18	51	48	49	60	54	56	61	57	59	55	53	55
19	47	45	46	55	52	54	60	57	59	56	53	54
20	52	45	49	55	51	53	58	57	57	56	55	55
21	51	49	50	54	50	52	60	58	58	56	55	55
22	50	48	49	55	53	54	92	59	68	59	56	57
23	49	46	47	56	52	54	61	59	60	58	55	56
24	48	45	46	56	53	54	59	55	57	59	54	57
25	50	45	47	56	54	55	70	54	61	63	58	60
26	48	46	47	56	53	55	65	52	57	168	63	95
27	50	47	48	54	50	52	52	47	49	142	67	90
28	49	47	47	55	52	53	52	47	49	68	60	66
29	48	45	46	56	53	54	50	47	49	66	58	62
30	50	46	48	55	52	54	54	47	50	59	58	58
31	51	46	48	---	---	---	54	51	53	61	57	59
MONTH	68	45	54	61	47	53	92	47	57	168	46	58

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	58	56	57	---	---	---	57	55	55	42	39	41
2	59	55	57	---	---	---	58	56	57	46	41	43
3	58	55	56	---	---	---	58	55	56	46	42	44
4	59	56	57	---	---	---	58	56	57	45	40	42
5	60	56	58	---	---	---	60	57	59	46	42	44
6	59	57	58	---	---	---	60	57	58	44	41	43
7	59	58	58	---	---	---	59	57	58	46	42	44
8	59	57	58	---	---	---	58	56	57	45	42	43
9	59	56	58	---	---	---	59	55	56	42	39	40
10	60	57	58	---	---	---	56	53	55	45	41	44
11	60	58	59	---	---	---	55	54	55	43	40	41
12	59	57	58	---	---	---	59	55	56	44	40	42
13	60	56	58	---	---	---	58	55	56	42	40	41
14	58	56	57	---	---	---	57	54	55	41	39	40
15	59	59	59	---	---	---	54	52	53	42	40	41
16	60	58	58	---	---	---	52	50	52	43	41	42
17	61	58	60	---	---	---	52	49	50	45	42	44
18	61	59	60	---	---	---	54	49	51	49	36	43
19	62	59	60	---	---	---	53	47	50	38	35	35
20	61	58	59	---	---	---	49	47	48	37	33	35
21	61	59	60	---	---	---	49	47	48	38	35	36
22	62	59	60	---	---	---	49	46	47	38	35	37
23	69	62	64	---	---	---	46	43	45	38	35	36
24	---	---	---	---	---	---	45	43	44	42	36	39
25	---	---	---	---	---	---	46	43	45	41	38	39
26	---	---	---	---	---	---	47	43	44	52	39	44
27	---	---	---	---	---	---	46	42	44	131	47	61
28	---	---	---	---	---	---	45	42	43	129	45	60
29	---	---	---	---	---	---	45	42	43	77	52	62
30	---	---	---	61	58	60	44	39	41	89	59	75
31	---	---	---	58	55	56	---	---	---	157	65	112
MONTH	69	55	59	61	55	58	60	39	51	157	33	46

01034500 PENOBSCOT RIVER AT WEST ENFIELD, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	52	48	49	56	53	55	50	47	49
2	182	49	113	63	54	59	55	52	54	48	46	47
3	57	50	54	68	55	62	88	52	62	50	43	46
4	59	53	55	74	50	59	128	90	121	50	47	49
5	57	52	54	66	43	51	183	116	158	50	38	44
6	56	50	53	56	42	47	176	83	136	41	38	40
7	57	47	52	56	49	53	92	74	82	43	41	42
8	74	57	66	59	48	54	92	78	84	49	42	45
9	63	52	56	54	47	50	98	81	89	52	49	50
10	68	46	53	---	---	---	85	79	83	48	46	47
11	59	45	49	---	---	---	88	85	86	50	46	48
12	---	---	---	158	83	101	106	85	91	54	47	49
13	---	---	---	102	81	89	109	55	83	49	47	48
14	122	66	91	---	---	---	57	53	56	48	46	47
15	131	44	66	---	---	---	56	50	54	51	46	48
16	63	53	55	---	---	---	53	50	53	51	49	51
17	69	51	56	---	---	---	53	51	53	49	47	48
18	51	50	51	---	---	---	53	47	51	70	41	49
19	51	50	51	---	---	---	53	50	51	71	40	55
20	52	50	51	---	---	---	55	48	50	71	40	58
21	53	50	51	---	---	---	54	43	49	72	41	52
22	53	51	52	98	68	78	52	42	49	75	43	57
23	57	51	53	80	42	63	54	45	49	76	41	55
24	51	50	51	55	45	51	51	42	46	43	41	42
25	52	50	51	---	---	---	55	39	48	44	42	43
26	52	50	51	56	37	49	52	43	48	43	41	42
27	55	49	52	81	42	53	51	44	47	45	41	42
28	55	49	52	62	57	60	56	45	49	43	41	42
29	52	49	50	58	54	56	87	48	61	43	41	42
30	49	47	48	57	54	56	51	43	48	58	42	44
31	---	---	---	55	53	55	53	44	50	---	---	---
MONTH	182	44	57	158	37	60	183	39	68	76	38	47
YEAR	183	33	55									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.0	12.5	12.5	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0
2	13.0	12.5	13.0	6.5	6.0	6.5	.5	.0	.5	.0	.0	.0
3	13.0	12.0	12.5	7.0	6.0	6.5	.5	.0	.0	.0	.0	.0
4	12.0	11.0	11.5	7.5	6.5	7.0	.5	.0	.0	.0	.0	.0
5	12.0	11.0	11.5	7.5	7.0	7.0	.0	.0	.0	.0	.0	.0
6	11.5	10.5	11.0	6.5	6.0	6.5	.0	.0	.0	.0	.0	.0
7	11.0	10.0	10.5	6.5	6.0	6.5	.0	.0	.0	.0	.0	.0
8	10.5	9.5	10.0	6.0	5.5	6.0	.0	.0	.0	.0	.0	.0
9	10.0	10.0	10.0	6.5	6.0	6.5	.0	.0	.0	.0	.0	.0
10	10.5	10.0	10.5	7.0	6.5	7.0	.0	.0	.0	.0	.0	.0
11	10.5	10.0	10.0	7.5	7.0	7.5	.0	.0	.0	.0	.0	.0
12	10.0	10.0	10.0	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0
13	10.0	9.5	9.5	6.0	5.5	6.0	.0	.0	.0	.0	.0	.0
14	9.5	8.5	9.0	5.5	4.0	5.0	.0	.0	.0	.0	.0	.0
15	8.5	8.5	8.5	4.0	3.5	4.0	.0	.0	.0	.0	.0	.0
16	9.0	8.5	8.5	4.5	3.5	4.0	.0	.0	.0	.0	.0	.0
17	8.5	8.5	8.5	4.5	4.0	4.5	.0	.0	.0	.0	.0	.0
18	8.5	8.5	8.5	4.5	4.0	4.5	.0	.0	.0	.0	.0	.0
19	8.0	8.0	8.0	4.0	3.0	3.5	.0	.0	.0	.0	.0	.0
20	8.0	8.0	8.0	3.5	3.0	3.0	.0	.0	.0	.0	.0	.0
21	8.5	7.5	8.0	3.0	3.0	3.0	.0	.0	.0	.0	.0	.0
22	8.0	7.5	8.0	3.5	2.5	3.0	.0	.0	.0	.0	.0	.0
23	7.5	7.0	7.0	2.5	2.0	2.5	.0	.0	.0	.0	.0	.0
24	7.0	6.5	6.5	2.5	2.0	2.0	.0	.0	.0	.0	.0	.0
25	6.5	6.0	6.5	2.5	2.0	2.0	.0	.0	.0	.0	.0	.0
26	7.0	6.0	6.5	2.5	2.0	2.0	.0	.0	.0	.0	.0	.0
27	8.0	7.0	7.5	2.0	.0	1.0	.0	.0	.0	.0	.0	.0
28	8.0	7.5	8.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
29	8.0	7.5	8.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
30	8.0	7.5	7.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	7.5	6.5	7.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	13.0	6.0	9.0	7.5	.0	4.5	.5	.0	.0	.0	.0	.0

01035000 PASSADUMKEAG RIVER AT LOWELL, ME

LOCATION.--Lat 45°11'04", long 68°28'29", Penobscot County, Hydrologic Unit 01020005, on right bank at Lowell, 0.5 mi (0.8 km) downstream from dam and highway bridge, and 11 mi (18 km) upstream from mouth.

DRAINAGE AREA.--299 mi² (774 km²).

PERIOD OF RECORD.--October 1915 to current year.

REVISED RECORDS.--WSP 821: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 151.3 ft (46.12 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1915, to Sept. 30, 1917, nonrecording gage at same site and datum. Oct. 1, 1917, to Nov. 30, 1921, nonrecording gage at site on left bank 400 ft (122 m) downstream from highway bridge at different datum.

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

AVERAGE DISCHARGE.--63 years, 504 ft³/s (14.27 m³/s), 22.89 in/yr (581 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,680 ft³/s (161 m³/s) May 2, 1923, gage height, 9.40 ft (2.865 m); minimum, about 5 ft³/s (0.1 m³/s) several times in July and August 1921 (gates in dam closed).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,090 ft³/s (59.2 m³/s) Apr. 24, gage height, 5.05 ft (1.539 m); maximum gage height not determined (backwater from ice during period of no gage-height record Jan. 14 to Feb. 9); minimum discharge, 41 ft³/s (1.16 m³/s) Sept. 30, gage height, 0.63 ft (0.192 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	705	605	397	910	1160	350	879	1800	382	286	84	49
2	1090	559	401	860	1110	340	868	1710	361	283	86	47
3	1220	523	411	800	1060	320	835	1630	364	277	90	46
4	1250	503	413	740	1020	310	782	1550	382	265	92	60
5	1230	504	404	700	980	305	753	1470	400	253	98	56
6	1170	489	392	660	940	305	748	1390	400	236	100	55
7	1060	486	367	640	900	305	743	1310	389	221	104	56
8	944	468	362	620	870	300	755	1230	392	209	104	53
9	833	469	365	620	840	295	786	1200	437	193	102	58
10	855	472	370	660	810	290	843	1200	487	184	98	62
11	868	474	360	800	780	285	912	1170	511	174	94	65
12	943	489	350	960	750	280	1020	1140	495	156	90	80
13	962	490	325	1100	720	275	1170	1080	456	138	88	88
14	794	490	360	1150	690	290	1270	1020	422	131	86	94
15	794	480	380	1130	660	370	1350	951	407	127	84	96
16	894	474	370	1060	650	425	1400	881	392	124	78	96
17	1010	472	380	970	640	415	1430	835	368	122	74	94
18	1160	527	375	870	620	395	1470	775	337	120	72	88
19	1200	604	360	790	580	380	1530	734	314	117	71	82
20	1230	644	335	730	550	360	1690	704	305	113	67	76
21	1260	644	315	660	510	340	1910	690	340	109	63	69
22	1250	632	310	620	480	330	1990	685	378	109	62	65
23	1240	593	370	580	460	340	2050	670	414	104	58	60
24	1190	547	455	550	430	380	2070	642	425	104	55	55
25	1120	518	530	530	410	405	2080	601	414	100	53	52
26	1050	499	610	520	390	410	2060	562	382	94	50	49
27	970	474	700	560	370	410	2030	520	344	90	49	46
28	885	457	790	680	360	500	1990	487	330	86	47	45
29	810	434	880	870	---	600	1940	456	314	84	50	43
30	732	410	950	1100	---	740	1870	433	295	84	49	41
31	664	---	940	1180	---	840	---	407	---	84	49	---
TOTAL	31383	15430	14327	24620	19740	11890	41224	29933	11637	4777	2347	1926
MEAN	1012	514	462	794	705	384	1374	966	388	154	75.7	64.2
MAX	1260	644	950	1180	1160	840	2080	1800	511	286	104	96
MIN	664	410	310	520	360	275	743	407	295	84	47	41
CFSM	3.39	1.72	1.55	2.66	2.36	1.28	4.60	3.23	1.30	.52	.25	.22
IN.	3.90	1.92	1.78	3.06	2.46	1.48	5.13	3.72	1.45	.59	.29	.24

CAL YR 1977 TOTAL 235277 MEAN 645 MAX 1890 MIN 128 CFSM 2.16 IN 29.27
WTR YR 1978 TOTAL 209234 MEAN 573 MAX 2080 MIN 41 CFSM 1.92 IN 26.03

01036500 KENDUSKEAG STREAM NEAR KENDUSKEAG, ME

LOCATION.--Lat 44°53'48", long 68°53'04", Penobscot County, Hydrologic Unit 01020005, on right bank 300 ft (91 m) upstream from highway bridge, 1.8 mi (2.9 km) downstream from Black Stream, and 2.9 mi (4.7 km) south of Kenduskeag.

DRAINAGE AREA.--178 mi² (461 km²).

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 91.94 ft (28.023 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. An artificial cut has been made through a low divide between Souadabscook Stream and Black Stream which enters Kenduskeag Stream 1.8 mi (2.9 km) above station. During high stages of Souadabscook Stream, part of its flow passes through the cut into Kenduskeag Stream; at low stages of Souadabscook Stream, all flow continues down its own channel. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--37 years, 324 ft³/s (9.176 m³/s), 24.72 in/yr (628 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,400 ft³/s (181 m³/s) Sept. 12, 1954, gage height, 14.83 ft (4.520 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 30, 1948, Aug. 8, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	unknown	2540 71.9	7.87 2.399	Jan. 10	2200	*4410 125	11.10 3.383
Oct. 18	0700	1790 50.7	6.38 1.945	Apr. 21	1700	2580 73.1	7.94 2.420

Minimum daily discharge, 2.4 ft³/s (0.068 m³/s) Aug. 27, 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	750	211	200	255	420	95	550	470	88	34	11	3.3
2	2300	197	287	235	360	92	470	392	75	31	11	3.3
3	1700	186	422	220	310	90	420	337	80	27	10	3.6
4	1200	187	390	210	280	88	390	317	176	25	11	3.8
5	910	226	318	205	260	86	370	283	219	22	12	3.6
6	689	232	198	200	250	84	410	238	178	19	11	3.3
7	522	203	223	190	230	82	450	208	128	18	11	4.6
8	410	180	230	190	215	80	490	189	189	17	10	5.2
9	351	320	215	710	200	78	540	254	408	16	9.4	5.4
10	863	812	190	3900	190	78	600	625	553	16	9.0	5.4
11	931	770	175	1180	180	76	700	511	382	15	7.9	5.2
12	668	756	170	1000	170	75	860	368	236	14	7.1	6.1
13	525	589	175	640	160	74	1200	264	149	13	6.8	6.1
14	420	538	190	540	155	74	1180	204	147	12	6.1	5.4
15	540	458	210	460	150	77	1020	170	188	13	5.8	6.1
16	1070	390	230	420	140	160	1030	158	150	16	5.2	7.1
17	1220	378	215	395	135	150	1100	363	107	18	5.2	6.1
18	1700	553	200	370	130	140	1200	599	78	20	4.6	5.8
19	1290	633	190	350	130	135	1400	485	64	20	3.8	5.2
20	1030	489	180	335	125	130	1900	404	113	19	3.6	4.9
21	1010	397	180	325	120	125	2500	662	217	16	3.3	4.9
22	844	387	400	315	115	125	2340	711	188	18	3.1	4.6
23	776	379	810	310	110	150	1900	473	193	17	2.9	4.4
24	652	340	700	305	110	160	1520	328	156	37	2.7	4.6
25	540	337	640	300	105	155	1230	237	115	42	2.5	4.6
26	459	317	1100	600	105	150	1050	183	85	32	2.7	4.6
27	401	347	750	1600	100	145	895	153	64	22	2.4	4.4
28	349	271	550	1000	98	400	772	133	54	18	2.4	4.1
29	304	265	420	740	---	700	663	114	45	15	2.7	4.2
30	264	240	330	600	---	760	561	107	39	14	3.1	3.9
31	231	---	285	500	---	650	---	117	---	12	3.1	---
TOTAL	24919	11588	10773	18600	5053	5464	29711	10057	4864	628	192.4	143.8
MEAN	804	386	348	600	180	176	990	324	162	20.3	6.21	4.79
MAX	2300	812	1100	3900	420	760	2500	711	553	42	12	7.1
MIN	231	180	170	190	98	74	370	107	39	12	2.4	3.3
CFSM	4.52	2.17	1.96	3.37	1.01	.99	5.56	1.82	.91	.11	.04	.03
IN.	5.21	2.42	2.25	3.89	1.06	1.14	6.21	2.10	1.02	.13	.04	.03

CAL YR 1977 TOTAL 162626.8 MEAN 446 MAX 4970 MIN 9.4 CFSM 2.51 IN 33.99
WTR YR 1978 TOTAL 121993.2 MEAN 334 MAX 3900 MIN 2.4 CFSM 1.88 IN 25.50

NOTE.--No gage-height record Oct. 1-4.

Reservoirs in Penobscot River basin

01027000 CHESUNCOOK, RIPOGENUS, AND CARIBOU LAKES AND MOOSE POND in West Branch Penobscot River basin are controlled by Ripogenus Dam, in T. 3, R. 11, Piscataquis County, Maine, 36 mi (58 km) upstream from Millinocket and 42 mi (68 km) northeast of Greenville, present dam completed in 1917, used for power; usable capacity of reservoir, 30,000,000,000 ft³ (850,000,000 m³). Records furnished by Great Northern Paper Co.

01027000 AMBAJEJUS, PEMADUMCOOK, NORTH TWIN, SOUTH TWIN, AND ELBOW LAKES in West Branch Penobscot River basin are controlled by North Twin Dam, Penobscot County, 3 mi (5 km) upstream from Millinocket, Maine, used for power; usable capacity of reservoir, 15,000,000,000 ft³ (420,000,000 m³). Records furnished by Great Northern Paper Co.

01028500 CHAMBERLAIN AND TELOS LAKES AND ROUND POND in East Branch Penobscot River basin are controlled by dams in outlets of Chamberlain and Telos Lakes, although regulation is at Telos Dam, in T. 6, R. 11, Piscataquis County, Maine. Telos Dam rebuilt during 1941, used for power; usable capacity, 5,050,000,000 ft³/s (142,700,000 m³) between gage height 2.0 ft (0.61 m) and 11.0 ft (3.35 m). Records furnished by Bangor Hydro-Electric Co.

01029000 SECOND AND GRAND LAKES in East Branch Penobscot River basin are controlled by dam rebuilt in 1942 at outlet of Grand Lake, in T. 6, R. 8, Penobscot County, Maine, used for power; usable capacity, 1,785,000,000 ft³ (50,550,000 m³) between elevations 643.0 ft (195.99 m) and 655.0 ft (199.64 m). Records furnished by Bangor Hydro-Electric Co.

01032500 SEBEC LAKE on Sebec River, Piscataquis County, at Sebec, Maine, used for power; usable capacity, 2,511,000,000 ft³ (71,110,000 m³) between elevations 316.1 ft (96.35 m) and 325.1 ft (99.09 m). Records furnished by Bangor Hydro-Electric Co.

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

DATE		CHESUNCOOK, RIPOGENUS CARIBOU, AMBAJEJUS, PEMADUMCOOK, NORTH TWIN SOUTH TWIN, AND ELBOW LAKES AND MOOSE POND*	CHAMBERLAIN, TELOS, SECOND, AND GRAND LAKES AND ROUND POND	SEBEC LAKE
SEPT. 30, 1977		41156	2988	1749
OCT. 31		51183	4812	1311
NOV. 30		48013	5215	1474
DEC. 31		43481	5138	2247
JAN. 31, 1978		41532	5415	2042
FEB. 28		35692	3487	441
MAR. 31		26946	1439	179
APR. 30		32191	3279	2130
MAY 31		56902	6084	2013
JUNE 30		54373	6223	2101
JULY 31		53202	5662	1638
AUG. 31		49378	5004	1039
SEPT. 30		42786	3890	179

* Includes monthend contents of following additional reservoirs in West Branch Penobscot River basin, used for power, total capacity, approximately 12,000,000,000 ft³ (340,000,000 m³); Penobscot, Seboomook, Caucomgomoc, Loon, Shallow, Umbazooksus, Harrington, Sourdnahunk, Rainbow, Ragged, and Millinocket Lakes, Canada Falls Reservoir, Dole, and Poland Ponds.

01037700 TRIBUTARY A LITTLE POND NEAR DAMARISCOTTA, ME

LOCATION.--Lat 44°02'44", long 69°28'05", Lincoln County, Hydrologic Unit 01050003, on right bank 300 ft (91 m) upstream from mouth, and 2.8 mi (4.5 km) east of Damariscotta.

DRAINAGE AREA.--0.31 mi² (0.80 km²).

PERIOD OF RECORD.--April 1976 to March 1977 (occasional discharge measurements), April 1977 to September 1978 (seasonal records only, discontinued).

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 110 ft (34 m), from topographic map.

REMARKS.--Records fair. Several observations of water temperature and specific conductance were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 49 ft³/s (1.39 m³/s) Nov. 9, 1977, gage height, 2.61 ft (0.796 m); no flow Aug. 3-5, Sept. 4-10, 12, 1977, July 21-25, Aug. 7, 10, Aug. 12 to Sept. 30, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 49 ft³/s (1.39 m³/s) Nov. 9, gage height, 2.61 ft (0.796 m); no flow July 21-25, Aug. 7, 10, Aug. 12 to Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.57	.26				---	1.6	.29	.06	.01	.01	.00
2	3.6	.26				---	1.7	.27	.05	.02	.01	.00
3	.85	.26				---	1.0	.23	.10	.02	.01	.00
4	.45	.26				---	.80	.22	.94	.02	.02	.00
5	.30	.24				---	2.1	.20	.44	.02	.01	.00
6	.25	.24				---	1.5	.19	.35	.04	.01	.00
7	.18	.27				---	1.1	.16	.25	.04	.00	.00
8	.35	.24				---	1.1	.15	.80	.04	.01	.00
9	2.1	17				---	1.0	2.0	1.0	.04	.01	.00
10	2.1	4.6				---	.97	1.5	.80	.04	.00	.00
11	1.4	3.2				---	.91	.80	.42	.06	.01	.00
12	1.3	1.5				---	2.1	.52	.25	.04	.00	.00
13	1.2	1.4				---	1.2	.39	.22	.02	.00	.00
14	1.3	1.3				---	.98	.33	.52	.01	.00	.00
15	1.7	.88				---	.85	.29	.27	.01	.00	.00
16	1.5	.76				---	.74	1.7	.17	.01	.00	.00
17	5.0	1.0				---	.65	6.5	.11	.01	.00	.00
18	3.3	1.3				---	.58	2.1	.09	.01	.00	.00
19	2.9	.89				---	.54	1.2	.07	.01	.00	.00
20	6.0	.72				---	6.0	.80	.07	.01	.00	.00
21	4.3	.61				---	2.0	.73	.10	.00	.00	.00
22	1.5	.57				---	1.2	.55	.70	.00	.00	.00
23	.87	---				---	.87	.39	.39	.00	.00	.00
24	.66	---				---	.76	.33	.19	.00	.00	.00
25	.45	---				---	.64	.27	.11	.00	.00	.00
26	.45	---				---	.58	.25	.07	.01	.00	.00
27	.43	---				---	.50	.22	.05	.01	.00	.00
28	.33	---				---	.44	.18	.04	.01	.00	.00
29	.27	---				---	2.6	.39	.14	.03	.01	.00
30	.27	---				---	1.7	.33	.10	.02	.00	.00
31	.27	---				---	1.4	.06	---	.02	.00	---
TOTAL	46.15	---				---	35.13	23.06	8.68	.56	.10	.00
MEAN	1.49	---				---	1.17	.74	.29	.018	.003	.000
MAX	6.0	---				---	6.0	6.5	1.0	.06	.02	.00
MIN	.18	---				---	.33	.06	.02	.00	.00	.00
CFSM	4.81	---				---	3.77	2.39	.94	.06	.01	.000
IN.	5.52	---				---	4.20	2.76	1.04	.07	.01	.00

01038000 SHEEPSHOT RIVER AT NORTH WHITEFIELD, ME

LOCATION.--Lat 44°13'23", long 69°35'38", Lincoln County, Hydrologic Unit 01050003, on left bank at North Whitefield 50 ft (15 m) upstream from highway bridge and 0.6 mi (1.0 km) downstream from Pleasant Pond Brook.

DRAINAGE AREA.--148 mi² (383 km²).

PERIOD OF RECORD.--Discharge: October 1938 to current year.

Specific conductance: July 1974 to September 1976.

Water temperatures: October 1957 to September 1971, July 1974 to September 1976.

GAGE.--Water-stage recorder. Datum of gage is 101.1 ft (30.82 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. Some regulation at low flow by sawmill at North Whitefield. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--40 years, 248 ft³/s (7.023 m³/s), 22.76 in/yr (578 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,420 ft³/s (182 m³/s) Dec. 18, 1973, gage height, 12.52 ft (3.816 m), from floodmarks; minimum, 5.0 ft³/s (0.14 m³/s) Oct. 24, 1941, gage height, 1.70 ft (0.518 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s (31 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	0700	1550 43.9	5.95 1.814	Jan. 9	2200	*2040 57.8	6.75 2.057
Oct. 21	0200	1160 32.9	5.31 1.618	Mar. 28	1700	1390 39.4	5.71 1.740
Nov. 9	2100	1430 40.5	5.75 1.753	Apr. 12	2100	1220 34.6	5.43 1.655
Dec. 26	0800	1730 49.0	6.25 1.905	Apr. 21	0300	1410 39.9	5.74 1.750

Minimum discharge, 9.4 ft³/s (0.27 m³/s) Sept. 10, 11, gage height, 1.71 ft (0.521 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	386	263	305	541	420	135	1240	342	125	52	30	16
2	1390	241	401	455	370	125	1180	307	112	48	31	15
3	1070	221	357	396	325	115	1030	276	107	45	31	14
4	965	208	324	357	295	110	905	251	271	44	35	13
5	894	197	298	312	270	105	974	232	216	43	39	12
6	775	189	285	286	250	100	1030	210	190	41	38	11
7	654	195	265	263	235	98	974	193	177	38	36	10
8	537	184	250	244	220	95	937	179	200	37	35	11
9	511	1010	245	1140	210	93	915	245	240	35	39	10
10	783	1080	240	1710	200	91	879	317	288	34	38	10
11	628	1030	230	1320	190	93	869	248	226	33	34	9.5
12	549	1030	225	1080	185	91	1080	226	203	30	31	12
13	503	941	220	910	180	93	1160	210	183	29	30	12
14	456	874	215	805	175	99	1130	198	174	32	28	12
15	478	752	215	689	165	188	1130	186	161	31	26	12
16	503	659	210	617	160	254	1070	200	145	35	25	12
17	637	606	205	530	155	240	974	585	129	34	23	12
18	705	642	200	430	150	205	859	474	116	33	22	12
19	625	555	200	390	145	190	800	411	105	31	20	12
20	809	490	200	360	145	190	1130	387	99	30	19	11
21	1050	442	450	335	140	188	1330	377	94	29	18	10
22	880	419	1030	315	140	259	1160	367	93	28	16	15
23	805	383	1270	300	135	327	1040	314	91	27	15	15
24	725	371	1120	290	130	295	926	279	84	26	16	14
25	636	361	1190	279	130	282	815	251	76	24	16	13
26	543	352	1670	568	125	271	709	226	70	23	15	12
27	480	383	1340	915	125	474	608	203	65	23	14	12
28	424	323	1130	780	130	1320	525	183	62	26	14	11
29	373	293	934	630	---	1310	451	166	58	27	18	11
30	329	270	772	530	---	1360	391	151	56	30	18	10
31	292	---	655	475	---	1330	---	137	---	30	17	---
TOTAL	20395	14964	16651	18252	5500	10126	28221	8331	4216	1028	787	361.5
MEAN	658	499	537	589	196	327	941	269	141	33.2	25.4	12.1
MAX	1390	1080	1670	1710	420	1360	1330	585	288	52	39	16
MIN	292	184	200	244	125	91	391	137	56	23	14	9.5
CFSM	4.45	3.37	3.63	3.98	1.32	2.21	6.36	1.82	.95	.22	.17	.08
IN.	5.13	3.76	4.19	4.59	1.38	2.55	7.09	2.09	1.06	.26	.20	.09

CAL YR 1977 TOTAL 129050.0 MEAN 354 MAX 3780 MIN 15 CFSM 2.39 IN 32.44
WTR YR 1978 TOTAL 128832.5 MEAN 353 MAX 1710 MIN 9.5 CFSM 2.39 IN 32.38

KENNEBEC RIVER BASIN

01040500 MOOSEHEAD LAKE AT EAST OUTLET, ME

LOCATION.--Lat 45°35'07", long 69°42'48", Piscataquis County, Hydrologic Unit 01030001, on left bank at wharf at east outlet of lake at Moosehead.

DRAINAGE AREA.--1,266 mi² (3,279 km²).

PERIOD OF RECORD.--March 1895 to current year.

GAGE.--Nonrecording gage read daily at 0700. Datum of gage is 1,011.48 ft (308.299 m) National Geodetic Vertical Datum of 1929.

COOPERATION.--Gage-height record furnished by Kennebec Water Power Co.

REMARKS.--Lake is controlled by dams at East and West Outlets originally built prior to 1840. East Outlet partly rebuilt of concrete in 1947-48 with gate sills at elevation 7.0 ft (2.13 m). Remaining wooden section rebuilt of concrete in 1955-56. Lake outlet dredged in 1948 to permit drawing level down to elevation 10.0 ft (3.05 m) at a faster rate than formerly. Capacity, 23,735,000,000 ft³ (672,200,000 m³) between gage heights 10.0 ft (3.05 m) and 17.5 ft (5.33 m). Water is used primarily for power, although some logs are driven each year. Some water was diverted through gates in dam at West Outlet; monthly mean diversion, in cubic feet per second, during water year 1978, is given below:

October	60	February	60	June	60
November	70	March	40	July	60
December	70	April	35	August	60
January	70	May	70	September	55

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 18.0 ft (5.49 m) May 30, 1902; minimum, 10.0 ft (3.05 m) or lower, present datum Mar. 20-29, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum gage height observed, 17.86 ft (5.444 m) Jan. 15, 16; minimum observed, 13.94 ft (4.249 m) Apr. 15.

Capacity table (elevation, in feet, and contents, in million cubic feet)

13.0	9,379
14.0	12,537
15.0	15,713
16.0	18,908
17.0	22,121
18.0	25,355

GAGE HEIGHT, IN FEET, AT 0700, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.66	17.63	17.50	17.54	17.64	16.26	14.95	15.90	17.59	17.76	17.25	15.57
2	15.85	17.65	17.50	17.56	17.67	16.22	14.88	16.02	17.52	17.75	17.20	15.54
3	16.00	17.67	17.50	17.58	17.71	16.15	14.84	16.16	17.56	17.73	17.13	15.51
4	16.14	17.67	17.50	17.58	17.74	16.08	14.80	16.28	17.56	17.71	17.14	15.47
5	16.28	17.65	17.52	17.56	17.77	15.98	14.70	16.42	17.57	17.70	17.17	15.43
6	16.38	17.65	17.53	17.52	17.80	15.88	14.62	16.56	17.58	17.67	17.16	15.38
7	16.48	17.68	17.55	17.51	17.81	15.82	14.52	16.68	17.59	17.63	17.12	15.40
8	16.56	17.67	17.55	17.50	17.82	15.76	14.40	16.80	17.64	17.58	17.05	15.37
9	16.62	17.67	17.53	17.56	17.77	15.72	14.30	16.98	17.68	17.56	16.96	15.37
10	16.82	17.68	17.53	17.70	17.74	15.70	14.18	17.20	17.72	17.64	16.90	15.34
11	16.98	17.72	17.52	17.78	17.68	15.65	14.10	17.35	17.68	17.62	16.86	15.32
12	17.08	17.74	17.50	17.82	17.66	15.57	14.08	17.48	17.67	17.58	16.82	15.30
13	17.16	17.74	17.49	17.82	17.63	15.56	14.00	17.54	17.63	17.54	16.76	15.25
14	17.26	17.74	17.49	17.84	17.57	15.50	13.97	17.58	17.68	17.50	16.72	15.21
15	17.34	17.73	17.50	17.86	17.49	15.43	13.94	17.60	17.64	17.47	16.67	15.15
16	17.40	17.71	17.50	17.86	17.40	15.44	13.95	17.62	17.66	17.62	16.62	15.08
17	17.50	17.69	17.48	17.82	17.28	15.44	13.96	17.60	17.65	17.70	16.55	15.06
18	17.56	17.69	17.47	17.79	17.18	15.42	13.98	17.54	17.66	17.70	16.47	15.03
19	17.62	17.71	17.46	17.76	17.05	15.40	14.02	17.54	17.66	17.68	16.39	14.98
20	17.68	17.72	17.44	17.70	16.94	15.37	14.10	17.52	17.66	17.66	16.32	14.94
21	17.68	17.75	17.38	17.67	16.86	15.35	14.26	17.58	17.66	17.64	16.24	14.91
22	17.68	17.75	17.38	17.65	16.78	15.32	14.44	17.60	17.66	17.68	16.16	14.87
23	17.66	17.75	17.38	17.65	16.70	15.30	14.58	17.60	17.67	17.66	16.08	14.81
24	17.62	17.74	17.39	17.62	16.62	15.26	14.70	17.61	17.67	17.63	16.00	14.73
25	17.60	17.72	17.41	17.59	16.54	15.22	14.85	17.63	17.70	17.58	15.94	14.63
26	17.58	17.70	17.50	17.60	16.47	15.17	15.00	17.62	17.73	17.52	15.84	14.59
27	17.58	17.64	17.56	17.60	16.38	15.16	15.16	17.60	17.72	17.42	15.76	14.55
28	17.56	17.60	17.56	17.57	16.32	15.12	15.32	17.60	17.75	17.37	15.68	14.51
29	17.56	17.55	17.53	17.58	-	15.08	15.54	17.60	17.77	17.35	15.68	14.49
30	17.58	17.52	17.52	17.61	-	15.04	15.72	17.66	17.77	17.34	15.65	14.45
31	17.62	-	17.52	17.61	-	15.00	-	17.62	-	17.32	15.60	-
MAX	17.68	17.75	17.56	17.86	17.82	16.26	15.72	17.66	17.77	17.76	17.25	15.57
MIN	15.66	17.52	17.38	17.50	16.32	15.00	13.94	15.90	17.52	17.32	15.60	14.45
†	24,124	23,800	23,800	24,091	19,935	15,713	18,012	24,124	24,610	23,154	17,628	13,964
‡	+6,496	-324	0	+291	-4,156	-4,222	+2,299	+6,112	+486	-1,456	-5,526	-3,664

CAL YR: ‡ +485

WTR YR: ‡ -3,664

† Contents, in millions of cubic feet, at end of month.

‡ Change in contents, in millions of cubic feet.

01041000 KENNEBEC RIVER AT MOOSEHEAD, ME

LOCATION.--Lat 45°35'08", long 69°43'05", Somerset County, Hydrologic Unit 01030001, on right bank 700 ft (213 m) downstream from dam at East Outlet of Moosehead Lake and 0.2 mi (0.3 km) northwest of Moosehead.

DRAINAGE AREA.--1,266 mi² (3,279 km²).

PERIOD OF RECORD.--October 1919 to current year.

REVISED RECORDS.--WSP 1301: 1928-50 (adjusted monthly runoff). WSP 1901: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,015.53 ft (309.534 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1924, nonrecording gage on railroad bridge 300 ft (91 m) downstream at same datum.

REMARKS.--Records good. Some water diverted down west channel through gates in dam at West Outlet. Flow regulated by Moosehead Lake (station 01040500) and by Brassua Lake and First Roach Pond (Reservoirs in Kennebec River basin). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--59 years, 1,961 ft³/s (55.54 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,700 ft³/s (473 m³/s) May 3, 1974, gage height, 9.74 ft (2.969 m); minimum, about 62 ft³/s (1.8 m³/s) Apr. 7-15, 1923.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,380 ft³/s (266 m³/s) May 17, gage height, 7.66 ft (2.335 m); minimum, 158 ft³/s (4.47 m³/s) Oct. 17, gage height, 2.24 ft (0.683 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	491	658	2350	454	2160	4340	4260	352	3540	2240	3030	1330
2	496	658	2170	452	2170	4580	4210	352	2850	2230	3010	1810
3	376	1750	2180	1480	2180	4910	4170	356	2530	1880	3010	1560
4	279	2750	1510	2930	2180	4840	4530	359	2280	1470	3030	1560
5	283	2190	1740	3370	2200	4730	4890	359	2140	1740	3020	1540
6	285	1430	2190	2810	2610	4680	5050	364	1790	2180	3010	1530
7	285	1960	2180	1280	2690	4590	5160	365	980	2170	3440	1540
8	286	2190	2190	732	5050	4550	5050	366	1240	2160	3700	1530
9	290	2200	1540	736	4720	4530	4920	378	3450	1850	3670	1520
10	296	2220	2170	739	3980	4490	4820	388	3630	1570	3230	1500
11	297	2240	2170	1410	2870	4440	4720	392	2760	2170	2920	1500
12	305	2250	2170	2300	2190	3580	4680	1420	3340	2160	2900	1450
13	319	2240	2160	2870	3110	4020	4290	2120	3870	2140	2890	1470
14	321	2250	2170	3210	3780	4330	3300	2120	4480	2130	2870	1460
15	329	2240	2180	3220	4310	4310	2410	2120	3540	2160	2850	1440
16	320	2240	2990	3600	5330	4310	2200	4070	2580	1850	2710	1460
17	297	2220	2960	4030	5240	4280	1020	7490	2200	1560	2820	1440
18	320	2240	2170	4000	5130	4250	314	9210	2190	2210	2800	1720
19	2030	2250	2150	4900	5030	4230	311	9200	2200	2200	2770	1930
20	3680	2250	3160	5160	4920	4210	309	6690	2190	2200	2740	1920
21	4530	3460	3170	3200	4850	4380	313	5210	2200	2210	2710	1900
22	4880	4060	1220	2120	4750	4620	317	5250	1850	2220	2690	2190
23	4290	4030	577	3200	4720	4610	320	5270	1630	2760	2670	2580
24	3970	4020	592	3480	4690	4530	323	4920	1630	4010	2640	2550
25	3960	4000	527	3190	4560	4510	326	5450	1640	3380	2620	2210
26	3950	3970	300	4110	4530	4460	331	5790	1980	3130	2600	1670
27	3950	3940	1290	3910	4510	4470	336	4940	2220	3580	2570	1290
28	3460	3940	2200	2860	4390	4430	342	3800	1900	3790	2540	927
29	2130	3400	1680	2150	---	4380	346	2710	2010	3080	2550	686
30	1180	2850	1130	3210	---	4340	349	2630	2250	3070	1970	683
31	656	---	462	2850	---	4280	---	3860	---	3050	1200	---
TOTAL	48541	78096	57648	83963	108850	137210	73917	98301	73090	74550	87180	47896
MEAN	1566	2603	1860	2708	3888	4426	2464	3171	2436	2405	2812	1597
MAX	4880	4060	3170	5160	5330	4910	5160	9210	4480	4010	3700	2580
MIN	279	658	300	452	2160	3580	309	352	980	1470	1200	683
CAL YR 1977	TOTAL	855423	MEAN	2344	MAX	7800	MIN	226				
WTR YR 1978	TOTAL	969242	MEAN	2655	MAX	9210	MIN	279				

KENNEBEC RIVER BASIN

01042500 KENNEBEC RIVER AT THE FORKS, ME

LOCATION.--Lat 45°20'25", long 69°57'48", Somerset County, Hydrologic Unit 01030001, on right bank at The Forks 0.4 mi (0.6 km) upstream from highway bridge and 0.7 mi (1.1 km) upstream from Dead River.

DRAINAGE AREA.--1,589 mi² (4,116 km²).

PERIOD OF RECORD.--September 1901 to current year.

REVISED RECORDS.--WSP 1231: 1902-4, 1906-8, 1912, 1914, 1919-20(M), 1923(M), 1926(M), 1928-29(M), 1936(M), 1938(M). WSP 1301: 1928-35 (adjusted monthly runoff). WSP 1901: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 569.03 ft (173.440 m) National Geodetic Vertical Datum of 1929. Prior to June 21, 1912, nonrecording gage, and June 21, 1912, to Oct. 17, 1919, water-stage recorder and nonrecording gage at highway bridge 0.4 mi (0.6 km) downstream at different datum.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by Moosehead Lake (station 01040500), Brassua Lake, and Moxie, Indian, and First Roach Ponds (Reservoirs in Kennebec River basin). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--77 years, 2,611 ft³/s (73.9 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,900 ft³/s (705 m³/s) Dec. 22, 1973, gage height, 12.68 ft (3.865 m); minimum, 85 ft³/s (2.41 m³/s) Sept. 3, 1953, gage height, 1.02 ft (0.311 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,600 ft³/s (300 m³/s) May 17, gage height, 6.71 ft (2.045 m); minimum daily, 447 ft³/s (12.7 m³/s) Sept. 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	1400	2810	973	3700	5800	6400	3830	3490	2220	4210	1250
2	2500	1420	2790	1490	3200	5700	4500	3610	3900	2410	3330	1460
3	2000	1850	2690	3730	4380	5800	6400	3380	2570	2380	3640	1050
4	970	2500	828	3440	2060	5400	5980	3280	2310	1570	4150	1110
5	1520	1920	2610	2520	2100	2200	5300	2360	2570	2270	3180	1820
6	1500	1880	2770	2940	3450	6000	5490	2430	1980	2130	2130	2560
7	1500	2520	2790	1490	4000	5800	5430	2080	2620	2420	4290	2170
8	900	2520	2420	840	5200	6100	5390	3460	1920	2690	3860	1940
9	1000	3800	3740	2750	5450	5600	3450	4110	4380	1190	3390	1280
10	920	3300	2640	2800	5300	4600	5110	4320	3570	2870	2810	494
11	3000	3400	1650	4940	5350	4050	5900	4040	3210	3450	3460	3070
12	950	3300	4220	4500	3000	3000	5330	4070	4150	2690	2120	2890
13	1470	3250	4220	4980	5000	5400	5630	3600	4690	3010	1020	1770
14	1500	3200	3730	4740	4000	6000	5730	2450	5590	2570	4040	1950
15	900	3200	2590	4670	4500	5950	4150	3340	5010	2190	4120	2850
16	910	3200	3030	5180	5400	5900	1790	6000	4290	2230	4110	1780
17	1600	3130	1920	5830	6400	5650	2790	10400	3090	2880	3950	447
18	2600	3010	1550	5580	5800	4700	1890	10300	1980	1800	3840	2270
19	2600	3480	3070	6260	5550	2100	1750	9890	2790	2720	1650	2620
20	4500	3570	3950	5400	5300	6100	1930	8340	3010	3300	751	2520
21	6600	4430	4110	4900	4700	6000	3450	6670	3030	3200	4210	2490
22	6500	6960	1060	2500	4750	6200	2670	7330	1960	3200	3780	2410
23	4600	7130	1790	3500	4750	6000	1930	7410	2890	2480	3140	1300
24	4700	4150	938	2700	5500	4500	4260	7410	1270	3390	3710	733
25	4800	5320	630	5800	4900	4450	3550	5620	502	3440	3090	2560
26	4750	5760	662	7000	3900	3700	3760	6390	2380	4180	1760	1690
27	4800	5640	3100	6100	5500	6200	3460	6900	2400	4360	842	1530
28	4750	6050	1810	5000	5850	6000	3190	4290	2020	4270	3360	1990
29	2700	4610	2150	1600	---	4850	3000	2230	1740	3330	1330	1390
30	1100	2830	2240	4000	---	4700	4090	4550	2570	2220	1250	1400
31	2400	---	1500	3200	---	5600	---	3750	---	4080	2320	---
TOTAL	81740	108730	76008	121353	128990	160050	123700	157840	87882	87140	92843	54794
MEAN	2637	3624	2452	3915	4607	5163	4123	5092	2929	2811	2995	1826
MAX	6600	7130	4220	7000	6400	6200	6400	10400	5590	4360	4290	3070
MIN	900	1400	630	840	2060	2100	1750	2080	502	1190	751	447
CAL YR 1977 TOTAL	1122410			MEAN 3075	MAX 11000	MIN 200						
WTR YR 1978 TOTAL	1281070			MEAN 3510	MAX 10400	MIN 447						

NOTE.--No gage-height record Oct. 1 to Nov. 16, Feb. 4 to Apr. 3.

01043500 DEAD RIVER NEAR DEAD RIVER, ME

LOCATION.--Lat 45°13'48", long 70°11'58", Somerset County, Hydrologic Unit 01030002, on right bank at foot of Long Falls, in T. 3, R. 4, 0.3 mi (0.5 km) upstream from Black Brook, and 0.5 mi (0.8 km) downstream from Flagstaff Lake Dam.

DRAINAGE AREA.--520 mi² (1,347 km²).

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October to December 1939, published in WSP 1301.

GAGE.--Water-stage recorder. Datum of gage is 1,037.32 ft (316.175 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Flagstaff Lake (Reservoirs in Kennebec River basin). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--39 years, 869 ft³/s (24.61 m³/s), 22.69 in/yr (576 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s (510 m³/s) Sept. 12, 1954, gage height, 11.50 ft (3.505 m); no flow part of July 31, 1949, when flow was completely shut off by cofferdam during construction of Flagstaff Lake Dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,460 ft³/s (183 m³/s) May 17, gage height, 8.84 ft (2.694 m); minimum daily, 18 ft³/s (0.510 m³/s) Apr. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	242	841	1670	1090	1710	2210	39	823	740	393	2060
2	46	553	1040	1660	1090	1700	2190	38	913	1010	390	1200
3	28	743	1120	1600	1100	2070	2180	34	1050	712	394	1080
4	24	749	469	1570	1080	2290	2150	39	1050	255	388	1190
5	24	730	985	1560	1070	2270	2130	45	1060	248	386	1370
6	25	718	1490	1560	1010	2190	2120	52	1060	245	385	1440
7	26	685	1170	1570	1060	2130	2100	67	979	497	573	2180
8	302	664	653	1570	1090	2330	2080	84	992	718	681	2510
9	366	758	656	455	1090	2530	2060	162	1210	701	675	2360
10	171	837	661	45	1070	2470	2040	1460	2950	692	672	2210
11	57	1000	656	45	1030	2470	2020	3020	2380	690	796	1600
12	52	1030	647	1260	991	2470	2000	3490	2310	671	1150	1040
13	51	1100	653	2210	1320	2470	1990	4620	2160	661	1080	994
14	51	1550	665	2020	787	2470	1990	5000	1990	645	716	961
15	59	1560	662	2290	449	2470	1990	5010	1940	648	715	934
16	62	1440	646	1680	829	2470	1980	5670	1810	656	409	908
17	142	993	647	1320	1430	2460	1980	6260	1370	350	549	876
18	246	1040	647	1320	1700	2460	1270	6170	1050	171	850	1380
19	2260	1250	811	1530	1960	2430	21	5170	1030	170	1230	1630
20	3390	1190	895	1700	2110	2420	25	3700	1120	170	1230	1860
21	3430	1230	892	1690	1990	2370	29	2430	1290	168	1200	2060
22	3060	1230	732	1580	1990	2350	22	1860	1380	170	1190	1910
23	2820	1120	640	1200	1920	2360	18	1890	1760	178	1170	1770
24	2180	1140	645	689	1840	2350	19	1860	1220	183	1150	1640
25	1820	1070	619	934	1830	2330	25	1830	882	192	1150	1730
26	1820	1010	572	1290	1800	2310	25	1790	1430	219	1530	1800
27	1260	1230	574	1310	1760	2280	19	1570	1670	211	1700	1830
28	304	1350	578	1320	1710	2270	39	1400	1150	577	1810	2030
29	107	1150	577	1940	---	2250	52	1050	760	1030	1900	1960
30	152	875	574	1900	---	2230	51	627	752	1080	2150	1750
31	199	---	1170	1100	---	2220	---	785	---	402	2260	---
TOTAL	24561	30237	23587	43588	38196	71600	36825	67222	41541	15060	30872	48263
MEAN	792	1008	761	1406	1364	2310	1228	2168	1385	486	996	1609
MAX	3430	1560	1490	2290	2110	2530	2210	6260	2950	1080	2260	2510
MIN	24	242	469	45	449	1700	18	34	752	168	385	876
MEAN†	2180	1008	580	1496	577	393	2287	3923	1353	274	113	213
CFSM†	4.19	1.94	1.12	2.88	1.11	.76	4.40	7.54	2.60	.53	.22	.41
IN.†	4.83	2.16	1.29	3.32	1.16	.87	4.91	8.69	2.90	.61	.25	.46
CAL YR 1977 TOTAL	356295.6			MEAN 976	MAX 5230	MIN 4.1	MEAN† 1060	CFSM†	2.04	IN.†	27.67	
WTR YR 1978 TOTAL	471552.0			MEAN 1292	MAX 6260	MIN 18	MEAN† 1205	CFSM†	2.32	IN.†	31.45	

† Adjusted for change in contents in Flagstaff Lake.

KENNEBEC RIVER BASIN

01045000 DEAD RIVER AT THE FORKS, ME

LOCATION.--Lat 45°20'59", long 69°59'26", Somerset County, Hydrologic Unit 01030002, on left bank 1.5 mi (2.4 km) northwest of The Forks and 1.8 mi (2.9 km) upstream from mouth.

DRAINAGE AREA.--872 mi² (2,258 km²).

PERIOD OF RECORD.--September 1901 to August 1907, March 1910 to current year. Monthly discharge only for some periods, published in WSP 1301.

REVISED RECORDS.--WSP 801: Drainage area. WSP 1231: 1913-15, 1916-17(M), 1919-20(M), 1922(M), WSP 1301: 1904(M), 1907, 1911-12.

GAGE.--Water-stage recorder. Datum of gage is 600.5 ft (183.03 m) National Geodetic Vertical Datum of 1929. Prior to September 29, 1923, nonrecording gage at site 100 ft (30 m) downstream at same datum.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Flagstaff Lake (Reservoirs in Kennebec River basin). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--73 years (water years 1902-6, 1911-78), 1,458 ft³/s (41.29 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,700 ft³/s (813 m³/s) Mar. 20, 1936, gage height, 10.54 ft (3.213 m) from rating curve extended above 15,000 ft³/s (420 m³/s); minimum daily since September 1923, 61 ft³/s (1.73 m³/s) Dec. 23, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,300 ft³/s (292 m³/s) May 18, gage height, 6.50 ft (1.981 m); minimum daily, 396 ft³/s (11.2 m³/s) Aug. 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	700	1240	2950	1730	1900	2430	2650	1490	1200	564	2250
2	3520	815	1350	2900	1700	1890	2260	2010	1430	1280	548	1390
3	3260	1160	1530	2850	1710	2100	2310	1760	1960	1310	542	1060
4	1830	1170	1190	2800	1780	2430	2310	1790	2050	642	569	1230
5	1260	1310	885	2750	1820	2430	2320	2070	1720	559	594	1300
6	962	1260	1790	2700	1720	2370	2350	2520	1650	534	559	1460
7	785	1200	1670	2650	1710	2260	2340	3040	1510	593	618	2200
8	689	1120	1030	2600	1700	2340	2290	3770	1580	947	810	2860
9	943	1420	983	2100	1650	2640	2270	5440	2190	936	803	2570
10	2090	1920	980	2080	1580	2650	2250	6680	4140	1030	791	2370
11	1910	1940	975	2140	1610	2650	2250	7590	3900	1030	792	1980
12	1240	2020	970	2670	1560	2640	2300	7520	2940	944	1170	1190
13	945	1880	970	3690	1720	2620	2400	8300	2960	887	1200	1180
14	794	2100	965	3200	1620	2620	2520	8480	3330	849	844	1080
15	763	2180	965	3410	893	2510	2620	8530	3380	916	800	1040
16	1020	1990	960	3110	1080	2480	2620	8740	2810	1060	719	1000
17	1600	1690	960	2610	1760	2460	2600	9650	2250	1080	396	969
18	3260	2120	955	2480	2220	2450	2470	9900	1640	673	794	1190
19	3720	2450	1150	2780	2230	2450	1060	8310	1580	541	1190	1650
20	5200	2170	1300	3250	2450	2450	1250	6510	2280	485	1230	1720
21	5480	1970	1250	3290	2450	2450	2060	4860	2610	450	1210	2120
22	4730	1940	1150	3450	2490	2450	2790	4180	2380	471	1190	1960
23	4090	1810	1100	3070	2330	2450	2770	3550	2590	500	1170	1800
24	3380	1730	1050	2420	2160	2450	2440	3150	2280	588	1160	1660
25	2640	1670	1020	2330	2020	2450	2140	2940	1570	530	1150	1620
26	2530	1550	1010	2440	1900	2440	2320	2740	1740	466	1360	1830
27	2250	1730	990	2410	1890	2420	2890	2480	2130	457	1680	1760
28	1140	1640	980	2530	1900	2450	3330	2130	1890	487	1740	1970
29	684	1740	975	2870	---	2450	3550	1940	1360	1300	1950	2010
30	651	1290	975	3180	---	2450	3500	1160	1290	1260	2120	1770
31	670	---	1600	1790	---	2450	---	1520	---	684	2360	---
TOTAL	65176	49685	34918	85500	51383	75250	73010	145910	66630	24689	32623	50189
MEAN	2102	1656	1126	2758	1835	2427	2434	4707	2221	796	1052	1673
MAX	5480	2450	1790	3690	2490	2650	3550	9900	4140	1310	2360	2860
MIN	651	700	885	1790	893	1890	1060	1160	1290	450	396	969
CAL YR 1977	TOTAL	598133	MEAN	1639	MAX	7420	MIN	142				
WTR YR 1978	TOTAL	754963	MEAN	2068	MAX	9900	MIN	396				

01046500 KENNEBEC RIVER AT BINGHAM, ME
(National stream-quality accounting network station)

LOCATION.--Lat 45°03'06", long 69°53'12", Somerset County, Hydrologic Unit 01030003, on right bank at Bingham, 200 ft (60 m) downstream from highway bridge, 0.4 mi (0.6 km) downstream from Austin Stream, and 1.6 mi (2.6 km) downstream from Wyman Dam.

DRAINAGE AREA.--2,720 mi² (7,045 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1907 to June 1910, October 1930 to current year.

REVISED RECORDS.--WSP 1271: 1951(M). WSP 1301: 1936(M). WSP 1901: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 330.2 ft (100.64 m) National Geodetic Vertical Datum of 1929. June 1907 to June 1910, nonrecording gage on highway bridge at different datum.

REMARKS.--Records good. Flow regulated by Moosehead Lake (station 01040500), Brassua and Flagstaff Lakes, First Roach, Indian, Moxie, and Wyman Ponds (Reservoirs in Kennebec River basin). Considerable diurnal fluctuation caused by powerplant above station.

AVERAGE DISCHARGE.--50 years (water years 1908-9, 1931-78), 4,464 ft³/s (126 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58,800 ft³/s (1,670 m³/s) Mar. 20, 1936, gage height, 14.44 ft (4.401 m), from rating curve extended above 30,000 ft³/s (850 m³/s) on basis of computations of flow at Wyman Dam plus inflow; minimum daily, 110 ft³/s (3.12 m³/s) Dec. 25, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,500 ft³/s (637 m³/s) Jan. 9, gage height, 11.20 ft (3.414 m); minimum daily, 1,670 ft³/s (47.3 m³/s) Oct. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5560	2600	3990	3900	6030	7380	8170	7950	4970	3820	4040	3480
2	9880	2560	4070	3800	6050	7660	8150	8200	5120	3830	4200	3590
3	9900	2800	3370	4050	6600	7430	8110	8190	4820	3600	4100	3610
4	7060	3370	3000	4100	5660	7230	8150	7840	4880	3340	4110	3360
5	4360	4000	3760	3820	3500	7520	8160	7880	5120	3270	3570	3670
6	2710	3740	3960	3920	4160	8370	8170	7080	4270	3330	4220	3560
7	2810	3610	3910	3970	5550	7680	7940	5960	3860	3120	4260	3410
8	2800	3940	4060	3810	6160	7450	7370	7020	4160	3430	4290	3500
9	2910	4550	3920	7400	6370	7200	7210	8170	5790	3450	4240	3570
10	7330	6440	3850	10600	6870	7220	7370	8810	8360	3350	4070	3590
11	6150	6620	3960	9150	6910	7360	7380	8820	8210	3390	4250	3470
12	3750	5910	4020	8430	6730	7120	7410	8620	7590	3480	3310	3540
13	3540	5430	4100	8150	6220	7300	8120	11100	8090	3370	3190	3480
14	4680	6210	3830	7620	5240	7330	8030	10700	8130	3190	4100	3500
15	4770	5480	3910	7530	5940	7220	8080	13000	8170	3610	4160	3390
16	4600	5700	3910	7560	7160	7270	6780	14100	8090	3390	4200	3140
17	4820	5360	4000	7780	7080	7270	5110	20700	5310	3430	4260	3220
18	4910	5780	4050	8000	7090	7170	4750	21200	5090	3530	4120	3450
19	6150	6350	4140	8250	7090	7200	5940	18700	5030	3920	3620	3620
20	10400	7240	4010	8240	7220	7120	8360	15400	4700	3650	3600	3480
21	12700	5940	3950	7710	7240	7140	9100	11600	4760	4300	3950	3690
22	13500	7640	4280	7100	7290	7170	9300	11800	5060	4170	4350	3470
23	9390	8710	3350	5220	7260	7100	9080	11000	5030	4090	4400	3340
24	8250	8580	2690	2980	7240	7170	8970	10600	5060	4120	4200	3220
25	8300	7530	2450	5120	7120	7180	8830	9260	4820	4130	4350	3230
26	7930	7530	2440	7830	7180	7210	8840	8440	3480	4130	3800	3350
27	8170	7790	2650	8990	7170	7180	8950	9630	3050	4110	3400	3380
28	8160	7560	2920	8490	7400	7120	8940	8010	3130	3890	3600	3400
29	2320	4920	3190	7670	---	7170	8960	5950	3050	4170	3500	3480
30	1670	4460	3760	6220	---	7350	8890	5090	3610	4150	3490	3390
31	2050	---	3870	3790	---	8230	---	4970	---	4060	3680	---
TOTAL	191530	168350	113370	201200	181530	227520	238620	315790	160810	114820	122630	103580
MEAN	6178	5612	3657	6490	6483	7339	7954	10190	5360	3704	3956	3453
MAX	13500	8710	4280	10600	7400	8370	9300	21200	8360	4300	4400	3690
MIN	1670	2560	2440	2980	3500	7100	4750	4970	3050	3120	3190	3140

CAL YR 1977 TOTAL 1854160 MEAN 5080 MAX 16100 MIN 1670
WTR YR 1978 TOTAL 2139750 MEAN 5862 MAX 21200 MIN 1670

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to 1978 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to current year (discontinued).

WATER TEMPERATURES: October 1975 to current year (discontinued).

INSTRUMENTATION.--Water-quality monitor since October 1975.

REMARKS.--Interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 59 micromhos Feb. 16, 1977; minimum, 19 micromhos May 16-18, 1978.

WATER TEMPERATURES: Maximum, 22.0°C July 18, 1976; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 40 micromhos on many days; minimum, 19 micromhos May 16-18.

WATER TEMPERATURES: Maximum, 21.0°C Aug. 18; minimum, 0.0°C on many days during winter periods.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (CULS. PER 100 ML)
OCT												
27...	1130	8240	34	6.5	15.0	9.0	1	--	10.6	93	K2	17
NOV												
22...	1430	8400	35	6.6	3.0	6.0	1	--	11.5	95	K1	12
DEC												
19...	1515	6600	40	6.6	-1.5	.5	1	--	14.0	99	K1	K1
JAN												
18...	1030	8280	36	6.5	-8.0	.5	2	--	12.8	90	7	7
FEB												
23...	1030	7320	37	6.5	-2.0	.5	1	--	13.4	94	<1	<1
MAR												
21...	1430	7060	38	6.8	4.5	.5	1	--	13.4	94	K1	K4
APR												
19...	1000	7930	39	6.6	11.5	2.0	1	--	11.0	80	<1	<1
MAY												
23...	1500	8320	29	6.6	20.0	10.0	--	2.0	10.4	94	<1	<1
JUN												
28...	1500	4110	36	6.6	23.0	18.0	--	2.0	9.1	97	K1	K3
JUL												
27...	1200	6120	34	6.6	26.0	19.5	--	.00	9.0	99	<1	K2
AUG												
29...	1030	5820	35	6.5	17.5	19.5	--	2.0	7.7	85	K1	18
SEP												
12...	1545	3450	43	6.8	18.5	16.5	--	1.0	8.8	92	K2	24

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)
OCT												
27...	13	5	3.6	.9	1.0	14	.1	.5	10	0	8	5.1
NOV												
22...	12	3	3.5	.9	1.2	17	.1	.5	11	0	9	4.4
DEC												
19...	13	5	3.7	1.0	1.2	16	.1	.4	10	0	8	4.0
JAN												
18...	13	5	3.8	.9	1.2	16	.1	.5	10	0	8	5.1
FEB												
23...	13	5	3.7	.9	1.1	15	.1	.4	10	0	8	5.1
MAR												
21...	12	4	3.2	.9	1.3	19	.2	.5	10	--	8	2.5
APR												
19...	14	1	3.8	1.0	1.2	16	.1	.5	15	0	12	6.0
MAY												
23...	11	--	3.2	.8	1.0	16	.1	.3	--	--	15	--
JUN												
28...	11	4	3.2	.8	1.0	16	.1	.3	--	--	7	--
JUL												
27...	13	0	3.8	.8	1.1	15	.1	.3	--	--	15	--
AUG												
29...	12	4	3.4	.8	1.2	18	.2	.4	--	--	8	--
SEP												
12...	11	2	3.1	.8	1.1	17	.1	.4	--	--	9	--

01046500 KENNEBEC RIVER AT BINGHAM, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)
OCT												
27...	5.2	1.2	.0	3.8	36	21	801	.07	.01	--	--	--
NOV												
22...	5.6	1.2	.0	3.7	28	22	635	.09	.02	--	--	--
DEC												
19...	6.4	1.2	.0	3.7	34	23	606	.11	.00	--	--	--
JAN												
18...	5.0	1.8	.0	4.5	32	23	715	.18	.01	--	--	--
FEB												
23...	5.7	1.4	.0	3.8	31	22	613	.16	.02	.14	.16	.00
MAR												
21...	5.5	.7	.0	4.2	30	21	572	.17	.01	.20	.21	.00
APR												
19...	6.2	1.0	.0	4.2	38	25	814	.17	.00	.11	.11	.00
MAY												
23...	4.4	.4	.0	3.4	29	--	651	.10	.01	--	--	--
JUN												
28...	4.9	2.1	.0	3.5	32	20	355	.09	.01	.16	.17	.05
JUL												
27...	4.1	1.1	.0	3.4	34	24	562	.10	.01	.67	.68	.04
AUG												
29...	4.1	1.1	.0	3.5	29	19	456	.09	.01	.38	.39	.17
SEP												
12...	4.8	.9	.0	3.2	31	20	289	.10	.01	.27	.28	.15

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CAUDIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT												
27...	.28	--	--	.00	.01	--	--	--	--	--	--	--
NOV												
22...	.21	--	--	.01	.00	0	0	0	0	0	0	0
DEC												
19...	.21	--	--	.01	.00	--	--	--	--	--	--	--
JAN												
18...	.13	--	--	.01	.01	--	--	--	--	--	--	--
FEB												
23...	--	.32	1.4	.01	.00	2	1	1	0	0	0	0
MAR												
21...	--	.38	1.7	.00	.00	--	--	--	--	--	--	--
APR												
19...	--	.28	1.2	.01	.00	--	--	--	--	--	--	--
MAY												
23...	.21	--	--	.01	.01	0	0	0	--	--	0	<100
JUN												
28...	.12	.26	1.2	.00	.00	--	--	--	--	--	--	--
JUL												
27...	.64	.78	3.5	.01	.00	--	--	--	--	--	--	--
AUG												
29...	.22	.48	2.1	.00	.00	0	--	0	0	0	0	1
SEP												
12...	.13	.38	1.7	.00	.00	--	--	--	--	--	--	--

KENNEBEC RIVER BASIN

01046500 KENNEBEC RIVER AT BINGHAM, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

[illegible][illegible]

01046500 KENNEBEC RIVER AT BINGHAM, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MERCURY SUS- PENDE RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT 27...	--	--	--	--	--	--	--	--	--
NOV 22...	.0	<.5	0	0	0	0	0	0	0
DEC 19...	--	--	--	--	--	--	--	--	--
JAN 18...	--	--	--	--	--	--	--	--	--
FEB 23...	.0	<.5	0	0	0	1	1	0	10
MAR 21...	--	--	--	--	--	--	--	--	--
APR 19...	--	--	--	--	--	--	--	--	--
MAY 23...	.0	<.5	0	0	0	0	0	0	0
JUN 28...	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--
AUG 29...	.0	<.5	0	0	0	0	0	0	30
SEP 12...	--	--	--	--	--	--	--	--	--

DATE	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 27...	--	--	6.0	--	--	6	133	88
NOV 22...	0	0	8.3	--	--	11	249	100
DEC 19...	--	--	7.2	--	--	6	107	64
JAN 18...	--	--	8.7	--	--	2	45	100
FEB 23...	10	0	--	11	.2	10	198	52
MAR 21...	--	--	5.6	--	--	1	19	100
APR 19...	--	--	6.3	--	--	1	21	100
MAY 23...	0	0	--	6.0	--	3	67	100
JUN 28...	--	--	8.4	--	--	1	11	100
JUL 27...	--	--	6.1	--	--	1	17	100
AUG 29...	20	10	--	6.0	.1	1	16	100
SEP 12...	--	--	4.4	--	--	2	19	100

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIPHYTON							
DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS(G/SQ M)		CHLOROPHYLL A (MG/SQ M)	CHLOROPHYLL B (MG/SQ M)	BIOMASS PIGMENT RATIO	SAMPLING METHOD
NOV 22	26	.236	.079	.000	.000	--	ARTIFICIAL SUBSTRATE
AUG 29	33	12.4	11.3	4.09	.000	269	ARTIFICIAL SUBSTRATE

01046500 KENNEBEC RIVER AT BINGHAM, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	NOV 22,77 1430	MAR 21,78 1430	MAY 23,78 1500	JUN 28,78 1530				
TOTAL CELLS/ML	440	47	95	2300				
DIVERSITY: DIVISION	1.2	0.0	0.6	1.5				
..CLASS	1.7	0.0	0.6	1.6				
..ORDER	2.2	0.0	0.6	1.7				
...FAMILY	3.3	1.4	1.4	1.9				
....GENUS	3.6	1.9	1.8	2.3				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	--	-	160	7
...MICRACTINIACEAE								
....ERRERELLA	31	7	--	-	--	-	--	-
....GOLINKINIA	8	2	--	-	--	-	23	1
...OOCYSTACEAE								
....ANKISTRODESMUS	31	7	--	-	--	-	23	1
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....OOCYSTIS	16	4	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	93	4
....SCENEDESMUS	16	4	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	55	13	--	-	--	-	46	2
..ZYGNEMATALES								
...DESMIDIACEAE								
....COSMARIUM	8	2	--	-	--	-	--	-
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCEAE								
....CYCLOTELLA	8	2	--	-	--	-	--	-
....MELOSIRA	--	-	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	70#	16	--	-	--	-	69	3
...FRAGILARIACEAE								
....ASTERIONELLA	31	7	--	-	--	-	--	-
....FRAGILARIA	--	-	9#	20	--	-	69	3
....HANNAEA	--	-	--	-	14	14	--	-
....SYNEORA	8	2	19#	40	41#	43	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	16	4	--	-	27#	29	--	-
...NAVICULACEAE								
....NAVICULA	--	-	9#	20	--	-	--	-
...NITZSCHIAEAE								
....NITZSCHIA	--	-	9#	20	--	-	--	-
...TABELLARIACEAE								
....TABELLARIA	55	13	--	-	--	-	--	-
..CHRYSTOPHYCEAE								
...CHRYSOMONADALES								
...OCHROMONADACEAE								
....DINOBYRON	70#	16	--	-	--	-	46	2
....OCHROMONAS	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONIDALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	8	2	--	-	--	-	280	12
...CRYPTOMONODACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...HORMOGONALES								
...OSCILLATORIACEAE								
....PHORMIDIUM	8	2	--	-	--	-	--	-
...CHROCCOCCALES								
...CHROCCOCCAEAE								
....AGMENELLUM	--	-	--	-	--	-	1300#	57
....ANACYSTIS	--	-	--	-	--	-	160	7
....COCCOCHLORIS	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	14	14	23	1
....TRACHELOMONAS	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01046500 KENNEBEC RIVER AT BINGHAM, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	JUL 27,78 1200	AUG 29,78 1030	SEP 12,78 1545
TOTAL CELLS/ML	14000	1000	360
DIVERSITY: DIVISION	0.3	0.8	1.2
..CLASS	0.3	0.8	1.8
...ORDER	0.3	1.0	2.2
...FAMILY	0.3	1.1	2.2
....GENUS	0.7	1.4	2.2

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
....HYDRODICTYACEAE						
.....PEDIASTRUM	--	-	--	-	--	-
....MICRACTINIACEAE						
.....ERRERELLA	--	-	--	-	--	-
....GOLENKINIA	--	-	--	-	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	*	0	*	0	--	-
....DICTYOSPHAERIUM	--	-	44	4	--	-
...OOCYSTIS	*	0	--	-	--	-
...SCENEDESMACEAE						
....CRUCIGENIA	*	0	--	-	89#	25
....SCENEDESMUS	--	-	11	1	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	30	3	22	6
..ZYGNEMATALES						
...DESMIDIACEAE						
....COSMARIMUM	--	-	--	-	--	-
CHRYSOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
....COSCINODISCAEAE						
.....CYCLOTELLA	--	-	12	1	--	-
....MELOSIRA	--	-	27	3	67#	19
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	*	0	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	96	1	--	-	--	-
....FRAGILARIA	260	2	--	-	--	-
....HANNAEA	--	-	--	-	--	-
....SYNEDRA	--	-	*	0	--	-
...GOMPHONEMATAEAE						
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	--	-	5	1	22	6
...NITZSCHIAEAE						
....NITZSCHIA	--	-	--	-	--	-
...TABELLARIACEAE						
....TABELLARIA	*	0	34	3	--	-
..CHRYSOPHYCEAE						
...CHRYSOMONADALES						
....OCHROMONADACEAE						
.....DINOBRYON	--	-	--	-	--	-
....OCHROMONAS	--	-	--	-	130#	38
CRYPTOPHYTA (CRYPTOMONADS)						
..CRYPTOPHYCEAE						
...CRYPTOMONIDALES						
....CRYPTOCHRYSIDACEAE						
.....CHROOMONAS	--	-	--	-	--	-
...CRYPTOMONODACEAE						
....CRYPTOMONAS	*	0	--	-	22	6
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...HORMOGONALES						
....OSCILLATORIACEAE						
.....PHORMIDIUM	--	-	--	-	--	-
..CHROCOCCALES						
...CHROCOCCACEAE						
....AGMENELLUM	1100	7	790#	79	--	-
....ANACYSTIS	--	-	44	4	--	-
....COCCOCHLORIS	13000#	89	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
....EUGLENACEAE						
.....EUGLENA	--	-	--	-	--	-
....TRACHELOMONAS	*	0	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

KENNEBEC RIVER BASIN

01046500 KENNEBEC RIVER AT BINGHAM, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	33	32	32	35	32	33	36	35	35	39	38	38
2	33	31	32	34	33	33	36	35	35	39	38	38
3	34	33	33	34	33	33	36	35	35	39	38	38
4	34	33	34	34	32	33	36	35	35	39	35	38
5	35	33	34	34	33	34	36	35	35	40	37	39
6	36	34	35	33	32	33	36	35	35	40	38	39
7	36	34	35	34	33	34	36	35	35	39	39	39
8	36	33	35	34	33	33	36	35	35	40	39	39
9	35	31	33	34	32	33	36	35	36	---	---	---
10	33	32	33	33	31	32	36	34	35	---	---	---
11	34	33	33	35	31	33	36	32	35	---	---	---
12	34	32	33	34	32	34	36	34	35	---	---	---
13	36	34	35	34	30	33	36	35	36	---	---	---
14	36	34	34	34	33	34	37	36	36	---	---	---
15	35	32	33	34	33	34	37	31	35	---	---	---
16	33	32	32	34	33	33	37	36	37	---	---	---
17	33	32	32	34	32	33	38	33	36	---	---	---
18	33	32	32	34	33	33	37	36	36	---	---	---
19	33	31	32	34	33	34	37	36	37	36	35	36
20	32	31	31	35	33	34	38	30	36	36	36	36
21	33	32	32	36	33	34	37	36	36	36	35	36
22	33	32	32	35	34	35	39	34	36	36	35	36
23	34	32	33	35	34	35	37	37	37	37	36	36
24	33	32	33	35	35	35	38	36	37	37	30	34
25	33	32	33	35	35	35	37	36	37	33	31	32
26	33	32	32	36	35	35	38	32	37	34	32	34
27	35	32	34	35	33	35	38	37	37	---	---	---
28	34	32	33	35	34	35	38	37	38	---	---	---
29	36	32	34	36	35	35	38	37	37	---	---	---
30	35	33	34	36	35	35	38	32	37	---	---	---
31	35	32	34	---	---	---	39	33	36	---	---	---
MONTH	36	31	33	36	30	34	39	30	36	40	30	37

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	37	37	37	29	26	28
2	---	---	---	---	---	---	37	36	36	28	26	27
3	---	---	---	---	---	---	36	35	36	28	26	27
4	---	---	---	---	---	---	36	35	35	28	25	26
5	---	---	---	---	---	---	35	35	35	28	24	26
6	---	---	---	---	---	---	35	34	35	27	24	26
7	---	---	---	---	---	---	36	34	35	27	24	25
8	---	---	---	---	---	---	35	34	34	26	24	25
9	---	---	---	---	---	---	34	33	33	26	23	23
10	---	---	---	---	---	---	35	33	34	22	22	22
11	---	---	---	---	---	---	33	33	33	25	21	22
12	---	---	---	---	---	---	34	32	33	24	21	22
13	---	---	---	---	---	---	33	32	32	24	21	22
14	---	---	---	---	---	---	33	32	33	24	20	21
15	---	---	---	---	---	---	33	31	32	20	20	20
16	---	---	---	---	---	---	33	31	32	23	19	20
17	---	---	---	---	---	---	34	31	32	24	19	22
18	---	---	---	---	---	---	33	31	33	24	19	24
19	---	---	---	---	---	---	33	31	32	34	27	31
20	---	---	---	---	---	---	32	31	31	34	27	30
21	---	---	---	---	---	---	31	31	31	32	26	30
22	---	---	---	40	39	40	31	30	31	32	26	32
23	---	---	---	40	39	40	31	30	31	---	---	---
24	---	---	---	40	38	39	30	30	30	---	---	---
25	---	---	---	39	37	38	31	30	30	---	---	---
26	---	---	---	39	38	39	31	29	30	---	---	---
27	---	---	---	39	39	39	31	29	30	---	---	---
28	---	---	---	39	38	39	30	28	30	---	---	---
29	---	---	---	40	38	39	30	30	30	---	---	---
30	---	---	---	39	38	38	30	28	29	---	---	---
31	---	---	---	39	37	38	---	---	---	---	---	---
MONTH	---	---	---	40	37	39	37	28	33	34	19	25

KENNEBEC RIVER BASIN

01046500 KENNEBEC RIVER AT BINGHAM, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	27	23	26	29	27	28	---	---	---	39	36	38
2	28	23	24	30	27	29	---	---	---	40	36	39
3	26	23	23	32	28	30	---	---	---	40	36	39
4	27	23	25	31	29	30	---	---	---	39	36	37
5	27	23	25	32	27	30	---	---	---	38	36	37
6	27	23	25	34	30	32	---	---	---	37	36	36
7	28	24	27	35	31	33	---	---	---	36	35	35
8	30	25	27	35	32	33	---	---	---	37	35	36
9	29	24	26	35	32	33	---	---	---	37	35	36
10	27	24	25	35	32	33	---	---	---	37	35	36
11	29	23	26	33	31	32	---	---	---	36	35	36
12	30	26	28	32	31	31	---	---	---	36	35	36
13	28	25	27	34	31	33	---	---	---	36	35	35
14	25	24	24	34	32	33	---	---	---	37	34	36
15	25	23	24	33	31	32	---	---	---	36	34	35
16	29	24	27	32	31	31	---	---	---	37	35	36
17	30	25	28	32	31	32	---	---	---	36	35	36
18	28	27	28	34	32	33	---	---	---	37	34	36
19	30	27	29	34	31	33	---	---	---	37	34	36
20	31	26	27	34	32	33	---	---	---	38	34	36
21	28	26	27	36	33	34	---	---	---	39	36	37
22	28	26	27	34	32	33	---	---	---	37	35	36
23	30	26	28	36	33	34	---	---	---	37	34	36
24	29	26	27	34	32	33	---	---	---	37	34	36
25	31	26	29	35	32	34	---	---	---	36	34	35
26	32	28	30	35	33	34	---	---	---	36	33	35
27	32	29	31	---	---	---	---	---	---	36	34	35
28	31	29	30	---	---	---	---	---	---	36	34	35
29	32	29	31	---	---	---	---	---	---	36	34	35
30	31	28	29	---	---	---	40	38	39	36	34	35
31	---	---	---	---	---	---	40	37	39	---	---	---
MONTH	32	23	27	36	27	32	40	37	39	40	33	36
PERIOD	40	19	33									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.5	12.5	14.0	9.0	8.0	8.5	3.5	3.0	3.5	.0	.0	.0
2	14.5	14.0	14.5	8.5	7.5	8.0	4.0	3.0	3.5	.0	.0	.0
3	15.0	14.0	14.5	8.5	8.0	8.0	3.0	2.5	3.0	.0	.0	.0
4	14.0	13.5	14.0	8.0	8.0	8.0	3.0	2.0	2.5	.0	.0	.0
5	13.5	13.0	13.5	8.5	8.0	8.0	2.5	1.0	1.5	.0	.0	.0
6	13.0	11.5	12.5	8.0	8.0	8.0	1.5	.5	1.0	.0	.0	.0
7	13.0	10.0	12.5	8.0	7.5	8.0	1.0	.0	.5	.0	.0	.0
8	13.0	9.5	11.5	8.0	7.5	7.5	1.0	.0	.5	.0	.0	.0
9	12.0	10.5	11.5	8.0	7.5	8.0	1.5	.5	1.0	.0	.0	.0
10	12.5	10.5	12.0	8.0	7.5	7.5	1.5	.0	.5	.0	.0	.0
11	12.5	11.5	12.0	8.0	7.5	7.5	.5	.0	.0	.0	.0	.0
12	11.5	10.5	11.5	7.5	7.5	7.5	.0	.0	.0	.0	.0	.0
13	12.0	10.5	11.5	7.5	7.5	7.5	.0	.0	.0	.0	.0	.0
14	11.5	9.5	11.0	7.0	7.0	7.0	.5	.0	.0	.0	.0	.0
15	11.5	9.0	11.0	7.0	7.0	7.0	.5	.0	.0	.0	.0	.0
16	11.5	9.0	11.0	7.0	7.0	7.0	.5	.0	.0	.0	.0	.0
17	11.0	9.5	10.5	7.0	7.0	7.0	.5	.0	.0	.0	.0	.0
18	11.0	9.5	10.5	7.0	6.5	6.5	.5	.0	.0	.5	.5	.5
19	11.0	9.0	10.5	6.5	6.0	6.5	.5	.0	.0	.5	.5	.5
20	10.5	10.5	10.5	6.5	6.0	6.0	.0	.0	.0	.5	.5	.5
21	11.0	10.5	10.5	6.0	6.0	6.0	.0	.0	.0	.5	.0	.5
22	10.5	10.0	10.0	6.0	5.5	5.5	.5	.0	.0	.5	.5	.5
23	10.0	9.5	10.0	5.5	5.5	5.5	.0	.0	.0	.5	.5	.5
24	9.5	9.0	9.5	5.5	5.0	5.5	.5	.0	.0	.5	.0	.0
25	9.5	9.0	9.0	6.5	4.5	5.0	.5	.0	.0	.5	.0	.0
26	9.0	8.5	9.0	6.0	4.0	4.5	.0	.0	.0	1.5	.0	.5
27	9.0	8.5	9.0	5.5	3.5	4.0	.0	.0	.0	---	---	---
28	9.5	8.5	9.0	4.0	4.0	4.0	.0	.0	.0	---	---	---
29	9.5	8.5	9.0	4.0	3.5	4.0	.0	.0	.0	---	---	---
30	9.5	8.0	8.5	3.5	3.0	3.5	.0	.0	.0	---	---	---
31	9.0	8.0	8.5	---	---	---	.0	.0	.0	---	---	---
MONTH	15.0	8.0	11.0	9.0	3.0	6.5	4.0	.0	.5	1.5	.0	.0

01047000 CARRABASSETT RIVER NEAR NORTH ANSON, ME

LOCATION.--Lat 44°52'09", long 69°57'20", Somerset County, Hydrologic Unit 01030003, on left bank 3.4 mi (5.5 km) upstream from Mill Stream and North Anson.

DRAINAGE AREA.--354 mi² (917 km²).

PERIOD OF RECORD.--November and December 1901, June 1902 to May 1907, August 1925 to current year. Monthly discharge only for some periods, published in WSP 1301.

REVISED RECORDS.--WSP 851: Drainage area. WSP 1231: 1904-7, 1928(M), 1932(M), 1936(M), 1938(M), 1944(M), 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 303.3 ft (92.45 m) National Geodetic Vertical Datum of 1929. November 1, 1901 to May 5, 1907, nonrecording gage 1 mi (2 km) upstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Some regulation at low flows by mills above station. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--57 years (water years 1902-06, 1926-78), 723 ft³/s (20.48 m³/s), 27.74 in/yr (705 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,800 ft³/s (872 m³/s) Mar. 19, 1936, gage height, 21.17 ft (6.453 m); maximum gage height, 27.78 ft (8.467 m) Feb. 21, 1978 (ice jam); minimum discharge, 18 ft³/s (0.51 m³/s) Oct. 29, 1929, gage height, 2.02 ft (0.616 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,000 ft³/s (200 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	0900	14,100 399	13.51 4.118	Feb. 21	1900	ice jam	*27.78 8.467
Oct. 10	0200	13,100 371	13.00 3.962	Apr. 21	1800	6730 191	9.55 2.911
Oct. 17	2100	14,000 396	13.48 4.109	May 17	1400	6540 185	9.43 2.874
Jan. 9	2400	*16,800 476	14.90 4.542				

Minimum discharge, 49 ft³/s (1.39 m³/s) Sept. 27, gage height, 2.45 ft (0.747 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1960	544	565	590	820	350	840	2680	686	241	116	81
2	8780	524	640	545	760	350	820	2010	620	219	117	73
3	4040	500	669	520	710	345	760	1900	738	203	117	69
4	2350	487	602	495	670	340	730	2070	761	187	125	69
5	1570	524	534	480	630	335	830	2220	631	175	151	62
6	1150	505	470	470	610	330	980	2220	584	166	134	59
7	892	478	430	460	580	330	930	2460	529	157	117	65
8	716	456	400	450	560	330	880	2780	664	149	112	101
9	1810	2250	380	5500	565	325	860	4230	983	157	108	86
10	8340	3080	400	11000	580	320	850	4340	1300	205	106	73
11	3470	3530	380	5170	560	320	1100	3260	962	180	97	67
12	2190	2970	375	3200	540	320	1450	2600	755	147	92	71
13	1590	1630	365	1900	520	325	1800	2320	642	134	94	78
14	1220	1250	360	1550	500	330	1700	2020	829	125	97	77
15	1470	1100	425	1300	490	350	1900	1970	810	153	91	69
16	2280	1000	600	1100	480	380	1850	1800	642	356	83	66
17	6940	950	500	980	460	370	1800	5080	534	253	78	66
18	8930	1420	425	880	450	350	2200	3670	465	268	75	63
19	4000	1360	370	810	440	335	2500	2650	465	221	71	59
20	4410	1080	330	750	425	325	3120	2250	636	185	70	58
21	3790	930	310	720	410	310	5500	2160	816	175	67	57
22	2090	857	620	750	400	350	5310	1820	804	187	67	56
23	1310	784	750	760	395	410	4590	1420	779	221	65	55
24	817	734	610	720	385	450	3930	1190	550	300	66	55
25	580	716	550	920	375	420	3620	997	415	230	70	55
26	646	710	1000	1300	370	410	4000	900	340	173	77	53
27	824	772	900	1900	365	620	4320	829	295	151	70	50
28	753	580	810	1600	360	900	4360	773	300	147	69	51
29	680	575	750	1300	---	1200	4190	697	293	147	138	51
30	624	534	670	1100	---	1050	3870	620	259	132	162	50
31	575	---	630	920	---	920	---	755	---	121	101	---
TOTAL	80797	32830	16820	50140	14410	13800	71590	66691	19087	5865	3003	1945
MEAN	2606	1094	543	1617	515	445	2386	2151	636	189	96.9	64.8
MAX	8930	3530	1000	11000	820	1200	5500	5080	1300	356	162	101
MIN	575	456	310	450	360	310	730	620	259	121	65	50
CFSM	7.36	3.09	1.53	4.57	1.46	1.26	6.74	6.08	1.80	.53	.27	.18
IN.	8.49	3.45	1.77	5.27	1.51	1.45	7.52	7.01	2.01	.62	.32	.20
CAL YR 1977	TOTAL	414960	MEAN	1137	MAX	17200	MIN	83	CFSM	3.21	IN	43.61
WTR YR 1978	TOTAL	376978	MEAN	1033	MAX	11000	MIN	50	CFSM	2.92	IN	39.61

01047730 WILSON STREAM AT EAST WILTON, ME

LOCATION.--Lat 44°36'55", long 70°11'42", Franklin County, Hydrologic Unit 01030003, on left bank 0.1 mi (0.2 km) upstream from railroad bridge in East Wilton, and 1.5 mi (2.4 km) downstream from Varnum Stream.

DRAINAGE AREA.--45.9 mi² (118.9 km²).

PERIOD OF RECORD.--February 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft (121.920 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period and period of no gage-height record Aug 24 to Sept. 30, which are fair. Flow regulated by Wilson Pond 3.7 mi (6.0 km) upstream. Several observations of water temperature and specific conductance were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,720 ft³/s (48.7 m³/s) Jan. 9, 1978, gage height, 13.31 ft (4.057 m); minimum daily, 4.3 ft³/s (0.12 m³/s) Sept. 27, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1720 ft³/s (48.7 m³/s) Jan. 9, gage height, 13.31 ft (4.057 m); minimum daily, 4.3 ft³/s (0.12 m³/s) Sept. 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	51	72	71	140	80	116	306	21	13	5.9	8.0
2	753	32	119	68	130	80	118	245	20	12	6.8	7.0
3	341	31	108	65	120	76	112	224	33	12	6.5	6.5
4	217	37	95	62	110	73	100	221	61	11	6.2	5.9
5	152	32	85	60	105	72	144	219	61	11	5.0	5.5
6	120	30	79	59	96	77	146	215	60	11	12	5.3
7	101	36	74	57	92	79	139	213	55	10	9.5	5.0
8	92	33	68	56	86	78	147	214	116	9.8	9.0	6.3
9	493	286	64	824	82	76	159	349	112	9.2	11	7.2
10	1020	245	60	1300	81	70	177	388	93	9.3	8.2	6.5
11	481	291	58	630	78	64	189	280	74	8.9	7.6	6.1
12	284	232	55	335	75	60	273	212	66	8.3	7.5	6.0
13	205	184	54	260	74	58	261	169	63	7.9	7.7	6.7
14	153	151	88	230	72	59	315	140	73	7.9	7.4	8.8
15	188	122	82	205	70	70	374	122	60	13	7.2	7.3
16	203	109	75	185	68	67	354	167	56	13	7.3	6.4
17	575	112	71	170	67	63	357	585	52	11	7.1	5.8
18	596	156	68	155	66	60	394	388	50	10	6.5	5.5
19	338	131	66	145	65	58	434	263	70	9.6	6.5	5.4
20	370	112	68	135	64	57	638	198	48	9.8	6.6	5.1
21	302	102	70	125	63	60	1080	181	33	9.4	6.6	5.0
22	236	105	189	120	62	67	943	152	34	9.9	6.5	4.8
23	183	93	151	115	62	69	805	121	54	9.8	6.2	4.7
24	146	99	119	110	61	68	630	102	64	9.4	6.0	4.6
25	127	99	170	105	61	77	529	88	64	8.6	5.9	4.5
26	115	110	234	400	61	64	518	79	58	8.3	6.8	4.4
27	109	115	180	300	60	89	544	71	36	8.0	6.5	4.3
28	147	91	130	240	60	158	532	65	16	8.0	6.2	4.5
29	135	85	98	205	---	156	492	59	15	7.7	5.0	4.6
30	108	66	83	175	---	133	432	56	14	8.6	12	4.7
31	75	---	75	160	---	118	---	43	---	8.1	9.5	---
TOTAL	8506	3378	3008	7127	2231	2436	11452	6135	1632	303.5	228.7	172.4
MEAN	274	113	97.0	230	79.7	78.6	382	198	54.4	9.79	7.38	5.75
MAX	1020	291	234	1300	140	158	1080	585	116	13	12	8.8
MIN	75	30	54	56	60	57	100	43	14	7.7	5.0	4.3
CFSM	5.97	2.46	2.11	5.01	1.74	1.71	8.32	4.31	1.19	.21	.16	.13
IN.	6.89	2.74	2.44	5.78	1.81	1.97	9.28	4.97	1.32	.25	.19	.14

WTR YR 1978 TOTAL 46609.6 MEAN 128 MAX 1300 MIN 4.3 CFSM 2.79 IN 37.77

01048000 SANDY RIVER NEAR MERCER, ME

LOCATION.--Lat 44°42'26", long 69°56'21", Somerset County, Hydrologic Unit 01030003, on right bank 0.9 mi (1.4 km) upstream from Bog Stream, 2.1 mi (3.4 km) north of Mercer, and 8.6 mi (13.8 km) upstream from mouth.

DRAINAGE AREA.--514 mi² (1,331 km²).

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 756: 1933. WSP 801: Drainage area. WSP 1231: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 197.1 ft (60.08 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period and period of no gage-height record, Jan. 10-13, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--50 years, 975 ft³/s (27.61 m³/s), 25.76 in/yr (654 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,600 ft³/s (1,090 m³/s) Mar. 19, 1936, gage height, 16.75 ft (5.105 m), from rating curve extended above 15,000 ft³/s (420 m³/s) on basis of records for stations on Kennebec River at Bingham and Waterville, Carrabassett River near North Anson, and Sebasticook River near Pittsfield; maximum gage height, 18.89 ft (5.758 m) Feb. 12, 1970, from floodmark (backwater from ice); minimum discharge, 32 ft³/s (0.91 m³/s) Sept. 22-26, 1939, gage height, 2.15 ft (0.655 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,000 ft³/s (170 m³/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. 2	1700	12800	362	9.89	3.014	Apr. 21	2000	11100	314	9.30	2.835
Oct. 10	1200	14700	416	10.55	3.216	May 10	0100	7950	225	8.16	2.487
Oct. 18	0300	9890	280	8.89	2.710	May 17	1800	9310	264	8.68	2.646
Jan. 10	unknown	*25000	708	a13.50	4.115						

a From floodmarks.

Minimum discharge, 44 ft³/s (1.25 m³/s) Sept. 30, gage height, 2.26 ft (0.689 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1550	835	834	740	1450	510	1350	3500	634	349	115	106
2	9640	781	1080	690	1270	500	1300	2600	568	316	110	88
3	5220	747	1190	660	1150	500	1220	2330	617	288	108	78
4	2690	714	1020	640	1080	490	1180	2540	945	264	112	75
5	1940	748	890	610	1020	490	1300	2830	755	249	126	67
6	1540	730	665	590	980	485	1550	2860	657	231	167	61
7	1300	732	610	600	950	480	1350	3050	619	215	135	60
8	1100	690	570	680	960	480	1280	3450	897	199	116	59
9	1660	2640	545	4500	925	475	1250	4980	2090	184	112	76
10	12400	3300	530	17200	890	470	1350	6360	1950	175	109	83
11	5130	2940	525	7400	850	470	1650	4280	1210	194	111	74
12	2900	2870	520	3900	810	475	2200	3370	872	177	105	71
13	2080	1920	510	2900	790	480	2800	2930	708	159	98	68
14	1770	1690	495	2140	760	500	2600	2540	942	147	96	71
15	1930	1400	490	2060	740	580	3050	2540	1130	151	96	75
16	2780	1240	490	1500	720	700	2900	2360	783	265	90	71
17	4670	1220	1050	1350	690	630	2800	7090	619	359	85	66
18	7620	1920	850	1220	660	580	4000	5480	522	286	78	63
19	3550	1920	710	1130	650	550	4590	3190	522	298	73	61
20	3860	1440	610	1050	630	530	6080	2540	660	228	69	58
21	4350	1210	640	1010	610	500	9340	2280	1170	196	66	56
22	2750	1210	1150	980	600	530	8780	2220	1190	188	63	55
23	2160	1150	1500	960	580	600	7310	1640	1130	189	61	53
24	1780	1060	1080	950	570	700	6110	1360	906	213	63	51
25	1550	1100	950	940	550	650	5400	1190	691	183	65	49
26	1390	1080	2000	2000	540	630	5600	1060	579	168	67	49
27	1270	1290	1400	3900	530	950	5840	937	494	144	78	47
28	1170	943	1150	2750	520	1500	5740	835	440	132	75	46
29	1110	894	960	2250	---	1900	5470	739	448	127	81	45
30	997	849	860	1900	---	1600	5180	647	384	137	119	45
31	916	---	800	1650	---	1460	---	646	---	125	142	---
TOTAL	94773	41263	26674	70850	22475	21395	110570	84374	25132	6536	2991	1927
MEAN	3057	1375	860	2285	803	690	3686	2722	838	211	96.5	64.2
MAX	12400	3300	2000	17200	1450	1900	9340	7090	2090	359	167	106
MIN	916	690	490	590	520	470	1180	646	384	125	61	45
CFSM	5.95	2.68	1.67	4.45	1.56	1.34	7.17	5.30	1.63	.41	.19	.13
IN.	6.86	2.99	1.93	5.13	1.63	1.55	8.00	6.11	1.82	.47	.22	.14
CAL YR 1977	TOTAL	532791	MEAN	1460	MAX	20000	MIN	101	CFSM	2.84	IN	38.56
WTR YR 1978	TOTAL	508960	MEAN	1394	MAX	17200	MIN	45	CFSM	2.71	IN	36.84

01049000 SEBASTICOOK RIVER NEAR PITTSFIELD, ME

LOCATION.--Lat 44°43'00", long 69°24'56", Somerset County, Hydrologic Unit 01030003, on right bank 1.7 mi (2.7 km) upstream from Twentyfivemile Stream and 5.0 mi (8.0 km) south of Pittsfield.

DRAINAGE AREA.--579 mi² (1,500 km²).

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 1271: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 133.9 ft (40.81 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by dam 0.4 mi (0.6 km) upstream, and by Great Moose and Sebasticook Lakes and Plymouth Pond, combined capacity, about 2,345,000,000 ft³ (66,410,000 m³). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--49 years (water years 1930-78), 959 ft³/s (27.16 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,400 ft³/s (408 m³/s) Mar. 22, 1936, gage height, 13.18 ft (4.017 m); minimum daily, 4.5 ft³/s (0.13 m³/s) Nov. 10, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,450 ft³/s (183 m³/s) Apr. 23, gage height, 8.39 ft (2.557 m); minimum daily, 52 ft³/s (1.47 m³/s) Aug. 19, 23, 26-28, 31.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2230	1240	1050	1150	3250	755	2710	3080	614	230	60	68
2	3020	1040	1110	1030	2750	775	2710	2770	542	220	61	117
3	3770	945	1190	930	2430	730	2560	2480	511	212	62	139
4	4130	888	1180	870	2050	700	2480	2210	603	192	65	141
5	4080	796	1170	840	1810	675	2710	1860	594	178	124	141
6	3740	745	1100	805	1650	655	3020	1570	553	172	200	337
7	3300	737	1050	790	1500	630	3120	1190	421	167	157	512
8	2840	720	1040	785	1380	620	3190	894	452	159	83	538
9	2490	1120	1000	2700	1270	600	3260	736	575	150	64	527
10	2440	1680	980	4250	1200	600	3350	910	779	144	58	504
11	2500	1730	950	5240	1120	577	3460	1010	758	139	54	481
12	2520	1670	930	5460	1060	556	3680	1020	692	132	55	470
13	2450	1620	900	5100	1000	538	4090	993	633	128	56	434
14	2320	1610	890	3800	950	532	4390	930	608	125	65	398
15	2240	1550	880	2850	900	660	4570	848	592	128	59	373
16	2310	1480	860	2230	870	790	4630	787	548	131	54	347
17	2550	1450	845	1800	840	842	4620	904	496	125	53	314
18	3000	1530	830	1680	810	830	4650	1150	454	121	53	229
19	3270	1610	820	1550	790	803	4720	1220	431	115	52	181
20	3340	1620	805	1450	770	768	4980	1220	409	90	53	169
21	3260	1570	800	1370	755	737	5580	1220	397	76	57	132
22	3050	1530	1260	1310	740	814	6180	1220	388	74	54	157
23	2820	1470	1710	1270	725	881	6410	1210	383	70	52	206
24	2560	1410	1830	1210	705	881	6270	1150	380	69	54	194
25	2310	1340	1950	1170	690	890	5920	1060	360	64	53	179
26	2090	1310	2400	1150	680	869	5440	954	330	63	52	165
27	1860	1280	2560	2450	670	950	4950	840	310	62	52	148
28	1630	1220	2480	3360	700	1780	4470	745	286	64	52	136
29	1470	1140	2250	3720	---	2340	3900	702	258	64	58	125
30	1350	1070	1850	3950	---	2690	3440	761	241	66	55	111
31	1330	---	1450	3800	---	2750	---	736	---	60	52	---
TOTAL	82270	39121	40120	70070	34065	29218	125460	38380	14598	3790	2079	7973
MEAN	2654	1304	1294	2260	1217	943	4182	1238	487	122	67.1	266
MAX	4130	1730	2560	5460	3250	2750	6410	3080	779	230	200	538
MIN	1330	720	800	785	670	532	2480	702	241	60	52	68
CAL YR 1977 TOTAL	440664			1207	MAX 6070	MIN 82						
WTR YR 1978 TOTAL	487144			1335	MAX 6410	MIN 52						

01049218 COLD BROOK NEAR NORTH BELGRADE, ME

LOCATION.--Lat 44°37'37", long 69°47'06", Kennebec County, Hydrologic Unit 01030003, on left bank 0.6 mi (1.0 km) east of State Highway 8, and 0.2 mi (0.3 km) upstream from mouth near North Belgrade.

DRAINAGE AREA.--0.85 mi² (2.20 km²).

PERIOD OF RECORD.--November 1977 to September 1978 (seasonal records only).

GAGE.--Water-stage recorder. Altitude of gage is 280 ft (85 m) from topographic map.

REMARKS.--Records fair. Several observations of water temperature and specific conductance were made during the year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 32 ft³/s (0.91 m³/s) Mar. 28, gage height, 11.73 ft (3.575 m); minimum, <0.01 ft³/s (<0.001 m³/s) Aug. 6, gage height 10.53 ft (3.210 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	1.6			---	5.0	1.7	1.3	.47	.10	.09
2		---	3.2			---	5.7	1.6	1.1	.41	.10	.09
3		---	2.1			---	3.2	1.6	1.7	.41	.10	.09
4		---	1.6			---	2.7	1.4	5.0	.41	.13	.09
5		---	1.5			---	7.1	1.3	1.3	.41	.12	.09
6		---	1.9			---	6.3	1.3	1.1	.35	.10	.09
7		---	2.1			---	5.4	1.1	1.0	.35	.12	.08
8		---	1.9			---	6.3	1.1	2.9	.35	.12	.08
9		---	---			---	6.6	5.0	2.5	.35	.12	.08
10		---	---			---	6.9	2.5	1.5	.35	.10	.09
11		---	---			---	6.6	1.4	1.0	.35	.10	.09
12		---	---			---	13	1.1	.93	.28	.10	.10
13		---	---			---	9.0	1.1	1.0	.28	.12	.10
14		---	---			1.3	9.3	1.1	1.1	.28	.10	.10
15		---	---			4.4	9.3	1.1	.86	.93	.10	.13
16		---	---			1.6	8.1	2.9	.74	.47	.13	.13
17		---	---			1.1	7.8	14	.67	.47	.10	.12
18		---	---			1.1	8.4	3.2	.67	.41	.09	.10
19		---	---			1.1	8.4	2.1	.67	.60	.09	.10
20		---	---			1.0	19	1.6	.67	.28	.09	.10
21		---	---			1.0	14	2.1	.80	.22	.10	.10
22		1.6	---			1.5	9.0	1.5	.80	.22	.10	.05
23		1.6	---			1.4	7.2	1.1	.74	.18	.09	.02
24		1.6	---			1.1	6.3	1.1	.67	.13	.10	.02
25		1.1	---			1.1	5.7	1.1	.54	.12	.10	.03
26		1.5	---			1.1	4.4	1.0	.54	.12	.10	.03
27		1.9	---			6.0	3.6	.80	.47	.12	.09	.05
28		1.4	---			16	3.2	.86	.93	.12	.10	.05
29		1.4	---			6.5	2.7	.80	.47	.13	.12	.05
30		1.3	---			5.0	2.1	6.3	.47	.15	.09	.06
31		---	---			4.2	---	3.9	---	.12	.09	---
TOTAL		---	---			---	212.3	68.76	34.14	9.84	3.21	2.40
MEAN		---	---			---	7.08	2.22	1.14	.32	.10	.080
MAX		---	---			---	19	14	5.0	.93	.13	.13
MIN		---	---			---	2.1	.80	.47	.12	.09	.02
CFSM		---	---			---	8.33	2.61	1.34	.38	.12	.09
IN.		---	---			---	9.28	3.01	1.49	.43	.14	.10

KENNEBEC RIVER BASIN

01049221 HATCHERY BROOK AT NORTH BELGRADE, ME

LOCATION.--Lat 44°31'21", long 69°47'54", Kennebec County, Hydrologic Unit 01030003, on left bank on State Highway 8, 100 ft (30 m) downstream from dam at outlet of Ellis Pond, at North Belgrade.

DRAINAGE AREA.--8.83 mi² (22.87 km²).

PERIOD OF RECORD.--November 1977 to September 1978.

GAGE.--Water-stage recorder. Altitude of gage is 280 ft (85 m), from topographic map.

REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period November 1977 to September 1978, 94 ft³/s (2.66 m³/s) Apr. 21, gage height, 8.03 ft (2.448 m); minimum not determined; minimum daily, 0.02 ft³/s (0.001 m³/s), Sept. 20-30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	63	.50	49	16	16	42	6.2	.97	.09	.04
2		---	59	.50	49	16	16	34	5.5	.83	.08	.04
3		---	42	.45	50	16	16	34	4.5	.83	.08	.04
4		---	34	.45	49	16	16	33	26	.71	.08	.04
5		---	14	.45	49	16	16	19	50	.77	.07	.04
6		---	.71	.50	49	16	16	6.6	50	.77	.07	.04
7		---	.65	.50	48	16	17	5.1	48	.71	.07	.04
8		---	.60	.50	47	16	18	3.3	38	.65	.07	.04
9		---	.65	.65	47	15	19	2.6	28	.65	.07	.04
10		---	.54	3.8	47	16	31	1.8	28	.41	.07	.04
11		---	.71	8.4	46	16	42	1.7	28	.18	.06	.03
12		---	.54	8.4	46	16	43	1.5	23	.18	.06	.03
13		---	.54	7.9	46	16	43	1.4	5.8	.18	.06	.03
14		---	.54	8.4	47	16	55	1.7	6.2	.18	.06	.03
15		---	.54	7.9	46	16	66	1.4	5.5	.18	.06	.03
16		---	.54	7.9	45	16	65	1.1	5.1	.18	.06	.03
17		---	.54	7.9	45	16	63	.97	5.1	.23	.06	.03
18		---	.50	7.9	45	16	65	1.1	5.1	.22	.05	.03
19		---	.54	7.9	45	16	65	1.5	3.0	.18	.05	.03
20		---	.50	12	43	16	63	2.0	1.8	.18	.05	.02
21		---	.50	16	28	16	77	2.0	1.8	.18	.05	.02
22		76	.45	16	16	16	89	20	1.8	.18	.05	.02
23		74	.45	17	16	16	85	37	1.5	.18	.05	.02
24		71	.41	18	16	16	68	36	1.1	.18	.05	.02
25		68	.39	18	16	16	52	36	1.1	.18	.05	.02
26		63	.37	19	16	16	49	35	1.1	.18	.05	.02
27		60	.35	37	16	16	39	35	1.1	.16	.05	.02
28		66	.33	52	16	16	43	35	1.1	.14	.04	.02
29		71	.31	51	---	16	50	35	.97	.12	.04	.02
30		67	.54	50	---	16	48	20	.97	.10	.04	.02
31		---	.54	50	---	16	---	7.1	---	.08	.04	---
TOTAL		---	225.28	436.90	1078	495	1351	493.87	385.34	10.87	1.83	.89
MEAN		---	7.27	14.1	38.5	16.0	45.0	15.9	12.8	.35	.059	.030
MAX		---	63	52	50	16	89	42	50	.97	.09	.04
MIN		---	.31	.45	16	15	16	.97	.97	.08	.04	.02
CFSM		---	.82	1.60	4.36	1.81	5.10	1.80	1.45	.04	.007	.003
IN.		---	.95	1.84	4.54	2.09	5.69	2.08	1.62	.05	.01	.00

01049300 NORTH BRANCH TANNING BROOK NEAR MANCHESTER, ME

LOCATION.--Lat 44°21'00", long 69°51'07", Kennebec County, Hydrologic Unit 01030003, on right bank 28 ft (8.5 m) upstream from culvert under road between U.S. Highway 202 and State Highway 135, 1,800 ft (550 m) upstream from mouth, and 1.8 mi (2.9 km) north of Manchester.

DRAINAGE AREA.--0.93 mi² (2.41 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 210 ft (64.0 m), from topographic map.

REMARKS.--Records fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--14 years (water years 1965-78), 2.08 ft³/s (0.059 m³/s), 30.37 in/yr (771 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 195 ft³/s (5.52 m³/s) Dec. 17, 1973, gage height, 3.89 ft (1.186 m); minimum, 0.05 ft³/s (0.001 m³/s) Aug. 21, 1970, Aug. 2, 16, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30 ft³/s (0.85 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Nov. 9	1015	30 0.85	4.64 1.414	Jan. 26	1630	42 1.19	4.81 1.466
Dec. 22	0830	33 0.94	4.69 1.430	Mar. 27	2045	40 1.13	4.79 1.460
Jan. 9	0930	*112 3.17	5.51 1.679	May 17	0430	41 1.16	4.80 1.463

Minimum discharge, 0.08 ft³/s (0.002 m³/s) July 29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	.81	3.1	1.5	1.5	.92	6.1	1.9	.81	.28	.12	.17
2	5.0	.81	5.8	1.4	1.4	.90	5.6	1.8	.89	.25	.09	.16
3	3.0	.81	3.2	1.3	1.3	.86	3.9	1.7	1.9	.22	.09	.16
4	1.5	.81	2.2	1.2	1.2	.90	3.5	1.6	9.5	.22	.26	.16
5	1.0	.81	1.4	1.2	1.1	.81	12	1.5	2.7	.22	1.1	.15
6	.80	.80	1.3	1.2	1.1	.81	9.5	1.4	1.6	.22	.35	.14
7	.73	1.2	1.2	1.2	1.0	.77	7.9	1.3	1.2	.19	.23	.14
8	.67	1.0	1.1	1.4	.98	.76	9.1	1.2	5.3	.18	.23	.14
9	4.3	17	1.1	54	.97	.76	8.7	6.2	5.7	.18	.35	.14
10	7.1	6.1	1.0	14	.94	.76	8.9	4.3	4.5	.23	.24	.12
11	2.2	4.1	.99	5.3	.92	.76	8.4	2.3	1.8	.24	.20	.12
12	1.3	2.8	.98	3.5	.91	.76	19	1.7	1.2	.20	.16	.14
13	1.0	2.4	.98	2.7	.97	.83	11	1.5	1.0	.16	.14	.15
14	.81	2.8	1.0	2.2	1.1	1.3	10	1.4	1.7	.14	.13	.16
15	2.0	1.8	3.2	1.9	1.1	6.2	9.1	1.3	1.5	.13	.12	.14
16	2.9	1.5	2.5	1.7	1.1	4.9	7.8	6.4	1.0	.57	.11	.15
17	11	2.7	1.7	1.6	1.1	2.5	6.9	23	.78	.52	.11	.20
18	19	5.5	1.3	1.5	1.1	1.6	6.7	6.4	.71	.34	.11	.18
19	2.6	2.8	1.2	1.4	1.1	1.4	6.3	3.8	.76	.26	.09	.17
20	6.9	1.9	1.3	1.5	1.0	1.4	21	2.8	.87	.22	.09	.16
21	5.3	1.4	1.4	1.4	1.0	1.4	13	3.6	1.4	.17	.09	.18
22	2.9	1.9	24	1.5	.93	3.6	7.7	3.0	1.7	.14	.09	.29
23	2.0	1.5	8.9	1.4	.92	3.2	5.6	2.0	1.4	.16	.09	.23
24	1.5	1.6	4.5	1.5	.92	2.2	4.8	1.6	.71	.16	.11	.22
25	1.4	1.7	9.0	1.4	.92	2.2	4.1	1.4	.63	.15	.12	.21
26	1.3	3.6	13	20	.87	1.7	3.6	1.4	.52	.10	.12	.20
27	1.3	4.2	4.2	18	.91	14	3.0	1.3	.42	.09	.12	.20
28	1.0	1.9	2.8	8.8	.92	25	2.7	1.2	.38	.09	.15	.20
29	.98	1.5	2.2	4.2	---	14	2.4	.96	.34	.12	.27	.20
30	.98	1.3	1.9	2.5	---	9.5	2.1	.90	.31	.12	.22	.20
31	.83	---	1.7	1.8	---	7.2	---	.83	---	.12	.18	---
TOTAL	96.90	79.05	110.15	164.2	29.28	113.90	230.4	91.69	53.23	6.39	5.88	5.18
MEAN	3.13	2.64	3.55	5.30	1.05	3.67	7.68	2.96	1.77	.21	.19	.17
MAX	19	17	24	54	1.5	25	21	23	9.5	.57	1.1	.29
MIN	.67	.80	.98	1.2	.87	.76	2.1	.83	.31	.09	.09	.12
CFSM	3.37	2.84	3.82	5.70	1.13	3.95	8.26	3.18	1.90	.23	.20	.18
IN.	3.87	3.16	4.40	6.56	1.17	4.55	9.21	3.66	2.13	.26	.23	.21

CAL YR 1977 TOTAL 861.50 MEAN 2.36 MAX 54 MIN .06 CFSM 2.54 IN 34.42
WTR YR 1978 TOTAL 986.25 MEAN 2.70 MAX 54 MIN .09 CFSM 2.90 IN 39.41

NOTE.--No gage-height record Oct. 1-5.

KENNEBEC RIVER BASIN

01049373 MILL STREAM AT WINTHROP, ME

LOCATION.--Lat 44°18'24", long 69°58'18", Kennebec County, Hydrologic Unit 01030003, on right bank 500 ft (150 m) downstream from bridge on Main Street, at Winthrop.

DRAINAGE AREA.--32.9 mi² (85.2 km²).

PERIOD OF RECORD.--October 1977 to September 1978.

GAGE.--Water-stage recorder. Datum of gage is 176.42 ft (53.773 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 274 ft³/s (7.76 m³/s) Apr. 21, gage height, 3.72 ft (1.134 m); minimum, 1.6 ft³/s (0.045 m³/s) Sept. 9, gage height, 1.08 ft (0.329 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	72	69	107	141	30	183	120	53	19	23	2.9
2	21	90	73	98	126	28	179	113	50	18	19	2.9
3	29	120	76	90	114	27	165	108	51	18	16	2.5
4	29	109	77	84	104	28	159	103	54	17	13	2.4
5	31	72	74	79	96	27	164	125	53	16	12	2.2
6	49	52	64	75	88	24	176	121	52	15	11	1.9
7	122	64	62	71	82	30	180	110	50	14	11	1.9
8	94	70	59	67	80	59	183	98	52	16	10	1.7
9	103	77	59	133	74	56	186	95	57	17	9.4	2.8
10	103	91	61	247	70	53	187	97	58	18	11	4.1
11	109	117	60	248	64	52	193	91	56	17	12	3.1
12	114	154	57	231	59	50	215	86	53	15	11	3.0
13	103	140	55	209	55	48	234	81	48	16	9.2	3.0
14	63	127	58	201	53	47	233	82	43	16	8.0	3.2
15	59	108	66	191	51	48	236	79	41	19	7.1	3.5
16	63	104	65	173	49	49	233	78	40	18	6.5	4.7
17	73	101	65	160	47	50	227	99	52	17	6.0	4.5
18	120	105	62	153	46	49	222	108	57	16	5.5	4.9
19	138	118	61	140	45	50	218	108	55	16	5.3	5.6
20	138	117	58	130	42	47	243	104	44	17	5.1	5.1
21	136	108	59	129	41	46	271	98	40	19	5.0	4.9
22	127	97	86	119	39	47	273	89	39	24	5.9	2.7
23	119	86	111	109	38	49	266	84	38	22	7.0	2.8
24	118	83	118	101	36	50	245	81	37	19	5.7	2.9
25	112	79	125	107	35	53	228	76	35	18	5.3	2.5
26	106	75	154	145	35	54	211	80	33	17	5.9	2.5
27	127	75	157	171	33	66	191	86	33	17	6.0	3.0
28	114	73	148	184	31	109	170	81	29	18	4.7	2.7
29	98	70	136	181	---	150	142	74	21	21	3.6	2.8
30	93	67	125	168	---	172	128	62	20	23	2.9	3.7
31	77	---	116	154	---	179	---	56	---	26	3.0	---
TOTAL	2796.7	2821	2616	4455	1774	1827	6141	2873	1344	559	266.1	96.4
MEAN	90.2	94.0	84.4	144	63.4	58.9	205	92.7	44.8	18.0	8.58	3.21
MAX	138	154	157	248	141	179	273	125	58	26	23	5.6
MIN	8.7	52	55	67	31	24	128	56	20	14	2.9	1.7
CFSM	2.74	2.86	2.57	4.38	1.93	1.79	6.23	2.82	1.36	.55	.26	.10
IN.	3.16	3.19	2.96	5.04	2.01	2.07	6.94	3.25	1.52	.63	.30	.11
WTR YR 1978	TOTAL	27569.2	MEAN	75.5	MAX	273	MIN	1.7	CFSM	2.30	IN	31.17

01049396 JOCK STREAM AT SOUTH MONMOUTH, ME

LOCATION.--Lat 44°11'04", long 69°59'48", Kennebec County, Hydrologic Unit 01030003, on right bank 100 ft (30 m) upstream from bridge on Town Road, at South Monmouth.

DRAINAGE AREA.--13.6 mi² (35.2 km²).

PERIOD OF RECORD.--October 1977 to September 1978.

GAGE.--Water-stage recorder. Datum of gage is 169.00 ft (51.511 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Several observations of water temperature and specific conductance were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 220 ft³/s (6.2 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	1115	240 6.80	5.69 1.734	Jan. 9	1830	*819 23.2	8.87 2.704
Nov. 9	0945	238 6.74	5.62 1.713	Mar. 27	2245	610 17.3	a*9.06 2.761

a Ice jam.

Minimum discharge, 0.84 ft³/s (0.024 m³/s) July 24-27, gage height, 1.59 ft (0.485 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	15	41	21	39	11	70	18	9.0	4.2	1.1	1.9
2	220	15	70	20	34	11	62	17	8.6	4.1	1.1	1.8
3	90	14	45	19	29	11	55	16	9.6	3.9	1.1	1.6
4	44	14	33	18	26	11	51	15	79	3.7	1.3	1.6
5	32	14	25	18	24	11	64	14	32	3.6	1.8	1.5
6	25	13	22	17	22	11	69	13	19	3.6	1.5	1.5
7	21	14	20	17	21	11	64	13	15	3.4	1.3	1.4
8	19	13	18	17	20	11	62	11	21	3.4	1.6	1.4
9	70	188	18	425	20	11	65	37	49	3.3	2.1	1.4
10	141	112	17	195	18	10	73	28	19	3.3	2.6	1.4
11	56	65	16	130	18	11	87	19	14	3.0	2.2	1.4
12	35	46	16	100	17	11	164	16	13	1.9	1.8	1.4
13	29	41	15	78	16	11	115	14	20	1.3	1.6	1.3
14	24	42	17	66	16	13	89	14	16	1.5	1.5	1.3
15	34	32	19	56	15	19	84	13	13	2.1	1.4	1.3
16	40	29	21	49	15	24	72	63	11	4.1	1.3	1.4
17	142	35	20	45	14	21	60	140	9.5	2.8	1.3	1.5
18	117	55	19	41	14	18	55	80	10	2.5	1.2	1.5
19	54	37	18	37	13	16	52	46	12	1.8	1.2	1.7
20	119	28	18	34	13	15	149	36	17	1.3	1.2	1.7
21	99	24	22	31	12	14	119	28	16	1.3	1.1	1.7
22	56	24	45	29	12	17	71	23	18	1.2	1.1	1.7
23	41	21	37	28	12	22	52	20	14	1.1	1.1	1.6
24	34	28	31	27	12	20	42	18	10	1.0	1.1	1.5
25	28	28	32	26	11	19	37	16	8.2	.89	1.1	1.5
26	24	57	44	45	11	18	32	15	6.6	.89	1.2	1.5
27	22	69	39	150	11	37	28	14	9.0	1.1	1.3	1.4
28	20	33	32	105	11	305	25	13	8.0	1.5	1.5	1.4
29	19	26	27	76	---	155	22	11	5.7	1.3	1.9	1.4
30	17	23	24	56	---	105	20	10	4.3	1.2	2.4	1.3
31	16	---	23	45	---	82	---	9.3	---	1.1	2.3	---
TOTAL	1717	1155	844	2021	496	1062	2010	800.3	496.5	71.38	46.3	45.0
MEAN	55.4	38.5	27.2	65.2	17.7	34.3	67.0	25.8	16.6	2.30	1.49	1.50
MAX	220	188	70	425	39	305	164	140	79	4.2	2.6	1.9
MIN	16	13	15	17	11	10	20	9.3	4.3	.89	1.1	1.3
CFSM	4.07	2.83	2.00	4.79	1.30	2.52	4.93	1.90	1.22	.17	.11	.11
IN.	4.70	3.16	2.31	5.53	1.36	2.90	5.50	2.19	1.36	.20	.13	.12

WTR YR 1978 TOTAL 10764.48 MEAN 29.5 MAX 425 MIN .89 CFSM 2.17 IN 29.44

01049400 COBBOSSECONTEE LAKE AT EAST WINTHROP, ME

LOCATION.--Lat 44°18'57", long 69°53'48", Kennebec County, Hydrologic Unit 01030003, in Augusta Water District pumping station on Welch Point, on town road at East Winthrop.

DRAINAGE AREA.--131 mi² (339 km²).

PERIOD OF RECORD.--September 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record Nov. 27 to Jan. 3, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily gage height, 168.20 ft (51.267 m) Apr. 4, 5, 1976; minimum daily, 162.90 ft (49.652 m) Nov. 5, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily gage height, 167.72 ft (51.121 m) June 5; minimum daily, 163.20 ft (49.743 m) Mar. 1, 2.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166.26	164.97	163.89	164.53	165.20	163.20	165.80	167.12	167.51	167.54	167.06	167.01
2	166.50	164.86	163.88	164.60	165.11	163.20	165.82	167.12	167.54	167.53	167.06	166.98
3	166.55	164.75	163.86	164.59	165.02	163.25	165.81	167.12	167.56	167.53	167.07	166.94
4	166.49	164.65	163.84	164.52	164.92	163.30	165.77	167.16	167.71	167.50	167.11	166.90
5	166.39	164.54	163.82	164.51	164.82	163.31	165.77	167.19	167.72	167.49	167.14	166.88
6	166.29	164.46	163.79	164.50	164.69	163.32	165.78	167.23	167.70	167.48	167.12	166.88
7	166.18	164.36	163.77	164.41	164.61	163.35	165.77	167.27	167.67	167.46	167.12	166.85
8	166.09	164.28	163.74	164.40	164.57	163.39	165.76	167.30	167.61	167.45	167.12	166.86
9	166.07	164.47	163.72	164.65	164.45	163.41	165.74	167.40	167.57	167.44	167.15	166.82
10	166.14	164.61	163.70	165.16	164.34	163.41	165.71	167.40	167.60	167.44	167.14	166.81
11	166.07	164.61	163.67	165.41	164.22	163.40	165.69	167.32	167.60	167.41	167.14	166.81
12	165.97	164.58	163.63	165.60	164.10	163.43	165.78	167.25	167.58	167.38	167.13	166.81
13	165.87	164.55	163.61	165.73	163.98	163.49	165.85	167.18	167.58	167.36	167.12	166.80
14	165.75	164.52	163.60	165.89	163.86	163.52	165.89	167.17	167.61	167.33	167.12	166.80
15	165.69	164.47	163.59	165.91	163.77	163.62	165.91	167.19	167.61	167.33	167.11	166.81
16	165.63	164.41	163.60	165.90	163.65	163.70	166.00	167.28	167.60	167.37	167.10	166.81
17	165.67	164.39	163.62	165.81	163.54	163.78	166.15	167.46	167.61	167.36	167.10	166.82
18	165.72	164.39	163.66	165.79	163.49	163.85	166.28	167.44	167.61	167.34	167.10	166.83
19	165.68	164.33	163.71	165.70	163.40	163.92	166.40	167.40	167.60	167.32	167.10	166.84
20	165.70	164.27	163.74	165.60	163.41	164.00	166.63	167.38	167.60	167.30	167.10	166.85
21	165.74	164.21	163.79	165.57	163.41	164.05	166.88	167.42	167.61	167.29	167.10	166.86
22	165.74	164.15	163.82	165.46	163.39	164.15	167.06	167.44	167.62	167.28	167.10	166.88
23	165.69	164.06	163.87	165.35	163.35	164.25	167.19	167.44	167.64	167.27	167.10	166.89
24	165.64	164.01	163.91	165.23	163.30	164.33	167.24	167.46	167.63	167.21	167.07	166.88
25	165.58	163.96	163.95	165.11	163.31	164.40	167.26	167.48	167.63	167.20	167.03	166.87
26	165.52	163.94	163.99	165.17	163.30	164.48	167.26	167.50	167.62	167.18	167.00	166.86
27	165.44	163.96	164.06	165.21	163.29	164.68	167.24	167.51	167.62	167.14	166.97	166.85
28	165.37	163.93	164.15	165.29	163.21	165.15	167.19	167.51	167.60	167.12	166.94	166.84
29	165.30	163.92	164.27	165.30	---	165.45	167.14	167.51	167.59	167.10	166.95	166.82
30	165.20	163.90	164.38	165.30	---	165.65	167.12	167.51	167.57	167.08	166.99	166.82
31	165.09	---	164.46	165.26	---	165.74	---	167.50	---	167.08	167.02	---
MEAN	165.84	164.35	163.84	165.21	163.99	163.94	166.33	167.34	167.61	167.33	167.08	166.86
MAX	166.55	164.97	164.46	165.91	165.20	165.74	167.26	167.51	167.72	167.54	167.15	167.01
MIN	165.09	163.90	163.59	164.40	163.21	163.20	165.69	167.12	167.51	167.08	166.94	166.80
CAL YR 1977	MEAN 165.95		MAX 167.49	MIN 163.59								
WTR YR 1978	MEAN 165.82		MAX 167.72	MIN 163.20								

01049500 COBBOSSEECONTEE STREAM AT GARDINER, ME

LOCATION.--Lat 44°13'44", long 69°46'44", Kennebec County, Hydrologic Unit 01030003, on left bank 0.8 mi (1.3 km) downstream from Gardiner Water District dam, 300 ft (91 m) upstream from Winter Street Bridge in Gardiner and 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--217 mi² (562 km²).

PERIOD OF RECORD.--June 1890 to September 1964, October 1976 to current year.

REVISED RECORDS.--WSP 541: 1916-20. WSP 1201: Drainage area. WSP 1231: 1910-15. WSP 1701: 1956-59.

GAGE.--Water-stage recorder. Datum of gage is 20.00 ft (6.096 m) National Geodetic Vertical Datum of 1929. June 16, 1890 to Sept. 30, 1964, nonrecording gage at site 0.8 mi (1.3 km) upstream at different datum.

REMARKS.--Records fair. Flow regulated by Cobbosseecontee Lake (station 01049400) and several other lakes upstream.

AVERAGE DISCHARGE.--76 years (water years 1891-1964, 1977-78), 342 ft³/s (9.69 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,020 ft³/s (142 m³/s) Mar. 21, 1936; minimum, leakage only when all gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,890 ft³/s (53.5 m³/s) Mar. 29, gage height, 5.31 ft (1.618 m); minimum daily, 19 ft³/s (0.54 m³/s) Sept. 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	501	678	940	798	505	292	1350	820	233	151	59	29
2	1060	734	870	771	459	272	1730	698	233	151	59	29
3	1330	787	810	587	299	216	1660	323	226	151	59	29
4	1310	782	750	475	284	174	1650	181	248	151	59	30
5	1190	765	700	410	351	124	1650	169	275	151	59	31
6	1110	744	740	385	417	91	1670	169	328	150	58	29
7	1040	734	815	370	521	68	842	169	337	150	54	30
8	972	713	755	365	708	69	1690	169	555	150	52	29
9	930	1010	683	630	639	68	1440	174	765	151	57	28
10	1100	1140	673	1250	505	69	1480	174	776	153	51	27
11	1140	1530	444	1600	455	69	1610	199	713	153	54	27
12	1130	1390	342	1430	459	73	1660	345	648	151	55	27
13	1070	1300	360	1080	542	80	1760	620	582	151	48	24
14	1010	1290	394	860	547	88	1790	578	521	104	48	23
15	1000	1290	470	700	582	123	1770	513	485	51	49	23
16	996	996	521	600	573	224	1620	501	334	51	49	23
17	1120	820	547	560	534	272	1390	620	142	44	49	22
18	1280	870	560	535	538	270	910	718	138	42	49	21
19	1310	888	547	520	489	251	729	825	138	49	48	20
20	1410	894	551	515	451	246	820	848	135	52	48	20
21	1500	900	560	510	407	246	836	842	135	53	48	21
22	1440	900	1090	505	375	260	859	809	137	54	48	21
23	1380	876	1530	500	357	282	1010	729	137	56	48	20
24	1270	521	1430	500	312	455	1010	658	143	54	48	20
25	1070	174	1350	500	282	542	1040	378	143	54	46	20
26	634	162	1410	1150	287	470	1080	233	143	54	29	19
27	513	284	1140	1300	263	542	1060	249	146	56	29	20
28	551	1030	859	1200	268	1200	1000	248	156	62	29	22
29	573	1120	776	1020	---	1810	984	248	162	62	30	20
30	601	1050	755	870	---	1890	894	246	151	62	32	21
31	634	---	936	755	---	1220	---	237	---	60	30	---
TOTAL	32215	26372	24308	23251	12409	12056	38994	13690	9265	2984	1481	725
MEAN	1039	879	784	750	443	389	1300	442	309	96.3	47.8	24.2
MAX	1500	1530	1530	1600	708	1890	1790	848	776	153	59	31
MIN	501	162	342	365	263	68	729	169	135	42	29	19
CAL YR 1977	TOTAL	199575	MEAN 547	MAX 3450	MIN 38							
WTR YR 1978	TOTAL	197750	MEAN 542	MAX 1890	MIN 19							

Reservoirs in Kennebec River basin

- 01038500 BRASSUA LAKE on Moose River, 4 mi (6 km) southwest of Rockwood, Maine, completed in 1928, for power, has usable capacity of 8,560,000 ft³ (242,400,000 m³) between elevations 1,043.0 ft (317.91 m) and 1,073.0 ft (327.05 m). Elevation record furnished by Kennebec Water Power Co.
- 01040000 FIRST ROACH POND on Roach River, at Kokadjo, Maine, used for power, has usable capacity of 938,000,000 ft³ (26,560,000 m³) between gage heights 1.0 ft (0.30 m) and 8.0 ft (2.44 m). Gage-height record furnished by Kennebec Water Power Co.
- 01040500 MOOSEHEAD LAKE on Kennebec River (see p. 110).
- 01041500 INDIAN POND on Kennebec River, in T. 1, R. 6, Maine, 13 mi (21 km) downstream from east outlet of Moosehead Lake, completed in 1954 for power, has capacity of 830,000,000 ft³ (23,510,000 m³) in normal operating range between elevations 950.0 ft (289.56 m) and 955.0 ft (291.08 m); total capacity of pond, 3,150,000,000 ft³ (89,210,000 m³) below elevation 955.0 ft (291.08 m). Elevation record furnished by Central Maine Power Co.
- 01042000 MOXIE POND on Moxie Stream, 4.8 mi (7.7 km) east of The Forks, Maine, used for power, has usable capacity of 640,000,000 ft³ (18,120,000 m³) between gage heights 6.0 ft (1.83 m) and 14.0 ft (4.27 m). Gage-height record furnished by Kennebec Water Power Co.
- 01043000 FLAGSTAFF LAKE on Dead River, in T. 3, R. 4, Maine, 0.8 mi (1.3 km) upstream from Black Brook, completed in 1950 for power, has usable capacity of 12,050,000,000 ft³ (341,300,000 m³) between elevations 1,110.0 ft (338.33 m) and 1,146.0 ft (349.30 m). Elevation record furnished by Kennebec Water Power Co.
- 01045500 WYMAN POND on Kennebec River, 1.5 mi (2.4 km) upstream from Bingham, Maine, completed in 1930 for power, has capacity of 2,630,000,000 ft³ (74,480,000 m³) in normal operating range between elevations 465.0 ft (141.73 m) and 485.0 ft (147.83 m); total capacity of pond, 9,080,000,000 ft³ (257,100,000 m³) below elevation 485.0 ft (147.83 m). Elevation record furnished by Central Maine Power Co.

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

DATE	BRASSUA LAKE	FIRST ROACH POND	INDIAN POND	MOXIE POND	FLAGSTAFF LAKE	WYMAN POND
SEPT. 30, 1977	9066	530	3276	595	8495	9040
OCT. 31	8896	760	3186	676	12213	9080
NOV. 30	8980	911	2868	685	12213	8890
DEC. 31	8197	0	3114	0	11728	8830
JAN. 31, 1978	9066	0	3150	210	11969	9100
FEB. 28	7035	0	2919	0	10066	8920
MAR. 31	1112	0	2936	0	4931	8920
APR. 30	2703	0	3042	0	7676	8020
MAY 31	9152	938	3168	712	12377	8980
JUNE 30	9195	938	3330	694	12295	9050
JULY 31	8938	774	3078	640	11728	8920
AUG. 31	8318	0	2936	577	9363	9060
SEPT. 30	8075	0	3204	60	5745	9000

NOTE.--Indian and Wyman Pond contents at 2400 on day shown. All others at 0700 on first day of following month.

01052500 DIAMOND RIVER NEAR WENTWORTH LOCATION, NH

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

DRAINAGE AREA.--153 mi² (396 km²).

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

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

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

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

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

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	0400	3760 106	7.51 2.289	May 10	0400	*5600 159	8.81 2.685

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

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

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

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

01053500 ANDROSCOGGIN RIVER AT ERROL, NH

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

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

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

REVISED RECORDS.--WSP 1001: Drainage area.

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

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

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2500	2760	2450	2050	2360	4070	2280	4070	1400	2300	1830	1840
2	3170	2990	2480	2070	2310	4230	2210	3000	996	2070	1830	1840
3	3940	2890	2480	2100	2290	4460	2190	2350	1540	1970	1830	1830
4	2860	2760	2480	2080	2290	4710	2000	2290	1710	1660	1780	1820
5	2050	2760	2430	2120	2290	4840	1620	2280	1730	1660	1750	1830
6	2010	2740	2420	2130	2290	4560	1710	2340	1740	1840	1770	1840
7	2020	2630	2420	2130	2390	4780	1960	2470	1750	1890	1820	1840
8	2010	2240	2440	2130	2430	4770	2010	2910	2180	1860	1830	1820
9	2150	2010	2420	2200	2420	4760	1970	3980	4340	1870	1810	1800
10	2790	2010	2410	2260	2330	4750	1770	3590	6980	1850	1800	1840
11	3040	2020	2390	2300	2290	4770	1810	5440	7200	1880	1810	1870
12	3010	2030	2380	2160	2290	4770	1920	5510	7050	1890	1800	1810
13	2970	2040	2350	2060	2290	4770	1710	5500	6410	1910	1810	1780
14	2950	2040	2320	2040	2290	4760	1590	5440	5950	1930	1810	1790
15	2980	2040	2270	2030	2290	4710	1610	5260	5080	1910	1830	1810
16	3040	2040	2350	2010	2320	4610	1610	4920	4540	1870	1840	1800
17	3690	2030	2380	1970	2380	4610	1570	4850	3700	1870	1830	1800
18	5200	2220	2360	1970	2390	4530	1550	4830	2570	1840	1830	1820
19	5130	2340	2400	1960	2410	4460	1580	4670	2070	1830	1830	1820
20	5150	2430	2420	2000	2420	4350	1580	4470	3000	1880	1840	1720
21	5130	2590	2400	2060	2370	4310	2260	4380	4950	1900	1840	1870
22	5310	2570	2370	2090	2410	4230	2770	4670	6460	1920	1850	1820
23	5390	2570	2380	2100	2520	3950	2780	4990	6260	1930	1870	1780
24	4990	2560	2370	2110	2770	3690	2820	5200	5740	1940	1840	1790
25	3840	2560	2340	2120	3140	3460	2850	5130	4410	1950	1810	1830
26	3440	2450	2370	2180	3450	3270	2910	5000	3950	1950	1830	1800
27	2870	2240	2360	2240	3680	2930	3120	4210	3660	1950	1830	1840
28	2530	2380	2420	2300	3870	2590	3450	3180	2480	1940	1820	1810
29	2640	2480	2350	2340	---	2470	3820	2540	2490	1930	1820	1760
30	2870	2450	2170	2370	---	2380	4110	1450	2480	1930	1830	1740
31	2800	---	2070	2380	---	2150	---	1660	---	1920	1840	---
TOTAL	104440	71870	73650	66060	70940	127700	67140	122580	114816	59040	56460	54360
MEAN	3364	2346	2376	2131	2535	4119	2238	3954	3827	1905	1821	1812
MAX	5390	2990	2480	2380	3870	4840	4110	5510	7200	2300	1870	1870
MIN	2010	2010	2070	1960	2290	2150	1550	1450	996	1660	1750	1720

CAL YR 1977 TOTAL 803901 MEAN 2262 MAX 5390 MIN 597
WTR YR 1978 TOTAL 989096 MEAN 2710 MAX 7200 MIN 996

01054000 ANDROSCOGGIN RIVER NEAR GORHAM, NH

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

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

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

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

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

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

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

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

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

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

CAL YR 1977 TOTAL 1050720 MEAN 2879 MAX 4730 MIN 1680
WTR YR 1978 TOTAL 1240510 MEAN 3399 MAX 9960 MIN 1720

01054200 WILD RIVER AT GILEAD, ME
(Hydrologic bench-mark station)

LOCATION.--Lat 44°23'26", long 70°58'46", Oxford County, Hydrologic Unit 01040002, on right bank 200 ft (60 m) upstream from highway bridge on U.S. Route 2, 2,000 ft (600 m) upstream from mouth, and 0.4 mi (0.6 km) west of Gilead.

DRAINAGE AREA. -- 69.5 mi² (180 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 683.10 ft (208.209 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 12, 1977 at site 180 ft (60 m) downstream on left bank at same datum.

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

AVERAGE DISCHARGE.--14 years, 181 ft³/s (5.126 m³/s), 35.37 in/yr (898 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s (354 m³/s) Nov. 3, 1966, gage height, 12.49 ft (3.807 m); minimum, 7.6 ft³/s (0.22 m³/s) July 16, 1971, gage height, 1.89 ft (0.576 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 24, 1959 reached a stage of 15.6 ft (4.755 m), from floodmarks, discharge, 18,100 ft³/s (513 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximums (*):

Date	Time	Discharge (ft ² /s)	Gage height (m ² /s)	Date	Time	Discharge (ft ² /s)	Gage height (m)
Oct. 2	0130	4850	137	Jan. 9	--	*8000	230
Oct. 9	1900	6720	190	Jan. 26	1700	ice jam	*12.11 3.691
Oct. 17	0745	7880	223	Apr. 29	1745	1610	5.77 1.759
Nov. 9	0600	2500	70.8	May 9	1015	2710	6.77 2.063
Nov. 11	0845	4040	114	May 17	0030	6530	9.21 2.807

Minimum discharge, 9.7 ft³/s (0.27 m³/s) Aug. 23, 24, Sept. 20, 21, 27, gage height, 3.02 ft (0.920 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	93	160	89	130	51	82	522	239	67	21	13
2	1430	85	255	86	115	50	78	475	163	59	22	12
3	328	81	175	83	110	49	77	522	286	53	20	11
4	204	83	150	80	105	49	76	593	283	49	33	11
5	149	90	125	78	98	49	100	690	172	46	36	10
6	118	83	110	76	93	49	110	745	156	42	24	10
7	96	88	100	74	88	49	92	1000	122	38	21	12
8	84	83	92	72	85	48	86	1220	375	36	19	12
9	1870	926	87	2500	82	48	82	1870	325	51	20	11
10	1050	387	83	900	79	48	80	1390	287	53	17	10
11	360	1310	79	400	77	47	240	1090	171	40	14	11
12	250	470	77	270	75	47	378	949	129	33	14	16
13	175	294	75	220	72	47	382	884	115	30	17	17
14	146	227	74	190	70	49	475	877	181	28	16	12
15	314	191	110	180	68	50	425	949	136	42	14	11
16	284	175	140	170	66	49	360	2360	105	50	13	12
17	3210	199	105	155	65	48	338	3440	86	40	12	12
18	790	392	95	145	63	48	378	974	77	56	11	11
19	415	244	88	140	61	47	455	751	122	35	11	10
20	445	183	84	135	60	47	513	745	239	30	11	9.9
21	343	160	120	130	59	47	672	649	296	28	11	10
22	257	171	165	125	58	115	672	437	314	38	10	13
23	206	146	150	115	56	84	631	356	275	32	10	12
24	179	150	135	110	55	62	578	324	159	35	18	11
25	160	153	200	130	54	58	583	285	116	27	42	10
26	146	153	320	580	53	54	702	254	94	23	20	10
27	133	143	150	380	52	160	836	233	80	21	14	10
28	124	124	115	290	51	320	912	202	134	23	14	10
29	109	121	105	220	---	160	1000	172	91	23	33	10
30	101	130	97	180	---	110	764	186	86	24	23	10
31	95	---	93	150	---	88	---	201	---	22	15	---
TOTAL	13715	7135	3914	8453	2100	2227	12157	25345	5414	1174	576	339.9
MEAN	44.2	238	126	273	75.0	71.8	405	818	180	37.9	18.6	11.3
MAX	3210	1310	320	2500	130	320	1000	3440	375	67	42	17
MIN	84	81	74	72	51	47	76	172	77	21	10	9.9
CFSM	6.36	3.42	1.81	3.93	1.08	1.03	5.83	11.8	2.59	.55	.27	.16
IN.	7.34	3.82	2.09	4.52	1.12	1.19	6.51	13.57	2.90	.63	.31	.18
CAL YR 1977	TOTAL	71441.2	MEAN	196	MAX	3800	MIN	8.9	CFSM	2.82	IN	38.24
WTR YR 1978	TOTAL	82549.9	MEAN	226	MAX	3440	MIN	9.9	CFSM	3.25	IN	44.18

01054200 WILD RIVER AT GILEAD, ME--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: July 1964 to current year.

INSTRUMENTATION.--Temperature recorder.

REMARKS.--Interruptions in the record were due to malfunctions of the recorder.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 30.0°C Aug. 2, 1975; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 28.5°C Aug. 17; minimum, 0.0°C on many days during winter periods.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)
OCT 25...	1245	158	20	6.1	11.0	4.5	13.2	105	--	<1	--	6
NOV 21...	0945	155	20	6.1	2.0	1.5	14.0	103	100	<1	K1	6
DEC 13...	1015	80	--	6.1	-14.0	.0	--	--	--	--	--	--
JAN 17...	1230	195	22	6.2	-11.0	.0	14.4	102	26	<1	<1	6
FEB 21...	1015	59	21	6.5	-7.0	.0	13.0	92	--	--	--	--
MAR 22...	0930	95	25	6.4	2.5	.0	12.9	91	22	<1	K2	6
APR 21...	1100	670	22	6.2	5.5	2.0	13.3	99	--	--	--	--
MAY 25...	1000	278	17	6.0	19.0	10.0	11.0	101	--	<1	K1	4
JUN 20...	1200	369	19	6.3	20.5	16.0	9.8	102	--	--	--	--
JUL 26...	1030	23	22	6.8	25.0	20.0	9.4	107	128	K2	K8	7
AUG 21...	1015	11	24	7.0	21.0	18.0	9.5	103	--	--	--	--
SEP 11...	1730	10	25	6.8	16.5	14.5	9.5	96	125	K4	15	6

DATE	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)
OCT 25...	3	1.7	.4	1.0	25	.2	.5	3	0	2	3.8	5.1
NOV 21...	0	1.6	.4	.9	24	.2	.4	7	0	6	8.9	--
DEC 13...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 17...	2	1.6	.4	1.6	36	.3	.4	4	0	3	4.0	4.3
FEB 21...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 22...	0	1.6	.5	1.3	30	.2	.5	8	--	7	5.1	4.4
APR 21...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 25...	--	1.3	.3	.8	26	.2	.4	--	--	3	--	4.4
JUN 20...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 26...	0	1.8	.5	1.4	30	.2	.5	--	--	7	--	3.7
AUG 21...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 11...	0	1.6	.5	1.8	36	.3	.6	--	--	9	--	4.0

ANDROSCOGGIN RIVER BASIN

01054200 WILD RIVER AT GILEAD, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
OCT 25...	.9	.1	5.7	19	17	8.11	.03	.00	0	0	0	<10
NOV 21...	--	--	--	--	27	11.3	.01	.00	--	--	--	--
DEC 13...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 17...	2.2	.0	6.3	22	19	11.6	.03	.00	--	--	--	--
FEB 21...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 22...	.6	.1	6.7	20	20	5.13	.15	.00	0	100	0	<10
APR 21...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 25...	9.0	.0	3.6	40	--	30.0	.01	.00	--	--	--	--
JUN 20...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 26...	1.7	.0	7.2	32	21	1.99	.01	.01	--	--	--	--
AUG 21...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 11...	.6	.1	8.2	26	23	.70	.08	.00	0	0	1	10

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 25...	3	130	31	10	<.5	0	0	10	.00	3	1.3
NOV 21...	--	--	--	--	--	--	--	--	--	5	2.1
DEC 13...	--	--	--	--	--	--	--	--	--	--	--
JAN 17...	--	--	--	--	--	--	--	--	--	3	1.6
FEB 21...	--	--	--	--	--	--	--	--	--	6	.96
MAR 22...	1	90	11	0	<.5	0	0	10	--	3	.77
APR 21...	--	--	--	--	--	--	--	--	--	3	5.4
MAY 25...	--	--	--	--	--	--	--	--	--	1	.75
JUN 20...	--	--	--	--	--	--	--	--	--	1	1.0
JUL 26...	--	--	--	--	--	--	--	--	--	1	.06
AUG 21...	--	--	--	--	--	--	--	--	--	1	.03
SEP 11...	3	50	7	0	<.5	0	0	10	--	1	.03

01054200 WILD RIVER AT GILEAD, ME--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)
OCT 25...	.0	.00	.00	.0	.0	.00	.00	.00	.00
SEP 11...	--	--	--	--	--	--	--	--	--

DATE	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)
OCT 25...	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP 11...	--	--	--	--	--	--	--	--	--

DATE	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	MIREX, TOTAL (UG/L)
OCT 25...	.00	.00	0	.00	.00	.00	.00	.00
SEP 11...	--	--	--	--	.00	.00	.00	.00

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SK/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)	SOLIDS, RESIDUE AT 105 DEG. C. DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C. SUS- PENDED (MG/L)
OCT 25...	<.4	<.4	1.3	<.4	1.3	<.4	.10	.04	23	<1
SEP 11...	.4	<.4	1.3	<.4	1.3	<.4	.07	.01	--	--

ANDROSCOGGIN RIVER BASIN

01054200 WILD RIVER AT GILEAD, ME--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.5	10.5	10.5	3.5	1.5	3.0	1.0	1.0	1.0	.0	.0	.0
2	11.0	10.0	10.5	4.0	1.5	3.0	1.0	.5	.5	.0	.0	.0
3	11.0	9.5	10.0	6.0	4.0	4.5	---	---	---	.0	.0	.0
4	9.5	9.0	9.0	8.0	6.0	6.5	---	---	---	.0	.0	.0
5	10.5	8.0	9.5	8.0	7.0	7.0	---	---	---	.0	.0	.0
6	10.0	9.0	9.5	7.0	6.5	6.5	---	---	---	.0	.0	.0
7	10.0	8.0	9.0	6.5	5.5	6.0	---	---	---	.0	.0	.0
8	8.0	5.5	6.5	5.5	5.0	5.0	---	---	---	.0	.0	.0
9	9.0	7.0	8.0	6.5	5.0	5.5	---	---	---	.5	.0	.0
10	9.0	9.0	9.0	7.0	6.5	6.5	---	---	---	.0	.0	.0
11	9.0	8.0	8.5	8.0	5.5	6.5	---	---	---	.0	.0	.0
12	9.0	8.0	8.5	5.5	4.5	4.5	---	---	---	.0	.0	.0
13	8.0	7.0	7.0	4.5	3.0	4.0	.0	.0	.0	.0	.0	.0
14	7.0	5.5	6.0	3.0	1.0	2.0	.0	.0	.0	.0	.0	.0
15	6.0	5.5	5.5	1.0	.5	1.0	.0	.0	.0	.0	.0	.0
16	6.5	5.5	5.5	1.5	.5	1.0	.0	.0	.0	.0	.0	.0
17	6.5	6.5	6.5	3.0	1.5	2.0	.0	.0	.0	.0	.0	.0
18	6.5	6.0	6.0	3.5	3.0	3.0	.0	.0	.0	.0	.0	.0
19	6.5	6.0	6.0	3.0	1.0	2.0	.0	.0	.0	.0	.0	.0
20	6.5	6.0	6.0	1.5	.5	1.0	.0	.0	.0	.0	.0	.0
21	7.0	6.0	6.5	1.5	.5	1.0	.0	.0	.0	.0	.0	.0
22	7.0	6.0	6.5	1.5	1.0	1.0	.0	.0	.0	.0	.0	.0
23	6.5	4.5	5.0	1.5	1.5	1.5	.0	.0	.0	.0	.0	.0
24	4.5	3.0	3.5	1.5	1.0	1.0	.0	.0	.0	.0	.0	.0
25	5.5	3.0	4.0	2.0	1.5	1.5	.0	.0	.0	.0	.0	.0
26	8.0	5.5	6.5	2.0	2.0	2.0	.0	.0	.0	.0	.0	.0
27	9.5	8.0	8.5	2.0	1.0	1.5	.0	.0	.0	.0	.0	.0
28	9.0	7.0	8.5	1.0	.5	1.0	.0	.0	.0	.0	.0	.0
29	6.5	5.5	6.0	1.0	1.0	1.0	.0	.0	.0	.0	.0	.0
30	5.5	3.5	4.5	1.0	1.0	1.0	.0	.0	.0	.0	.0	.0
31	4.0	2.0	3.5	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	11.0	2.0	7.0	8.0	.5	3.0	1.0	.0	.0	.5	.0	.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0	.5	1.5
2	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.0	1.5	3.0
3	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.5	2.5	4.0
4	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.5	2.0	5.0
5	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.0	2.5	4.5
6	.0	.0	.0	.0	.0	.0	.5	.0	.0	7.0	2.0	4.5
7	.0	.0	.0	.0	.0	.0	.5	.0	.0	8.0	2.5	5.0
8	.0	.0	.0	.0	.0	.0	1.0	.0	.5	9.0	2.5	5.0
9	.0	.0	.0	.0	.0	.0	3.5	.0	1.0	6.5	4.0	4.5
10	.0	.0	.0	.5	.0	.0	4.0	.0	2.0	6.5	3.0	4.5
11	.0	.0	.0	.5	.0	.0	2.0	.5	1.0	9.5	4.0	6.0
12	.0	.0	.0	.0	.0	.0	1.0	.0	.5	9.5	3.5	6.0
13	.0	.0	.0	.5	.0	.0	3.0	.5	1.5	9.0	4.5	6.5
14	.0	.0	.0	.0	.0	.0	3.0	.5	1.5	10.5	5.5	7.5
15	.0	.0	.0	.0	.0	.0	4.0	.5	2.0	9.0	5.5	6.5
16	.0	.0	.0	.0	.0	.0	3.0	1.5	2.5	7.0	5.0	5.5
17	.0	.0	.0	.0	.0	.0	3.5	1.0	2.0	7.5	5.0	6.0
18	.0	.0	.0	.0	.0	.0	6.0	.5	3.0	7.5	6.0	7.0
19	.0	.0	.0	.0	.0	.0	4.0	1.0	2.0	11.0	5.5	8.0
20	.0	.0	.0	.0	.0	.0	2.5	1.0	1.5	11.5	7.0	9.5
21	.0	.0	.0	.0	.0	.0	2.5	1.0	1.5	11.0	8.5	9.5
22	.0	.0	.0	.0	.0	.0	6.0	1.5	3.0	13.0	6.5	9.0
23	.0	.0	.0	.0	.0	.0	6.0	1.0	3.0	13.5	6.5	10.0
24	.0	.0	.0	.0	.0	.0	4.5	1.5	3.0	15.0	8.5	11.5
25	.0	.0	.0	.0	.0	.0	4.5	2.0	3.0	15.5	9.5	11.5
26	.0	.0	.0	.0	.0	.0	7.0	1.0	3.5	17.0	10.5	13.5
27	.0	.0	.0	.0	.0	.0	6.5	1.0	3.5	18.5	12.0	15.5
28	.0	.0	.0	.0	.0	.0	6.0	1.5	3.5	18.5	12.5	16.0
29	---	---	---	.0	.0	.0	6.5	1.5	3.5	17.5	13.5	15.5
30	---	---	---	.0	.0	.0	4.0	1.0	2.5	19.0	13.5	16.0
31	---	---	---	.0	.0	.0	---	---	---	18.5	14.0	16.0
MONTH	.0	.0	.0	.5	.0	.0	7.0	.0	1.5	19.0	.5	8.0

ANDROSCOGGIN RIVER BASIN

01054300 ELLIS RIVER AT SOUTH ANDOVER, ME

LOCATION.--Lat 44°35'37", long 70°44'01", Oxford County, Hydrologic Unit 01040002, on left bank 100 ft (30 m) upstream from covered bridge at South Andover.

DRAINAGE AREA.--131 mi² (339 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 620.00 ft (188.976 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

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

AVERAGE DISCHARGE.--15 years, 258 ft³/s (7.307 m³/s), 26.75 in/yr (679 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,630 ft³/s (159 m³/s) Dec. 29, 1969, gage height, 19.23 ft (5.861 m); minimum, 12 ft³/s (0.34 m³/s) part or all of each day Aug. 20-22, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (57 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 10	0600	2410 68.3	15.61 4.758	Jan. 10	0400	*2650 75.0	a*18.31 5.581

a Ice jam.

Minimum discharge, 13 ft³/s (0.37 m³/s) Sept. 27-30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	355	214	198	175	330	115	395	1050	246	159	43	25
2	1400	203	242	170	290	115	433	807	223	138	43	22
3	1030	192	249	165	255	115	412	731	309	124	40	20
4	622	175	220	160	225	115	359	724	264	112	59	19
5	469	182	188	155	205	110	357	859	226	102	94	17
6	377	173	170	150	190	110	391	967	219	94	58	16
7	312	209	160	150	190	110	335	1080	208	85	46	17
8	266	192	155	150	190	110	296	1280	417	78	41	20
9	582	541	150	600	190	110	273	1710	494	79	70	20
10	2040	562	145	2200	185	110	266	1810	377	109	61	17
11	1150	784	145	1400	175	110	312	1400	270	81	43	17
12	733	753	145	950	170	115	484	1200	216	67	38	20
13	564	507	145	700	165	125	557	1120	336	58	39	40
14	451	412	150	570	155	140	604	993	335	52	39	28
15	452	345	170	465	150	160	629	944	255	83	34	22
16	472	305	200	400	150	165	562	860	207	138	30	21
17	1080	297	190	355	145	155	534	1420	176	168	29	20
18	1390	521	180	315	145	145	574	1190	216	189	25	18
19	820	456	175	290	140	140	735	842	470	124	24	17
20	880	359	170	265	140	135	856	725	580	101	23	16
21	934	309	175	250	135	130	1130	686	720	84	21	15
22	683	298	260	250	135	160	1260	615	573	80	20	14
23	557	272	330	235	130	205	1230	498	524	88	20	14
24	467	258	290	225	130	200	1160	433	396	126	21	15
25	407	257	295	220	125	215	1050	390	322	85	37	15
26	364	257	400	275	125	200	1120	353	265	67	33	14
27	329	269	300	1000	120	220	1360	316	224	56	26	14
28	300	239	250	760	120	391	1470	282	242	50	25	13
29	270	214	225	550	---	530	1510	249	220	46	44	13
30	248	198	205	450	---	487	1500	233	187	47	39	13
31	229	---	185	375	---	437	---	228	---	48	29	---
TOTAL	20233	9953	6462	14375	4805	5685	22154	25995	9717	2918	1194	552
MEAN	653	332	208	464	172	183	738	839	324	94.1	38.5	18.4
MAX	2040	784	400	2200	330	530	1510	1810	720	189	94	40
MIN	229	173	145	150	120	110	266	228	176	46	20	13
CFSM	4.99	2.53	1.59	3.54	1.31	1.40	5.63	6.41	2.47	.72	.29	.14
IN.	5.75	2.83	1.83	4.08	1.36	1.61	6.29	7.38	2.76	.83	.34	.16
CAL YR 1977	TOTAL	110888	MEAN 304	MAX 2250	MIN 20	CFSM 2.32	IN 31.49					
WTR YR 1978	TOTAL	124043	MEAN 340	MAX 2200	MIN 13	CFSM 2.60	IN 35.22					

01054500 ANDROSCOGGIN RIVER AT RUMFORD, ME

LOCATION.--Lat 44°32'33", long 70°32'50", Oxford County, Hydrologic Unit 01040002, on left bank at upper power-plant of Rumford Falls Power Co. in Rumford and 1.2 mi (1.9 km) upstream from Swift River.

DRAINAGE AREA.--2,067 mi² (5,354 km²).

PERIOD OF RECORD.--May 1892 to current year. Monthly discharge only October 1903 to September 1904, published in WSP 1301.

REVISED RECORDS.--WSP 1001: Drainage area.

GAGE.--Nonrecording gages in pond above dam in tailrace of upper plant. Prior to Aug. 1, 1937, nonrecording gages in pond and tailrace of middle plant.

REMARKS.--Discharge computed from flow over upper dam and through wheels. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Umbagog, and Aziscohos Lakes (Reservoirs in Androscoggin River basin), with final regulation at Errol Dam about 84 mi (135 km) upstream.

COOPERATION.--Records furnished by Rumford Falls Power Co.

AVERAGE DISCHARGE.--86 years, 3,724 ft³/s (105 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,000 ft³/s (2,096 m³/s) Mar. 20, 1936; minimum daily, 625 ft³/s (17.7 m³/s) Mar. 27, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 20,400 ft³/s (555 m³/s) May 17; minimum daily, 1,630 ft³/s (46.2 m³/s) Sept. 5.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4880	4330	3780	3130	4390	4430	3880	12100	3690	3410	2300	1950
2	13300	4200	4610	3070	4180	4680	4130	10100	3470	3380	2200	1960
3	10200	3750	4640	3000	3880	4940	3990	8700	3800	2740	2080	2060
4	7610	3990	4240	2750	3550	5080	3910	8030	4470	2440	2310	1970
5	5550	4000	3840	2770	3490	5100	3950	8840	3700	2620	2430	1630
6	4230	3990	3400	2830	3500	5060	3860	9960	3440	2160	2230	1940
7	3670	4000	3290	2800	4290	5000	3670	11100	3390	2420	2070	2020
8	3360	4000	2740	2790	4450	5360	3920	12900	4080	2450	2170	2040
9	9250	7120	2790	12000	3910	5450	3810	17000	6070	2330	2270	1980
10	14700	6200	2710	15200	3480	5370	3860	19000	8710	2650	2300	1930
11	9020	8640	2530	6720	3460	5320	4190	15800	9370	2410	2160	2000
12	6440	6750	2670	8760	3440	5890	5590	14700	8900	2010	2100	2040
13	5360	5130	3150	7530	3460	5880	5750	14000	8380	2370	2110	2090
14	4790	4410	3100	5780	3330	6080	6160	13300	8880	2320	2080	2020
15	5210	4050	3350	4650	3240	6110	6140	13000	8310	2560	2040	1970
16	5620	4050	3900	4170	3230	5970	6170	15100	6690	2650	2040	1990
17	17000	3730	3850	3950	3260	5780	6100	20400	5620	2630	2040	1970
18	15700	5080	3470	3790	3420	5700	6370	15800	4680	2710	2030	1940
19	10900	5150	3470	3570	3410	5690	7800	12100	4020	2540	2000	1940
20	10400	4560	3440	3480	3360	5530	9440	11100	6080	2410	1980	1930
21	9250	4250	3420	3250	3360	5560	11200	10600	8460	2380	1990	1930
22	7910	4480	3740	3400	3380	5780	11300	9770	9520	2460	1980	1990
23	7430	4400	3540	3480	3300	5940	12100	8910	10700	2520	1950	1970
24	7050	4310	6150	3370	3250	5540	11400	8600	8920	2590	2090	1930
25	6160	4290	6680	3500	3500	5050	11200	8490	7490	2480	2200	1930
26	5090	4340	6870	4520	3590	4700	11900	7970	5780	2400	2100	1940
27	4570	4310	5110	7630	3910	4620	13400	7590	5110	2280	2020	1930
28	3900	3870	4140	6680	4670	5400	14600	6410	5140	2360	2070	1940
29	3460	3840	3490	5640	---	5160	15400	5180	4200	2310	2170	1940
30	3770	3900	3420	4940	---	4740	15000	4350	3630	2300	2110	1910
31	4330	---	3360	4630	---	4350	---	3960	---	2290	2090	---
TOTAL	230110	139120	118890	153780	101690	165260	230190	344860	184700	77580	65710	58780
MEAN	7423	4637	3835	4961	3632	5331	7673	11120	6157	2503	2120	1959
MAX	17000	8640	6870	15200	4670	6110	15400	20400	10700	3410	2430	2090
MIN	3360	3730	2530	2750	3230	4350	3670	3960	3390	2010	1950	1630
CAL YR 1977 TOTAL	1588010			MEAN 4351	MAX 18400	MIN 1840						
WTR YR 1978 TOTAL	1870670			MEAN 5125	MAX 20400	MIN 1630						

ANDROSCOGGIN RIVER BASIN

01055000 SWIFT RIVER NEAR ROXBURY, ME

LOCATION.--Lat 44°38'32", long 70°35'17", Oxford County, Hydrologic Unit 01040002, on left bank 0.2 mi (0.3 km) downstream from Philbrick Brook, 2.1 mi (3.4 km) downstream from Roxbury, and 7.2 mi (11.6 km) upstream from mouth.

DRAINAGE AREA.--95.8 mi² (248 km²).

PERIOD OF RECORD.--June 1929 to current year.

REVISED RECORDS.--WSP 801: 1934(M). WSP 1301: Drainage area. WSP 1301: 1937-38(M), 1942(M).

GAGE.--Water-stage recorder. Datum of gage is 615.67 ft (187.656 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--49 years, 200 ft³/s (5.66 m³/s), 28.35 in/yr (720 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s (476 m³/s) Oct. 24, 1959, gage height, 12.87 ft (3.923 m), from rating curve extended above 7,000 ft³/s (200 m³/s); minimum, 3.8 ft³/s (0.11 m³/s) Sept. 16, 17, 1948, gage height, 0.93 ft (0.283 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft³/s (68 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	0400	4330 123	7.09 2.161	May 9	1200	4240 120	7.03 2.143
Oct. 9	2300	7330 208	8.85 2.697	May 17	0630	2850 80.7	5.97 1.820
Jan. 9	1445	*8240 233	9.31 2.838				

Minimum discharge, 8.9 ft³/s (0.25 m³/s) Aug. 23, 24, Sept. 26, 27, 28, gage height, 0.98 ft (0.299 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	379	136	147	125	245	70	105	535	138	85	22	17
2	2020	132	168	120	215	70	105	395	115	71	24	14
3	578	125	156	115	195	70	100	373	202	63	21	13
4	344	125	138	115	180	70	100	488	159	56	76	11
5	254	138	124	110	170	68	149	716	116	50	70	10
6	209	125	121	105	165	70	148	908	128	46	36	9.2
7	179	133	120	105	155	70	120	1190	99	41	28	12
8	157	124	120	100	150	68	115	1460	393	37	25	16
9	1880	451	115	3820	140	68	110	2650	609	39	38	14
10	2100	353	115	2070	135	66	115	1860	373	61	31	12
11	591	683	110	606	125	63	162	1360	199	38	23	11
12	382	447	110	400	120	66	305	1180	142	31	20	28
13	294	283	110	300	115	66	275	1100	126	28	25	32
14	242	230	110	265	110	67	365	1090	514	25	22	19
15	267	195	160	245	105	68	310	1030	243	125	18	15
16	305	182	140	225	100	66	256	985	161	116	16	15
17	1270	202	125	210	96	63	257	2110	121	166	15	14
18	863	581	115	205	93	64	329	912	102	123	14	12
19	456	329	110	195	89	63	434	670	149	60	12	11
20	1160	240	103	185	86	61	532	669	660	49	11	10
21	648	208	103	180	83	60	1120	716	615	45	11	9.6
22	417	221	253	170	81	80	905	484	419	49	10	10
23	335	193	296	165	79	132	785	360	343	47	9.6	10
24	271	184	152	160	77	80	672	312	215	39	13	9.6
25	239	183	286	155	75	74	655	290	164	28	25	9.6
26	218	182	912	880	74	70	880	260	127	25	18	9.2
27	200	174	414	750	73	111	1110	231	105	22	14	8.9
28	181	173	265	490	72	592	1200	201	163	27	17	9.6
29	166	147	185	380	---	251	1220	165	125	27	71	9.6
30	153	138	150	330	---	147	970	135	99	28	35	10
31	145	---	135	275	---	115	---	148	---	24	21	---
TOTAL	16903	7017	5668	13556	3403	3049	13909	24983	7124	1671	791.6	391.3
MEAN	545	234	183	437	122	98.4	464	806	237	53.9	25.5	13.0
MAX	2100	683	912	3820	245	592	1220	2650	660	166	76	32
MIN	145	124	103	100	72	60	100	135	99	22	9.6	8.9
CFSM	5.69	2.44	1.91	4.56	1.27	1.03	4.84	8.41	2.47	.56	.27	.14
IN.	6.56	2.72	2.20	5.26	1.32	1.18	5.40	9.70	2.77	.65	.31	.15
CAL YR 1977	TOTAL	86982.0	MEAN 238	MAX 2100	MIN 13	CFSM 2.48	IN 33.78					
WTR YR 1978	TOTAL	98465.9	MEAN 270	MAX 3820	MIN 8.9	CFSM 2.82	IN 38.23					

01055500 NEZINSCOT RIVER AT TURNER CENTER, ME

LOCATION.--Lat 44°16'10", long 70°13'49", Androscoggin County, Hydrologic Unit 01040002, on left bank 500 ft (150 m) upstream from upper highway bridge at Turner Center and 3.6 mi (5.8 km) upstream from mouth.

DRAINAGE AREA.--171 mi² (443 km²).

PERIOD OF RECORD.--August 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 276.29 ft (84.213 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period and period of no gage-height record Jan. 11-13, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--37 years, 308 ft³/s (8,723 m³/s), 24.46 in/yr (621 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft³/s (394 m³/s) Mar. 27, 1953, gage height, 11.18 ft (3.408 m); minimum, 5.6 ft³/s (0.16 m³/s) Aug. 29, 1956, gage height, 0.72 ft (0.219 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft³/s (48 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 2	2100	2050	58.1	4.71	1.436	Jan. 11	0300	*3850	109	a*7.11	2.167
Oct. 10	2000	2660	75.3	5.21	1.588	Apr. 13	0900	1830	51.8	4.51	1.375
Oct. 18	1300	1770	50.1	4.45	1.356	Apr. 21	2100	3100	87.8	5.56	1.695

a Ice jam.

Minimum daily discharge, 15 ft³/s (.425 m³/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	355	235	306	255	660	190	860	804	256	89	30	28
2	1380	242	450	240	560	185	750	668	222	78	30	24
3	1830	238	488	225	465	180	670	569	216	70	30	22
4	1050	228	418	215	405	180	610	502	492	65	31	21
5	642	232	345	210	370	175	640	454	468	61	34	20
6	439	227	250	205	350	175	790	418	343	58	32	20
7	360	247	225	200	350	170	770	388	273	55	30	20
8	297	248	210	200	345	170	750	359	331	51	29	20
9	533	544	205	660	330	170	800	436	482	54	37	19
10	2300	745	195	2650	315	170	930	624	569	84	49	19
11	2140	697	190	3500	305	170	1150	548	422	75	39	19
12	1160	641	185	2300	290	175	1510	427	308	60	32	19
13	791	543	185	1500	280	185	1770	355	243	51	30	19
14	605	486	190	1180	270	200	1520	316	280	46	29	19
15	573	417	220	890	260	225	1560	283	276	53	27	19
16	624	379	250	730	255	250	1610	375	222	75	25	19
17	987	373	240	620	245	235	1470	1180	179	80	24	19
18	1720	468	240	530	240	210	1380	1510	170	70	23	19
19	1290	476	230	470	230	195	1530	998	165	61	21	19
20	1190	406	220	420	225	185	1950	731	182	53	21	19
21	1470	349	220	380	220	180	2850	585	194	49	20	19
22	1040	336	380	360	215	215	2930	517	200	46	20	20
23	759	319	450	340	210	250	2400	414	185	43	20	20
24	595	305	395	330	205	240	1940	343	194	40	20	20
25	454	333	380	320	200	230	1590	298	157	35	20	20
26	401	364	520	770	200	225	1400	266	129	34	20	20
27	348	435	490	1500	195	245	1320	237	111	31	20	19
28	303	376	390	1600	190	800	1240	219	105	32	20	17
29	282	316	345	1130	---	1080	1110	194	111	30	28	16
30	255	277	305	940	---	1030	979	176	101	31	31	15
31	233	---	270	780	---	970	---	243	---	30	30	---
TOTAL	26406	11482	9387	25650	8385	9260	40779	15437	7586	1690	852	589
MEAN	852	383	303	827	299	299	1359	498	253	54.5	27.5	19.6
MAX	2300	745	520	3500	660	1080	2930	1510	569	89	49	28
MIN	233	227	185	200	190	170	610	176	101	30	20	15
CFSM	4.98	2.24	1.77	4.84	1.75	1.75	7.95	2.91	1.48	.32	.16	.12
IN.	5.74	2.50	2.04	5.58	1.82	2.01	8.87	3.36	1.65	.37	.19	.13

CAL YR 1977 TOTAL 142230 MEAN 390 MAX 7330 MIN 19 CFSM 2.28 IN 30.94
WTR YR 1978 TOTAL 157503 MEAN 432 MAX 3500 MIN 15 CFSM 2.53 IN 34.26

ANDROSCOGGIN RIVER BASIN

01057000 LITTLE ANDROSCOGGIN RIVER NEAR SOUTH PARIS, ME

LOCATION.--Lat 44°17'08", long 70°32'16", Oxford County, Hydrologic Unit 01040002, on right bank 30 ft (9 m) upstream from Biscoe Falls and 5 mi (8 km) upstream from South Paris.

DRAINAGE AREA.--76.2 mi² (197 km²).

PERIOD OF RECORD.--September 1913 to April 1924, October 1931 to current year.

REVISED RECORDS.--WSP 726: Drainage area. WSP 1301: 1915-23(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 394.48 ft (120.238 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 30, 1924, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter period, which are fair and those below 10 ft³/s (0.3 m³/s), which are poor. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--57 years (water years 1914-23, 1932-78), 140 ft³/s (3.965 m³/s), 24.95 in/yr (634 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s (227 m³/s) Mar. 27, 1953, gage height, 12.41 ft (3.783 m), from rating curve extended above 2,800 ft³/s (79 m³/s), verified by computation of flow over dam at South Paris; minimum, 1 ft³/s (0.028 m³/s) Aug. 16, 1914, Feb. 22 to Mar. 5, 1920.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	1000	1690 47.9	6.80 2.073	Jan. 10	0300	*2310 65.4	7.59 2.313
Oct. 10	0400	2300 65.1	7.58 2.310	Apr. 21	1000	1330 37.4	6.29 1.917
Oct. 18	0100	1550 43.9	6.61 2.015				

Minimum discharge not determined, minimum daily, 1.4 ft³/s (0.396 m³/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	119	133	90	190	62	239	444	65	37	5.4	5.0
2	1300	113	210	89	170	61	253	355	63	30	5.2	3.9
3	677	108	206	89	148	60	249	331	100	25	5.1	3.3
4	375	105	174	88	130	59	196	316	213	22	5.6	2.9
5	252	113	144	88	120	58	242	297	138	20	9.0	2.6
6	190	107	125	88	112	58	275	273	117	18	6.6	2.4
7	153	124	110	88	110	59	267	248	88	16	5.5	2.3
8	124	112	100	86	105	58	258	230	226	15	4.9	2.7
9	512	389	96	808	100	57	269	294	249	15	7.0	3.5
10	1720	367	91	1820	97	57	303	356	242	16	11	3.2
11	676	365	88	855	95	58	403	272	157	15	9.5	2.7
12	411	313	87	529	92	59	620	219	112	14	7.9	2.5
13	293	237	85	390	89	62	610	190	87	12	7.1	2.8
14	230	203	84	290	87	70	555	170	137	10	6.5	6.0
15	231	172	115	250	84	105	623	155	107	10	5.9	4.4
16	247	154	141	210	82	117	600	213	78	15	5.3	3.5
17	1030	149	122	190	80	108	535	600	63	17	4.7	3.0
18	1150	228	113	175	77	99	570	527	53	16	4.3	2.7
19	556	196	104	165	75	88	674	354	64	14	3.7	2.5
20	769	164	99	155	74	90	821	273	72	11	3.2	2.3
21	747	145	102	144	71	79	1250	240	103	10	2.8	2.1
22	484	147	253	140	69	95	1130	216	95	9.8	2.5	2.0
23	350	133	242	135	68	112	1000	177	116	10	2.2	1.9
24	276	136	199	130	67	111	844	150	84	9.8	2.3	1.8
25	232	162	220	125	66	123	730	128	63	8.6	3.2	1.8
26	207	158	349	306	65	98	750	113	51	7.6	5.6	1.8
27	188	195	133	605	64	125	783	101	42	7.0	4.3	1.7
28	170	147	113	454	63	329	748	90	68	6.6	3.6	1.5
29	154	131	102	316	---	358	671	79	61	6.2	5.2	1.5
30	139	114	93	262	---	318	610	70	46	5.9	10	1.4
31	128	---	91	225	---	277	---	72	---	5.6	6.6	---
TOTAL	14176	5306	4324	9385	2650	3470	17078	7553	3160	435.1	171.7	81.7
MEAN	457	177	139	303	94.6	112	569	244	105	14.0	5.54	2.72
MAX	1720	389	349	1820	190	358	1250	600	249	37	11	6.0
MIN	124	105	84	86	63	57	196	70	42	5.6	2.2	1.4
CFSM	6.00	2.32	1.82	3.98	1.24	1.47	7.47	3.20	1.38	.18	.07	.04
IN.	6.92	2.59	2.11	4.58	1.29	1.69	8.34	3.69	1.54	.21	.08	.04
CAL YR 1977	TOTAL	61913.7	MEAN	170	MAX	2280	MIN	4.4	CFSM	2.23	IN	30.23
WTR YR 1978	TOTAL	67790.5	MEAN	186	MAX	1820	MIN	1.4	CFSM	2.44	IN	33.09

ANDROSCOGGIN RIVER BASIN

151

01058005 THOMPSON LAKE OUTLET AT OXFORD, ME

LOCATION.--Lat 44°08'07", long 70°29'28", Oxford County, Hydrologic Unit 01040002, on left bank at Oxford 50 ft (15 m) upstream from bridge on State Highway 121, and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--47.3 mi² (123 km²).

PERIOD OF RECORD.--June to December 1975, February 1976 to September 1978 (discontinued).

REVISED RECORDS.--WDR ME-77-1: 1975 (M), 1976.

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

REMARKS.--Records fair. Flow regulated by Thompson Lake (Reservoirs in Androscoggin River basin). Several observations of water temperature and specific conductance were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 546 ft³/s (15.5 m³/s) Mar. 17, 1977, gage height, 11.36 ft (3.463 m); minimum, 6.7 ft³/s (0.19 m³/s) July 31, 1977, gage height, 7.93 ft (2.417 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 435 ft³/s (12.3 m³/s) Apr. 21, gage height, 11.02 ft (3.359 m); minimum, 14 ft³/s (0.40 m³/s) Sept. 9, 13-23, 25-30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	254	51	134	307	36	68	109	55	47	22	16
2	184	171	51	133	301	36	72	53	54	47	26	15
3	200	131	51	132	287	36	77	53	53	47	25	15
4	205	140	51	131	281	34	80	53	58	47	26	15
5	205	137	51	129	271	34	89	52	59	47	25	15
6	200	133	52	128	263	34	93	52	58	47	24	15
7	200	131	53	127	259	34	97	51	59	47	24	15
8	198	129	54	125	177	35	103	52	102	47	24	15
9	200	131	54	151	124	35	107	52	242	46	24	15
10	169	132	54	188	123	35	109	52	288	47	24	15
11	154	131	53	203	118	35	153	52	276	46	24	15
12	151	128	60	201	116	35	184	53	260	44	22	15
13	151	128	62	197	115	35	194	53	253	44	22	15
14	151	118	63	197	114	35	205	53	242	44	21	14
15	153	105	67	190	113	36	213	58	236	44	21	14
16	153	103	66	185	111	36	218	66	165	44	22	14
17	171	103	66	185	109	36	218	76	127	44	22	14
18	215	103	66	180	109	36	218	83	120	44	19	14
19	293	103	65	175	109	36	239	86	116	44	19	14
20	355	103	69	175	108	36	358	88	116	44	18	14
21	352	82	81	170	108	36	428	90	116	44	18	14
22	328	70	91	165	107	36	425	88	116	44	17	14
23	318	62	92	165	105	37	415	90	116	44	17	14
24	305	51	93	160	104	37	415	71	115	44	17	15
25	305	50	99	160	104	37	415	58	110	44	17	15
26	285	50	105	185	98	37	390	56	81	44	16	15
27	246	49	119	240	37	44	390	56	51	44	16	15
28	272	49	122	320	37	49	376	55	51	44	16	15
29	308	50	141	335	---	53	359	54	47	44	16	15
30	283	50	141	330	---	58	289	59	47	43	16	14
31	273	---	140	325	---	62	---	58	---	30	16	---
TOTAL	7183	3177	2383	5821	4215	1191	6997	1982	3789	1380	636	440
MEAN	232	106	76.9	188	151	38.4	233	63.9	126	44.5	20.5	14.7
MAX	355	254	141	335	307	62	428	109	288	47	26	16
MIN	151	49	51	125	37	34	68	51	47	30	16	14
CFSM	4.91	2.24	1.63	3.98	3.19	.81	4.93	1.35	2.66	.94	.43	.31
IN.	5.65	2.50	1.87	4.58	3.31	.94	5.50	1.56	2.98	1.09	.50	.35

CAL YR 1977 TOTAL 36804.0 MEAN 101 MAX 536 MIN 7.0 CFSM 2.14 IN 28.94
WTR YR 1978 TOTAL 39194.0 MEAN 107 MAX 428 MIN 14 CFSM 2.26 IN 30.82

ANDROSCOGGIN RIVER BASIN

01058500 LITTLE ANDROSCOGGIN RIVER NEAR AUBURN, ME

LOCATION.--Lat 44°03'49", long 70°16'28", Androscoggin County, Hydrologic Unit 01040002, on right bank 100 ft (30 m) upstream from highway bridge at Littlefields, 3 mi (5 km) southwest of Auburn, and 4.6 mi (3.4 km) upstream from mouth.

DRAINAGE AREA.--328 mi² (850 km²).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 215 ft (65.5 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Thompson Lake (Reservoirs in Androscoggin River basin) and several powerplants above station. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--38 years, 577 ft³/s (16.34 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s (467 m³/s) Mar. 28, 1953, gage height, 14.76 ft (4.499 m); minimum daily, 14 ft³/s (0.40 m³/s) Oct. 14, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, 16,800 ft³/s (476 m³/s) Mar. 20, 1936, at mouth of river.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,610 ft³/s (102 m³/s) Apr. 22, gage height, 6.91 ft (2.106 m); minimum daily, 37 ft³/s (1.05 m³/s) Sept. 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	808	749	645	760	1220	320	1500	1680	430	247	129	55
2	1370	718	852	706	1100	310	1400	1380	382	232	109	49
3	1760	647	916	654	1010	305	1130	1150	367	210	113	48
4	1820	610	885	610	924	295	1140	1030	739	204	120	49
5	1410	573	801	590	853	290	1370	949	832	195	113	49
6	1120	526	678	552	785	285	1560	881	709	210	99	44
7	939	512	610	542	740	283	1560	823	581	232	92	43
8	800	510	570	510	685	280	1490	754	595	201	92	43
9	1020	886	520	1640	650	278	1480	776	834	173	88	47
10	1930	1120	490	2540	615	277	1520	925	1120	162	82	43
11	2490	1270	475	2990	585	284	1700	928	1130	159	75	41
12	2230	1200	465	2920	555	317	2180	823	935	156	67	41
13	1620	1130	460	2310	535	372	2470	726	790	146	61	38
14	1270	1050	465	1730	515	402	2430	657	736	141	66	37
15	1130	923	523	1390	495	586	2330	635	733	148	69	40
16	1070	799	649	1250	480	625	2300	818	689	176	60	45
17	1640	761	638	1110	465	626	2200	1490	529	156	63	41
18	2110	800	593	1010	450	567	2100	1710	448	156	61	38
19	2370	820	565	965	435	555	2070	1700	408	156	57	38
20	2520	758	537	935	420	529	2530	1430	375	154	51	40
21	2710	685	563	861	410	499	3160	1230	414	148	48	61
22	2570	639	997	862	395	509	3530	1090	511	151	49	74
23	2110	606	1140	820	385	570	3420	960	581	148	49	66
24	1710	591	1120	805	370	596	3090	831	490	143	48	60
25	1430	649	1120	795	360	579	2760	703	444	136	48	74
26	1230	753	1430	1130	350	547	2450	606	391	148	48	61
27	1100	823	1420	1640	345	706	2270	543	308	120	48	48
28	986	760	1220	1850	335	1400	2160	477	281	126	51	47
29	922	665	1020	1790	---	1680	2020	466	261	124	60	45
30	859	583	895	1570	---	1730	1860	417	257	115	51	40
31	796	---	832	1380	---	1600	---	398	---	115	51	---
TOTAL	47850	23116	24094	39217	16467	18202	63180	28986	17300	5088	2218	1445
MEAN	1544	771	777	1265	588	587	2106	935	577	164	71.5	48.2
MAX	2710	1270	1430	2990	1220	1730	3530	1710	1130	247	129	74
MIN	796	510	460	510	335	277	1130	398	257	115	48	37
CAL YR 1977	TOTAL	265848	MEAN	728	MAX	7950	MIN	68				
WTR YR 1978	TOTAL	287163	MEAN	787	MAX	3530	MIN	37				

ANDROSCOGGIN RIVER BASIN

153

01059000 ANDROSCOGGIN RIVER NEAR AUBURN, ME

LOCATION.--Lat 44°04'20", long 70°12'31", Androscoggin County, Hydrologic Unit 01040002, on right bank 1.5 mi (2.4 km) downstream from Little Androscoggin River and 2.1 mi (3.4 km) downstream from north bridge between Auburn and Lewiston.

DRAINAGE AREA.--3,257 mi² (8,436 km²).

PERIOD OF RECORD.--Discharge: October 1928 to current year. Monthly discharge only for October 1928, published in WSP 1301.
Water-quality records: Water years 1966-75.

REVISED RECORDS.--WSP 781: 1930, 1933-34. WSP 1301: 1932-36.

GAGE.--Water-stage recorder. Datum of gage is 109.18 ft (33.278 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Considerable diurnal fluctuation and some regulation by powerplants above station. Flow regulation by Rangeley, Mooselookmeguntic, Richardson, Umbagog, Azischoos, Auburn, and Thompson Lakes, and Gulf Island Pond (Reservoirs in Androscoggin River basin) with major regulation at Errol Dam 136 mi (219 km) upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--50 years, 6,181 ft³/s (175.0 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 135,000 ft³/s (3,820 m³/s) Mar. 20, 1936, gage height, 27.57 ft (8.403 m), from rating curve extended above 76,000 ft³/s (2,200 m³/s) on basis of slope-area measurement of peak flow and computation of flow over dam; minimum daily, 340 ft³/s (9.63 m³/s) Sept. 28, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 39,200 ft³/s (1,110 m³/s) Jan. 10, gage height, 12.19 ft (3.716 m), from peak-stage indicator; minimum daily, 750 ft³/s (21.2 m³/s) Aug. 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7300	6360	6490	6040	9860	5970	9780	22900	6660	5400	2800	3380
2	15300	6450	6910	5190	8980	6600	8930	18200	6570	3400	2850	2340
3	22000	6150	7110	5500	8460	5410	8480	15600	5320	3800	2890	1460
4	16000	6290	7800	5240	7870	4920	8300	13700	6530	3650	2850	1310
5	12000	5790	7130	5010	7390	6590	9070	13300	7620	4200	1500	2220
6	8990	5700	6940	5050	7070	6840	10100	14000	7050	5500	750	2370
7	7470	4900	6820	4890	7230	7250	9770	15100	6550	3250	2450	4060
8	7080	4900	4690	3450	7220	6810	9350	16600	5000	900	3000	3280
9	6820	9000	6380	10400	6930	6570	9800	19700	6600	1750	2750	1820
10	25900	13000	5560	32500	6730	5240	9660	26300	9000	3500	2680	1230
11	24800	11500	3500	34200	6490	6560	10700	25800	10200	3350	2600	2340
12	16800	14400	4350	20300	5840	6560	13000	21600	10300	3100	2650	2530
13	12300	11100	4700	16300	5150	6690	15500	20200	9500	3020	2460	2520
14	10700	8790	6100	11200	5790	7550	15100	19000	9400	3000	2590	2500
15	9380	7810	5900	9010	5780	7660	15900	18300	9800	1650	2500	1490
16	10700	7060	6800	9350	5950	7990	15300	18200	9300	1400	2450	1250
17	13700	6980	7000	9220	5970	7950	14300	24500	8200	3050	2470	1240
18	29500	7100	5200	8450	4610	7460	13600	30000	6900	3150	2450	2410
19	24400	8880	6250	7890	4430	7460	14700	24500	5600	3100	2230	2630
20	20900	7960	6300	8150	5370	7500	18300	19000	5500	3080	1280	2750
21	21000	7460	6300	7720	5450	7080	23600	16800	8200	3030	2320	2750
22	17900	7150	7750	7350	6210	7290	26300	16000	10000	3200	2440	2750
23	15000	7140	8030	6170	6220	7700	25800	14400	11000	2400	2500	1860
24	13500	6880	7810	7620	5110	7810	24000	12700	12000	2550	2460	1520
25	12600	7200	8460	7840	3910	7510	21900	12200	9600	3300	2440	2150
26	11100	7260	9920	8080	3870	7150	21300	11500	8700	3800	2120	2410
27	9740	7720	9880	11200	5100	8060	22500	10800	7400	3050	1190	2390
28	8550	7450	7930	15000	6030	10200	24100	10200	6800	3050	2610	2370
29	7520	6890	7460	13900	---	12000	24600	8750	6500	2150	2340	2260
30	6830	6580	7140	12300	---	11900	25000	7370	5500	1500	2350	990
31	6660	---	6630	10800	---	10500	---	6830	---	2800	3360	---
TOTAL	432440	231850	209240	325320	175020	232780	478740	524050	237300	94080	74330	66580
MEAN	13950	7728	6750	10490	6251	7509	15960	16900	7910	3035	2398	2219
MAX	29500	14400	9920	34200	9860	12000	26300	30000	12000	5500	3360	4060
MIN	6660	4900	3500	3450	3870	4920	8300	6830	5000	900	750	990

CAL YR 1977 TOTAL 2631302 MEAN 7209 MAX 39000 MIN 599
WTR YR 1978 TOTAL 3081730 MEAN 8443 MAX 34200 MIN 750

NOTE.--No gage-height record June 8 to Aug. 9.

ANDROSCOGGIN RIVER BASIN

01059400 ANDROSCOGGIN RIVER AT BRUNSWICK, ME
(National stream-quality accounting network station)

LOCATION.--Lat 43°55'03", long 69°58'25", Cumberland County, Hydrologic Unit 01060001, on right bank at cable suspended footbridge, 530 ft (161 m), downstream from railroad bridge at Brunswick.

DRAINAGE AREA.--3,410 mi² (8.832 km²).

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1975 to current year.

WATER TEMPERATURES: November 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1975.

REMARKS.--Interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 194 micromhos Feb. 16, 1977; minimum, 36 micromhos Apr. 4, 1976.

WATER TEMPERATURES: Maximum, 27.0°C July 21, 1977, July 23, Aug. 17, 18, 1978; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 169 micromhos Aug. 7; minimum, 40 micromhos June 28, 30.

WATER TEMPERATURES: Maximum, 27.0°C July 23, Aug. 17, 18; minimum, 0.0°C on many days during winter periods.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (CULS. PER 100 ML)
OCT												
31...	1545	7290	72	6.7	11.0	8.0	1	--	11.5	97	1200	--
NOV												
21...	1530	8290	90	6.6	6.0	3.5	2	--	13.7	102	600	380
DEC												
19...	1100	4800	128	6.8	-2.0	.0	5	--	--	--	K400	190
JAN												
18...	1545	9340	73	6.6	-5.5	.0	6	--	14.0	96	200	250
FEB												
21...	1530	5720	110	6.7	-4.0	.5	7	--	14.0	97	K60	K150
MAR												
22...	1500	8070	101	6.8	6.0	.5	4	--	14.1	98	900	520
MAY												
02...	0930	19700	45	6.6	8.5	5.5	4	--	10.4	82	K60	--
23...	1000	15100	--	--	--	--	--	--	--	--	--	--
23...	1030	15100	52	6.5	19.0	13.0	5	--	10.8	102	K225	K50
JUN												
21...	1030	6780	65	6.6	15.5	18.0	--	5.0	9.1	96	290	K40
JUL												
25...	1530	1630	128	--	24.0	26.0	--	3.0	8.7	106	920	K50
AUG												
22...	1515	--	--	--	--	--	--	3.0	--	--	380	K110
22...	1630	2880	149	6.8	25.0	24.0	--	4.0	8.0	94	K390	K75
SEP												
13...	1300	2940	159	6.8	14.0	17.0	--	3.0	9.1	94	480	230

ANDROSCOGGIN RIVER BASIN

01059400 ANDROSCOGGIN RIVER AT BRUNSWICK, ME--Continued

155

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)
OCT 31...	14	1	4.1	.8	6.4	48	.8	1.0	15	0	12	4.8
NOV 21...	16	0	5.0	.8	9.1	54	1.0	1.0	20	0	16	8.0
DEC 19...	18	0	5.6	1.0	14	61	1.4	1.2	23	0	19	5.8
JAN 18...	14	0	4.1	.8	7.0	51	.8	1.0	18	0	15	7.2
FEB 21...	17	4	5.4	.9	11	56	1.2	1.1	16	0	13	5.1
MAR 22...	16	1	4.8	1.0	10	55	1.1	1.1	18	--	15	4.6
MAY 02...	10	6	3.1	.5	3.5	42	.5	.5	5	0	4	2.0
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	11	4	3.3	.6	4.5	46	.6	.7	8	--	7	4.0
JUN 21...	14	0	4.1	.8	6.8	50	.8	.9	--	--	16	--
JUL 25...	18	1	5.8	.9	17	65	1.7	1.4	--	--	17	--
AUG 22...	21	3	6.4	1.1	20	66	1.9	1.6	--	--	18	--
22...	21	1	6.5	1.1	19	64	1.8	1.6	--	--	20	--
SEP 13...	19	6	6.1	1.0	21	68	2.1	1.4	--	--	13	--

DATE	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)
OCT 31...	8.6	6.3	.0	5.2	54	40	1060	.14	.07	--	--	--
NOV 21...	11	9.4	.0	6.1	51	52	1140	.17	.11	--	--	--
DEC 19...	13	14	.0	5.4	78	66	1010	.18	.20	--	--	--
JAN 18...	10	6.8	.0	5.5	55	44	1390	.24	.08	--	--	--
FEB 21...	15	12	.0	5.8	68	59	1050	.20	.18	.24	.42	.08
MAR 22...	11	8.7	.0	5.1	53	51	1160	.23	.08	.36	.44	.00
MAY 02...	6.3	3.3	.1	4.5	35	24	1860	.14	.04	.10	.14	.00
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	7.0	5.9	.1	4.0	33	30	1350	.14	.08	.28	.36	.07
JUN 21...	7.4	6.6	.0	4.4	44	41	805	.20	.08	.76	.84	.44
JUL 25...	16	15	.0	4.0	99	70	436	.65	.08	1.0	1.1	.65
AUG 22...	16	21	.1	4.0	103	81	--	.51	.02	.68	.70	.01
22...	17	21	.0	4.1	102	83	793	.46	.02	.78	.80	.17
SEP 13...	17	23	.1	4.2	104	82	826	.79	.00	.58	.58	.27

ANDROSCOGGIN RIVER BASIN

01059400 ANDROSCOGGIN RIVER AT BRUNSWICK, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 31...	.32	--	--	.03	.02	--	--	--	--	--	--	--
NOV 21...	.91	--	--	.04	.01	0	0	0	0	0	0	1
DEC 19...	.47	--	--	.04	.02	--	--	--	--	--	--	--
JAN 18...	.27	--	--	.03	.01	--	--	--	--	--	--	--
FEB 21...	.34	.62	2.7	.04	.03	3	1	2	0	0	0	0
MAR 22...	--	.67	3.0	.03	.02	--	--	--	--	--	--	--
MAY 02...	--	.28	1.2	.02	.01	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	.29	.50	2.2	.03	.01	0	0	0	0	0	0	0
JUN 21...	.40	1.0	4.6	.04	.01	--	--	--	--	--	--	--
JUL 25...	.45	1.8	7.7	.06	.02	--	--	--	--	--	--	--
AUG 22...	.69	1.2	5.4	.06	.01	1	1	0	0	0	0	3
22...	.63	1.3	5.6	.06	.01	1	1	0	0	0	0	2
SEP 13...	.31	1.4	6.1	.09	.06	--	--	--	--	--	--	--

[illegible]

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

[illegible]

ANDROSCOGGIN RIVER BASIN

01059400 ANDROSCOGGIN RIVER AT BRUNSWICK, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 31...	--	--	4.9	--	--	9	177	100
NOV 21...	0	10	8.4	--	--	10	224	100
DEC 19...	--	--	10	--	--	5	65	88
JAN 18...	--	--	12	--	--	4	101	100
FEB 21...	0	10	--	--	1.0	10	154	100
MAR 22...	--	--	5.3	--	--	7	153	77
MAY 02...	--	--	4.1	--	--	7	372	100
23...	--	--	--	--	--	10	408	100
23...	10	0	--	8.2	1.0	6	245	100
JUN 21...	--	--	10	--	--	29	531	17
JUL 25...	--	--	8.1	--	--	18	79	100
AUG 22...	30	0	--	10	--	8	--	100
22...	20	10	--	7.8	--	22	171	44
SEP 13...	--	--	8.0	--	--	9	171	100

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS (G/SQ M)		PERIPHYTON		BIOMASS PIGMENT RATIO	SAMPLING METHOD
		DRY WEIGHT	ASH WEIGHT	CHLOROPHYLL A (MG/SQ M)	CHLOROPHYLL B (MG/SQ M)		
JUN 21	29	1.65	1.10	14.7	1.51	37.4	ARTIFICIAL SUBSTRATE
JUL 25	34	1.26	.472	5.51	1.85	143	ARTIFICIAL SUBSTRATE

01059400 ANDROSCOGGIN RIVER AT BRUNSWICK, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO MAY 1978

DATE TIME	NOV 21,77 1530	MAR 22,78 1500	MAY 23,78 1000	MAY 23,78 1030				
TOTAL CELLS/ML	17000	970	11000	180				
DIVERSITY: DIVISION	0.0	0.5	0.3	0.0				
..CLASS	0.0	0.5	0.3	0.0				
...ORDER	0.0	0.5	0.3	0.6				
....FAMILY	0.0	0.5	0.4	2.7				
.....GENUS	0.0	0.5	0.4	2.8				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....OOCYSTACEAE								
.....ANKISTRODESUS	--	-	8	1	--	-	--	-
.....KIRCHNERIELLA	--	-	8	1	--	-	--	-
...VOLVOCALES								
....CHLAMYDOMONADACEAE								
.....CHLAMYDOMONAS	--	-	--	-	130	1	--	-
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
....COSCINODISCACEAE								
.....CYCLOTELLA	--	-	--	-	*	0	--	-
....MELOSIRA	--	-	--	-	--	-	28#	15
...PENNALES								
....CYMBELLACEAE								
.....CYMBELLA	--	-	--	-	--	-	14	8
...DIATOMACEAE								
....DIATOMA	--	-	--	-	--	-	14	8
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	--	-	*	0	--	-
....HANNAEA	--	-	--	-	--	-	14	8
....SYNEDRA	--	-	8	1	--	-	14	8
...GOMPHONEMACEAE								
....GOMPHONEMA	--	-	15	2	--	-	42#	23
...NAVICULACEAE								
....NAVICULA	--	-	--	-	--	-	42#	23
...NITZSCHACEAE								
....NITZSCHIA	--	-	--	-	*	0	14	8
CHRYSTOPHYCEAE								
...CHRYSOMONADALES								
....OCHROMONADACEAE								
.....DINOBRYON	--	-	15	2	--	-	--	-
...XANTHOPHYCEAE								
....HETEROCOCCALES								
...CENTRITRACTACEAE								
.....CENTRITRACTUS	*	0	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROCOCCALES								
....CHROCOCCACEAE								
.....ANACYSTIS	--	-	--	-	110	1	--	-
...HORMOGONALES								
....OSCILLATORIACEAE								
.....LYNGBYA	--	-	--	-	11000#	96	--	-
....OSCILLATORIA	17000#100		900#	93	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
.....TRACHELOMONAS	--	-	15	2	65	1	--	-
PYRRHOPHYTA (FIRE ALGAE)								
..DINOPHYCEAE								
...PERIDINIALES								
....GLENODINIACEAE								
.....GLENODINIUM	--	-	--	-	*	0	--	-
...PERIDINIACEAE								
.....PERIDINIUM	--	-	--	-	*	0	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

ANDROSCOGGIN RIVER BASIN

01059400 ANDROSCOGGIN RIVER AT BRUNSWICK, ME--Continued

PHYTOPLANKTON ANALYSES, JUNE 1978 TO SEPTEMBER 1978

DATE TIME	JUN 21,78 1030	JUL 25,78 1330	AUG 22,78 1515	AUG 22,78 1630	SEP 13,78 1300
TOTAL CELLS/ML	1300	17000	21000	7800	7200
DIVERSITY: DIVISION	1.1	1.4	1.4	1.5	1.5
..CLASS	1.5	1.5	1.4	1.6	1.5
...ORDER	2.3	1.9	1.8	1.9	1.8
...FAMILY	2.9	3.1	2.7	2.8	2.9
....GENUS	3.4	3.5	3.6	3.6	3.6

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...CHARACIACEAE										
...SCHROEDERIA	--	-	--	-	--	-	* 0	--	-	
...COELASTRACEAE										
...COELASTRUM	--	-	--	-	420	2	--	-	--	-
...HYDRODICTYACEAE										
...PEDIASTRUM	--	-	1900	11	1900	9	360	5	600	8
...MICRACTINIACEAE										
...GOLENKINIA	--	-	400	2	--	-	--	-	--	-
...MICRACTINIUM	--	-	2600	15	--	-	180	2	--	-
...OOCYSTACEAE										
...ANKISTRODESMUS	22	2	480	3	520	3	180	2	110	2
...DICTYOSPHAERIUM	89	7	320	2	3600#	17	830	11	1400#	19
...KIRCHNERIELLA	--	-	400	2	--	-	--	-	--	-
...NEPHROCITIUM	--	-	--	-	140	1	91	1	--	-
...OOCYSTIS	--	-	320	2	--	-	60	1	* 0	
...QUADRIGULA	--	-	--	-	* 0		--	-	--	-
...SELENASTRUM	--	-	--	-	870	4	45	1	--	-
...TETRAEDRUM	--	-	240	1	870	4	170	2	--	-
...WESTELLA	--	-	--	-	--	-	120	2	--	-
...SCENEDESMACEAE										
...ACTINASTRUM	--	-	--	-	280	1	--	-	--	-
...CRUCIGENIA	270#	21	--	-	140	1	180	2	980	14
...SCENEDESMUS	89	7	3800#	22	2600	13	1400#	18	800	11
...TETRASTRUM	--	-	--	-	280	1	230	3	89	1
...TETRASPORALES										
...COCCOMYXACEAE										
...ELAKATOTHRIX	--	-	160	1	--	-	--	-	--	-
...PALMELLACEAE										
...SPHAEROCYSTIS	--	-	320	2	--	-	--	-	--	-
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
...CHLAMYDOMONAS	220#	18	240	1	* 0		--	-	160	2
...ZYGNEMATALES										
...DESMIDIACEAE										
...COSMARIUM	--	-	--	-	--	-	--	-	44	1
...STAUSTRUM	--	-	--	-	* 0		* 0		* 0	
CHRYSTOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
...COSCINODISCACEAE										
...CYCLOTELLA	45	4	1100	6	--	-	* 0		44	1
...MELOSIRA	130	11	560	3	2500	12	1400#	18	420	6
...STEPHANODISCUS	--	-	--	-	--	-	* 0		--	-
...PENNIALES										
...ACHNANTHACEAE										
...ACHNANTHES	22	2	--	-	--	-	--	-	44	1
...EUNOTIACEAE										
...EUNOTIA	--	-	--	-	--	-	--	-	* 0	
...FRAGILARIACEAE										
...FRAGILARIA	22	2	--	-	* 0		* 0		--	-
...HANNAEA	22	2	--	-	--	-	--	-	--	-
...SYNEDRA	22	2	480	3	--	-	--	-	--	-
...GOMPHONEMATACEAL										
...GOMPHONEMA	--	-	--	-	--	-	--	-	89	1
...NAVICULACEAE										
...NAVICULA	110	9	--	-	* 0		--	-	--	-
...NITZSCHIA	22	2	160	1	100	1	--	-	89	1
...CHRYSTOPHYCEAE										
...CHRYSONOMADALES										
...MALLOMONADACEAE										
...MALLOMONAS	--	-	* 0		--	-	--	-	--	-
...OCHROMONADACEAE										
...DINOBYRON	160	12	--	-	--	-	--	-	--	-
...XANTHOPHYCEAE										
...HETEROCOCCALES										
...CHLOROTHECIACEAE										
...OPHIOCYTIUM	--	-	400	2	100	1	45	1	* 0	

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

ANDROSCOGGIN RIVER BASIN

161

01059400 ANDROSCOGGIN RIVER AT BRUNSWICK, ME--Continued

PHYTOPLANKTON ANALYSES, JUNE 1978 TO SEPTEMBER 1978

DATE TIME	JUN 21,78 1030		JUL 25,78 1330		AUG 22,78 1515		AUG 22,78 1630		SEP 13,78 1300	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONIDALES										
...CRYPTOMONODACEAE										
....CRYPTOMONAS	22	2	320	2	--	-	--	-	*	0
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROCOCCOCEAE										
....AGMENELLUM	--	-	--	-	2200	11	120	2	--	-
....ANACYSTIS	--	-	3200#	18	800	4	880	11	89	1
....COCCOCHLORIS	--	-	--	-	--	-	*	0	--	-
...HORMOGONALES										
...NOSTOCAEAE										
....ANABAENA	--	-	--	-	--	-	230	3	400	6
...OSCILLATORIAEAE										
....LYNGBYA	--	-	--	-	2800	14	1100	15	890	12
...OSCILLATORIA	--	-	--	-	--	-	--	-	670	9
...CHROCOCCOCEAE										
...CHROCOCCOCEAE										
....DACTYLOCOCCOPSIS	--	-	--	-	*	0	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	*	0	--	-	--	-
....TRACHELOMONAS	--	-	--	-	*	0	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
..DINOPHYCEAE										
...GYMNODINIALES										
...GYMNODINIACEAE										
....GYMNODINIUM	--	-	--	-	--	-	45	1	--	-
...PERIDINIALES										
...PERIDINIACEAE										
....PERIDINIUM	--	-	--	-	--	-	--	-	160	2

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

ANDROSCOGGIN RIVER BASIN

01059400 ANDROSCOGGIN RIVER AT BRUNSWICK, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	76	74	75	---	---	---	105	102	104
2	---	---	---	76	75	76	---	---	---	101	98	99
3	---	---	---	78	76	77	115	113	114	98	96	97
4	---	---	---	78	77	78	121	113	116	98	96	97
5	---	---	---	81	78	79	115	113	114	99	96	97
6	---	---	---	82	80	81	113	112	113	97	95	96
7	---	---	---	82	81	82	114	112	113	94	94	94
8	---	---	---	84	82	82	111	105	108	96	94	95
9	---	---	---	96	82	91	114	105	110	130	95	106
10	---	---	---	93	91	92	113	112	113	130	114	118
11	---	---	---	92	90	91	112	111	112	113	81	97
12	---	---	---	96	92	93	112	110	111	87	69	78
13	---	---	---	93	80	90	112	111	112	71	66	69
14	---	---	---	82	79	80	112	111	111	74	66	69
15	---	---	---	82	81	82	115	112	113	75	74	74
16	---	---	---	---	---	---	119	115	118	74	70	72
17	---	---	---	---	---	---	120	119	119	73	69	71
18	---	---	---	---	---	---	120	119	120	73	72	72
19	---	---	---	---	---	---	120	118	120	73	72	73
20	62	56	58	---	---	---	121	120	121	73	72	73
21	58	55	56	---	---	---	121	120	120	73	72	73
22	63	59	60	---	---	---	124	120	122	76	73	74
23	67	61	63	---	---	---	127	123	125	76	73	74
24	67	63	65	---	---	---	123	120	122	77	73	75
25	67	65	66	---	---	---	120	116	119	79	77	79
26	70	67	68	---	---	---	116	113	114	79	74	77
27	72	70	71	---	---	---	115	113	114	108	75	88
28	74	72	73	---	---	---	115	114	115	109	102	105
29	74	73	73	---	---	---	116	113	115	104	101	103
30	75	74	74	---	---	---	113	110	112	101	98	100
31	75	74	75	---	---	---	110	106	108	98	91	95
MONTH	75	55	67	96	74	83	127	105	115	130	66	87

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	91	83	87	99	97	98	89	87	88	45	41	44
2	83	79	81	99	97	99	89	86	88	48	45	46
3	80	76	79	100	99	99	90	85	88	50	47	48
4	80	75	78	100	99	99	91	87	89	54	50	52
5	81	75	78	101	100	101	87	84	85	57	52	55
6	79	77	78	101	101	101	87	82	84	61	55	58
7	79	78	78	102	101	102	85	82	84	65	61	63
8	81	78	79	103	102	103	86	83	85	69	63	66
9	82	77	80	103	102	103	87	83	85	68	67	67
10	83	78	80	103	102	103	86	81	84	70	62	67
11	83	78	80	104	102	103	81	78	80	64	57	62
12	84	79	81	104	103	103	81	76	78	67	58	62
13	85	79	81	106	104	104	79	75	77	67	61	64
14	83	80	82	105	104	104	79	71	77	69	63	66
15	84	83	84	105	104	104	77	69	75	69	66	68
16	87	84	85	105	104	104	76	68	74	75	71	73
17	88	86	87	104	102	103	75	68	72	81	77	80
18	90	87	89	103	101	102	72	64	68	83	72	79
19	91	89	90	102	101	102	71	67	68	78	50	73
20	92	88	90	102	101	101	67	66	67	84	44	64
21	93	89	90	101	101	101	69	66	67	59	45	48
22	92	90	91	111	100	107	66	59	64	52	48	50
23	94	92	93	101	97	99	59	52	56	52	47	50
24	95	93	94	99	95	97	53	51	52	49	46	48
25	96	93	94	96	92	94	52	50	51	51	47	48
26	96	94	95	94	92	93	53	49	51	49	47	48
27	97	96	96	100	93	95	50	48	49	53	49	51
28	98	96	97	99	90	98	50	48	49	54	50	52
29	---	---	---	93	89	90	49	45	48	54	50	52
30	---	---	---	91	89	90	48	44	46	54	51	53
31	---	---	---	91	87	89	---	---	---	56	51	53
MONTH	98	75	86	111	87	100	91	44	71	84	41	58

ANDROSCOGGIN RIVER BASIN

163

01059400 ANDROSCOGGIN RIVER AT BRUNSWICK, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	58	56	57	49	43	45	155	152	154	162	160	161
2	58	57	58	53	48	51	154	149	151	162	158	161
3	58	50	55	59	51	55	153	148	150	162	158	160
4	68	58	63	63	57	60	152	147	149	159	153	157
5	65	60	63	64	59	62	154	149	151	165	160	162
6	65	59	62	66	63	64	161	141	149	166	163	164
7	66	59	62	72	61	65	169	159	162	167	162	165
8	67	56	60	72	64	68	168	158	161	165	161	162
9	82	71	79	79	65	74	167	157	161	164	158	160
10	81	79	80	87	76	82	159	156	158	165	158	160
11	79	77	78	89	83	86	158	157	158	162	157	159
12	82	76	79	82	78	80	161	157	158	163	161	162
13	76	67	71	79	74	77	160	156	158	165	161	162
14	67	59	63	77	72	75	162	155	159	164	162	163
15	59	51	56	78	74	76	161	154	158	166	164	165
16	53	49	51	80	76	78	157	153	156	166	161	164
17	53	48	51	86	78	82	157	152	155	165	162	163
18	51	48	50	99	88	92	155	151	154	164	160	162
19	51	48	49	99	86	92	153	149	151	163	158	161
20	53	49	50	103	92	99	153	146	149	163	158	161
21	53	49	51	123	95	108	155	145	150	160	157	158
22	57	51	54	140	103	123	154	148	150	160	156	157
23	67	57	62	143	108	131	152	149	151	161	158	159
24	67	61	65	---	---	---	152	150	151	162	154	158
25	60	50	56	---	---	---	152	150	151	158	150	155
26	50	45	48	147	118	135	154	151	152	155	150	153
27	49	41	46	139	124	133	158	153	156	156	151	153
28	48	40	44	143	127	137	163	155	159	158	152	156
29	47	42	45	146	126	137	163	160	161	158	155	156
30	46	40	44	142	117	132	162	159	161	158	153	155
31	---	---	---	153	141	149	162	159	161	---	---	---
MONTH	82	40	58	153	43	91	169	141	155	167	150	160
YEAR	169	40	96									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	8.0	7.5	8.0	---	---	---	.0	.0	.0
2	---	---	---	8.0	7.5	8.0	---	---	---	.0	.0	.0
3	---	---	---	9.0	8.0	8.5	2.0	2.0	2.0	.0	.0	.0
4	---	---	---	9.0	8.5	9.0	2.0	1.5	2.0	.0	.0	.0
5	---	---	---	9.0	8.5	9.0	1.5	.5	1.0	.0	.0	.0
6	---	---	---	8.0	8.0	8.0	.5	.0	.5	.0	.0	.0
7	---	---	---	8.0	7.5	8.0	.5	.5	.5	.0	.0	.0
8	---	---	---	7.5	7.5	7.5	.5	.0	.5	.0	.0	.0
9	---	---	---	8.0	7.5	8.0	.5	.0	.0	.5	.0	.5
10	---	---	---	8.5	8.0	8.5	.0	.0	.0	.0	.0	.0
11	---	---	---	9.0	8.5	8.5	.0	.0	.0	.0	.0	.0
12	---	---	---	8.5	7.5	8.0	.0	.0	.0	.0	.0	.0
13	---	---	---	7.5	7.0	7.5	.0	.0	.0	.0	.0	.0
14	---	---	---	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0
15	---	---	---	6.0	5.5	6.0	.0	.0	.0	.0	.0	.0
16	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
17	---	---	---	---	---	---	.5	.0	.0	.0	.0	.0
18	---	---	---	---	---	---	.5	.0	.0	.0	.0	.0
19	---	---	---	---	---	---	.5	.0	.0	.5	.0	.0
20	8.0	8.0	8.0	---	---	---	.0	.0	.0	.5	.0	.0
21	8.0	7.5	8.0	---	---	---	.5	.0	.0	.0	.0	.0
22	8.0	7.5	8.0	---	---	---	.5	.0	.5	.5	.0	.5
23	8.0	7.5	7.5	---	---	---	.5	.0	.5	.5	.0	.5
24	7.5	7.0	7.5	---	---	---	.5	.0	.5	.5	.0	.5
25	7.5	7.0	7.5	---	---	---	.5	.0	.5	.5	.5	.5
26	8.0	7.5	8.0	---	---	---	.5	.0	.5	.5	.0	.5
27	8.5	8.0	8.0	---	---	---	.0	.0	.0	.5	.5	.5
28	8.5	8.0	8.0	---	---	---	.0	.0	.0	.5	.5	.5
29	8.0	7.5	8.0	---	---	---	.0	.0	.0	.5	.0	.0
30	8.0	7.5	8.0	---	---	---	.0	.0	.0	.5	.0	.0
31	8.0	7.5	7.5	---	---	---	.5	.0	.0	.5	.0	.5
MONTH	8.5	7.0	8.0	9.0	5.5	8.0	2.0	.0	.5	.5	.0	.0

ANDROSCOGGIN RIVER BASIN

01059400 ANDROSCOGGIN RIVER AT BRUNSWICK, ME--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.5	.0	.0	.5	.0	.0	1.5	.5	1.0	7.0	6.0	6.5
2	.5	.0	.0	.0	.0	.0	1.0	.5	1.0	7.0	5.5	6.0
3	.0	.0	.0	.0	.0	.0	1.0	.5	1.0	6.0	5.5	6.0
4	.0	.0	.0	.5	.0	.0	1.0	1.0	1.0	6.5	5.5	6.0
5	.0	.0	.0	.0	.0	.0	1.5	1.0	1.5	7.0	6.5	6.5
6	.0	.0	.0	.0	.0	.0	2.0	1.5	1.5	8.0	6.5	7.5
7	.0	.0	.0	.0	.0	.0	1.5	1.0	1.5	9.0	8.0	8.5
8	.5	.0	.0	.5	.0	.0	2.0	1.5	1.5	9.5	8.5	9.0
9	.5	.0	.0	.5	.0	.0	2.0	1.5	2.0	9.5	9.0	9.0
10	.5	.0	.0	.5	.0	.5	2.5	2.0	2.5	10.0	9.0	9.5
11	.5	.0	.0	.5	.0	.5	2.5	2.0	2.0	9.5	9.0	9.5
12	.5	.0	.0	.5	.0	.5	2.5	2.0	2.5	10.0	8.5	9.5
13	.5	.0	.5	.5	.0	.5	2.5	2.0	2.0	10.0	9.0	9.5
14	.5	.0	.5	.5	.0	.5	2.5	2.0	2.5	11.5	10.0	10.5
15	.5	.5	.5	.5	.5	.5	2.5	1.5	2.5	11.0	10.5	10.5
16	.5	.5	.5	.5	.0	.5	2.5	2.0	2.5	11.0	10.5	10.5
17	.5	.5	.5	.5	.0	.5	3.0	2.5	3.0	11.0	11.0	11.0
18	.5	.5	.5	.5	.0	.0	4.5	2.5	3.5	11.0	9.5	10.5
19	.5	.0	.5	.5	.0	.5	4.5	4.0	4.0	10.5	9.5	10.0
20	.5	.0	.0	.5	.0	.5	4.5	4.0	4.0	12.0	10.0	11.0
21	.5	.0	.0	.5	.0	.5	4.5	4.0	4.5	12.5	11.5	12.0
22	.5	.0	.0	.5	.0	.5	4.5	4.0	4.5	13.5	12.0	13.0
23	.5	.0	.0	.5	.0	.5	5.0	3.5	4.0	14.0	13.0	13.5
24	.5	.0	.0	.5	.0	.5	5.5	4.0	4.5	14.5	13.5	14.0
25	.5	.0	.5	.5	.0	.5	5.5	4.5	5.0	14.5	14.0	14.0
26	.5	.0	.0	.5	.0	.5	6.0	4.5	5.5	14.5	14.0	14.0
27	.5	.0	.5	.5	.5	.5	6.5	5.5	6.0	15.5	14.5	15.0
28	.5	.0	.0	1.0	.5	.5	7.0	6.0	6.5	16.5	15.5	16.0
29	---	---	---	1.0	.5	1.0	7.5	6.0	7.0	17.5	16.5	17.0
30	---	---	---	1.0	.5	1.0	7.5	6.5	7.0	19.5	17.5	18.5
31	---	---	---	1.5	.5	1.0	---	---	---	19.0	18.0	19.0
MONTH	.5	.0	.0	1.5	.0	.5	7.5	.5	3.5	19.5	5.5	11.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	19.0	18.0	18.5	21.5	21.0	21.0	23.5	23.0	23.0	22.5	22.0	22.5
2	19.0	18.5	19.0	22.0	21.0	21.0	24.0	22.5	23.0	22.5	21.0	21.5
3	19.0	18.5	19.0	23.0	21.0	21.5	24.0	23.0	23.5	22.5	21.0	21.5
4	19.0	19.0	19.0	21.5	21.0	21.5	24.5	23.5	24.0	22.5	21.0	21.5
5	19.0	18.0	18.5	22.0	20.5	21.0	24.5	23.0	24.0	22.5	20.5	21.5
6	18.5	17.5	18.0	22.0	21.0	21.5	24.0	23.0	23.5	21.5	20.5	21.0
7	19.0	18.0	18.5	23.5	21.5	22.5	25.0	23.0	24.0	20.5	20.0	20.5
8	18.5	17.5	18.0	25.0	22.5	23.5	24.5	24.0	24.5	20.5	19.5	20.0
9	17.5	17.0	17.0	25.0	23.0	24.0	25.5	24.0	24.5	19.5	18.5	19.0
10	17.5	17.0	17.5	25.5	23.5	24.5	25.5	24.5	25.0	19.0	17.5	18.5
11	18.0	17.5	17.5	25.0	23.0	24.0	25.5	24.0	24.5	18.0	17.5	17.5
12	18.5	17.5	18.0	23.5	22.0	23.0	24.5	23.5	24.0	18.5	17.5	17.5
13	18.5	17.0	17.5	24.5	22.0	23.0	24.5	23.0	24.0	19.0	17.0	18.0
14	17.5	17.0	17.5	25.0	23.0	24.0	25.5	23.0	24.0	19.0	17.0	18.0
15	17.5	17.0	17.5	24.0	23.5	24.0	26.5	24.5	25.0	17.5	17.0	17.0
16	18.0	17.0	17.5	23.5	23.0	23.0	26.5	25.0	25.5	18.5	16.5	17.5
17	18.5	18.0	18.0	22.5	22.0	22.0	27.0	25.0	26.0	18.0	16.5	17.0
18	18.0	17.0	17.5	24.0	21.5	22.5	27.0	25.0	26.0	17.5	16.5	17.0
19	19.0	17.0	18.0	26.0	23.5	24.5	26.5	25.0	25.5	18.0	16.5	17.0
20	19.0	18.0	18.5	26.0	24.5	25.5	25.0	24.5	24.5	18.0	16.0	17.0
21	18.0	17.5	18.0	26.5	24.5	25.5	25.0	23.5	24.5	18.5	16.5	17.5
22	18.0	18.0	18.0	26.5	25.0	25.5	25.0	23.5	24.5	18.5	17.5	18.0
23	19.5	18.0	19.0	27.0	25.5	26.0	25.0	23.5	24.5	18.5	16.5	17.5
24	19.5	19.0	19.0	26.5	25.5	26.0	24.5	23.0	23.5	17.0	16.0	16.5
25	20.0	18.5	19.5	26.0	24.5	25.0	23.0	22.0	22.5	16.5	15.5	16.0
26	20.0	19.5	19.5	25.0	24.0	24.5	23.0	21.0	22.0	16.5	15.0	15.5
27	20.5	19.5	20.0	25.0	24.0	24.5	23.5	21.5	22.5	15.5	14.5	15.0
28	21.5	20.0	20.5	25.5	24.0	25.0	22.5	20.5	21.5	15.5	15.0	15.0
29	21.5	21.0	21.0	25.5	24.5	25.0	22.5	20.5	21.0	15.5	14.5	15.0
30	22.0	21.0	21.5	25.0	24.0	24.5	23.0	21.0	22.0	15.0	14.0	14.5
31	---	---	---	24.5	23.0	24.0	23.0	22.5	22.5	---	---	---
MONTH	22.0	17.0	18.5	27.0	20.5	23.5	27.0	20.5	24.0	22.5	14.0	18.0
YEAR	27.0	.0	10.0									

Reservoirs in Androscoggin River basin

- 01050500 RANGELEY LAKE on Rangeley Stream, at Oquossoc, Maine, used for power, has usable capacity of 1,339,200,000 ft³ (37,926,000 m³) in top 4.0 ft (1.22 m) of lake (top of flashboards). Gage-height record furnished by Union Water Power Co.
- 01051000 MOOSELOOKMEGUNTIC LAKE at Upper Dam, in Richardson Township, Maine, used for power, has usable capacity of 8,370,000,000 ft³ (237,000,000 m³) between gage heights 8.3 ft (2.53 m) and 20.5 ft (6.25 m). Gage-height record furnished by Union Water Power Co.
- 01051500 UPPER AND LOWER RICHARDSON LAKES on Rapid River, at Middle Dam, Maine, used for power, has usable capacity of 5,691,500,000 ft³ (161,180,000 m³) between gage heights 3.0 ft (0.91 m) and 20.5 ft (6.25 m). Gage-height record furnished by Union Water Power Co.
- 01052000 AZISCOHOS LAKE on Magalloway River, in Lincoln Township, 3 mi (5 km) east of village of Wilsons Mills, Maine, completed in 1911 for power, has usable capacity of 9,593,000,000 ft³ (271,700,000 m³) between elevations 1,490.0 ft (454.15 m) and 1,535.0 ft (467.87 m). Elevation record furnished by Union Water Power Co.
- 01053000 UMBAGOG LAKE on Androscoggin River, at Errol Dam, 0.6 mi (1.0 km) northeast of Errol, N.H., used for power, has usable capacity of 3,080,160,000 ft³ (87,230,100 m³) between gage heights 5.5 ft (1.68 m) and 15.0 ft (4.57 m). Gage-height record furnished by Union Water Power Co.
- 01056000 GULF ISLAND POND on Androscoggin River, 3 mi (5 km) upstream from Lewiston, Maine, completed in 1928 for power, has capacity of 1,100,000,000 ft³ (31,150,000 m³) in top 10 ft (3 m) of pond below elevation 262.0 ft (79.86 m). Elevation record furnished by Central Maine Power Co.
- 01056500 LAKE AUBURN on outlet stream to Androscoggin River, at East Auburn, Maine, used for storing water supply of Auburn and Lewiston, has usable capacity of 580,000,000 ft³ (16,430,000 m³) between elevations 254.7 ft (77.63 m) and 260.7 ft (79.46 m). Elevation record furnished by Auburn Water District.
- 01058000 THOMPSON LAKE on short outlet stream to Little Androscoggin River, at Oxford, Maine used for process water, has usable capacity of 950,000,000 ft³ (26,900,000 m³) between gage heights 95.0 ft (28.96 m) and 100.0 ft (30.48 m). Gage-height record furnished by Robinson Manufacturing Co.

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

DATE	RANGELEY LAKE	MOOSELOOKMEGUNTIC LAKE	UPPER AND LOWER RICHARDSON LAKES	AZISCOHOS LAKE
SEPT. 30, 1977	1466	5870	5331	8125
OCT. 31	1004	8154	5614	8620
NOV. 30	683	8046	5350	9132
DEC. 31	445	6937	5237	8830
JAN. 31, 1978	1088	6474	5068	9147
FEB. 28	1035	4334	3640	7862
MAR. 31	837	900	2485	3362
APR. 30	863	2430	3658	4560
MAY 31	1380	8118	5576	9826
JUNE 30	1326	7974	5538	9794
JULY 31	1229	7402	4937	7935
AUG. 31	1018	6118	4066	5712
SEPT. 30	780	2940	4417	5059

DATE	UMBAGOG LAKE	GULF ISLAND POND	LAKE AUBURN	THOMPSON LAKE
SEPT. 30, 1977	2944	2438	408	1666
OCT. 31	3160	2465	580	1590
NOV. 30	2612	2365	628	1514
DEC. 31	880	2369	628	1628
JAN. 31, 1978	1060	2480	592	1647
FEB. 28	1812	2326	430	1476
MAR. 31	1140	2484	532	1552
APR. 30	1524	2478	556	1894
MAY 31	2554	2475	556	2027
JUNE 30	2573	2400	532	1837
JULY 31	1958	2349	452	1704
AUG. 31	2034	2335	375	1609
SEPT. 30	1488	2230	290	1533

NOTE.--Contents of Gulf Island Pond at 2400, Thompson Lake at 0800. Contents of all others at 0700 on first day of following month.

ROYAL RIVER BASIN

01059800 COLLYER BROOK NEAR GRAY, ME

LOCATION.--Lat 43°55'03", long 70°19'02", Cumberland County, Hydrologic Unit 01060001, 50 ft (15 m) downstream from U.S. Highway 202, 2.4 mi (3.9 km) northeast of Gray, and 3.4 mi (5.5 km) upstream from mouth.

DRAINAGE AREA.--13.9 mi² (36.0 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (54.9 m), from topographic map.

REMARKS.--Records fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--14 years, 28.0 ft³/s (0.793 m³/s), 27.36 in/yr (695 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,220 ft³/s (34.6 m³/s) Dec. 27, 1969, gage height, 3.48 ft (1.061 m); maximum gage height, 4.30 ft (1.311 m) Feb. 14, 1972 (backwater from ice); minimum daily discharge, 6.4 ft³/s (0.18 m³/s) Jan. 29, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 175 ft³/s (4.96 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 9	2200	216 6.12	2.05 0.625	Dec. 22	0115	252 7.14	2.15 0.655
Oct. 17	1230	290 8.21	2.25 0.686	Mar. 27	2230	*526 14.9	2.71 0.826
Nov. 9	1045	213 6.03	2.04 0.622	Apr. 20	1200	278 7.87	2.22 0.677
Dec. 12	0715	ice jam	*3.05 0.930	May 17	0115	266 7.53	2.19 0.668

Minimum daily discharge, 12 ft³/s (0.340 m³/s), Aug. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	19	65	26	36	19	60	38	30	17	17	15
2	115	19	67	30	33	19	63	36	29	17	16	14
3	33	20	41	29	31	19	50	35	30	17	16	14
4	21	20	34	28	29	19	44	34	60	17	21	14
5	18	19	29	27	28	19	119	33	35	17	18	13
6	17	19	26	26	27	19	89	33	31	15	17	13
7	16	19	24	25	27	19	69	32	29	15	17	14
8	16	21	22	24	26	19	65	31	35	15	17	13
9	103	154	21	150	25	18	67	57	42	16	17	13
10	105	53	20	110	24	18	66	44	37	17	16	14
11	31	47	20	92	24	19	71	34	30	16	15	15
12	24	34	19	80	23	19	150	32	27	15	15	15
13	21	33	19	70	23	19	93	30	26	15	15	14
14	19	32	18	63	22	23	71	30	29	15	15	14
15	33	27	18	58	22	38	70	31	26	19	14	14
16	28	27	18	53	21	28	67	89	22	20	14	15
17	203	34	17	49	21	25	65	197	21	19	14	14
18	80	41	17	46	21	25	61	68	21	18	14	14
19	37	30	17	43	20	24	60	54	21	17	13	14
20	99	27	17	42	20	24	222	45	21	16	13	14
21	72	25	55	40	20	24	141	44	24	16	14	13
22	40	25	200	38	20	37	73	39	25	15	13	13
23	32	25	85	37	20	36	65	36	23	16	12	13
24	28	32	47	36	19	33	60	34	20	15	15	13
25	26	29	57	35	19	32	57	33	19	15	15	14
26	25	87	72	125	19	28	54	33	19	15	14	14
27	24	58	85	95	19	178	51	33	18	15	14	14
28	23	33	80	74	19	242	47	31	18	17	16	14
29	22	29	50	59	---	116	40	30	17	15	18	14
30	21	27	32	48	---	73	38	29	17	16	15	14
31	20	---	29	41	---	62	---	28	---	16	15	---
TOTAL	1373	1065	1321	1699	658	1293	2248	1353	802	504	475	416
MEAN	44.3	35.5	42.6	54.8	23.5	41.7	74.9	43.6	26.7	16.3	15.3	13.9
MAX	203	154	200	150	36	242	222	197	60	20	21	15
MIN	16	19	17	24	19	18	38	28	17	15	12	13
CFSM	3.19	2.55	3.07	3.94	1.69	3.00	5.39	3.14	1.92	1.17	1.10	1.00
IN.	3.67	2.85	3.54	4.55	1.76	3.46	6.02	3.62	2.15	1.35	1.27	1.11
CAL YR 1977	TOTAL	12802	MEAN 35.1	MAX 600	MIN 12	CFSM 2.53	IN 34.26					
WTR YR 1978	TOTAL	13207	MEAN 36.2	MAX 242	MIN 12	CFSM 2.60	IN 35.34					

ROYAL RIVER BASIN

167

01060000 ROYAL RIVER AT YARMOUTH, ME

LOCATION.--Lat 43°47'57", long 70°10'45", Cumberland County, Hydrologic Unit 01060001, on right bank 150 ft (46 m) upstream from lower highway bridge in Yarmouth.

DRAINAGE AREA.--142 mi² (368 km²).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (3.0 m), from topographic map.

REMARKS.--Records good except those for winter period and period of no gage-height record Oct. 1-4, which are fair. Some diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--29 years, 278 ft³/s (7.873 m³/s), 26.59 in/yr (675 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s (326 m³/s) Mar. 13, 1977, gage height, 8.46 ft (2.579 m), from rating curve extended above 5,200 ft³/s (150 m³/s); minimum, 4.4 ft³/s (0.12 m³/s) Oct. 17, 18, 1962, gage height, 0.71 ft (0.216 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	-	2000 56.6	- -	Jan. 10	0700	3080 87.2	4.57 1.393
Oct. 10	0600	1740 49.3	3.51 1.070	Mar. 29	0100	*3270 92.6	4.70 1.433
Oct. 17	2400	2060 58.3	3.81 1.161	Apr. 6	0500	1770 50.1	3.56 1.085
Oct. 21	1200	2060 58.3	3.81 1.161	Apr. 12	2400	1770 50.1	3.56 1.085
Nov. 9	1300	1780 50.4	3.58 1.091	Apr. 21	0500	2090 59.2	3.84 1.170
Nov. 26	1900	1740 49.3	3.51 1.070	May 17	1500	2070 58.6	3.82 1.164

Minimum discharge, 18 ft³/s (0.51 m³/s) Aug. 17, gage height, 0.89 ft (0.271 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	178	547	275	350	120	1230	259	131	64	54	41
2	1500	175	1110	250	310	115	1260	239	128	62	53	39
3	800	175	770	235	275	115	959	225	125	60	52	38
4	500	193	504	225	250	115	774	208	445	58	52	35
5	291	182	382	215	230	115	735	195	468	58	51	35
6	211	167	301	205	217	115	1700	187	290	58	50	32
7	168	157	275	203	217	110	1330	178	208	56	49	32
8	142	159	265	199	210	115	1010	165	216	54	48	32
9	597	1430	255	1360	203	115	996	358	396	52	47	32
10	1630	1590	235	2870	200	115	950	610	486	52	46	31
11	1050	857	230	1990	190	120	996	390	303	52	44	31
12	522	577	220	1280	185	121	1510	285	212	51	41	35
13	326	428	220	965	175	123	1590	235	169	47	39	36
14	255	430	215	763	170	138	1130	203	203	47	39	35
15	294	360	210	690	165	298	915	191	191	52	36	35
16	442	309	205	610	160	387	806	549	149	73	41	35
17	1500	323	200	560	155	370	697	1900	125	81	30	35
18	1790	522	200	520	150	312	610	1470	112	79	32	34
19	973	461	195	480	145	281	576	798	105	75	35	32
20	1390	343	195	465	140	274	1530	480	99	73	32	31
21	1930	288	230	445	140	257	1900	390	94	70	32	31
22	1280	221	900	425	135	377	1230	353	105	68	34	30
23	680	245	990	415	130	559	822	285	115	66	32	29
24	429	292	800	405	130	555	582	239	121	62	32	29
25	347	341	730	391	125	549	480	212	96	61	36	29
26	299	929	1350	835	125	464	423	199	88	60	38	29
27	274	1510	1120	1370	120	875	380	187	83	58	36	27
28	252	794	757	1180	120	2880	343	178	78	57	41	27
29	227	435	520	932	---	2980	313	161	73	56	42	27
30	205	347	390	650	---	2230	285	146	68	55	47	27
31	194	---	310	415	---	1530	---	135	---	55	44	---
TOTAL	21148	14418	14831	21823	5122	16830	28062	11610	5482	1872	1285	971
MEAN	682	481	478	704	183	543	935	375	183	60.4	41.5	32.4
MAX	1930	1590	1350	2870	350	2980	1900	1900	486	81	54	41
MIN	142	157	195	199	120	110	285	135	68	47	30	27
CFSM	4.80	3.39	3.37	4.96	1.29	3.82	6.59	2.64	1.29	.43	.29	.23
IN.	5.54	3.78	3.89	5.72	1.34	4.41	7.35	3.04	1.44	.49	.34	.25

CAL YR 1977 TOTAL 143806 MEAN 394 MAX 9980 MIN 42 CFSM 2.78 IN 37.67
WTR YR 1978 TOTAL 143454 MEAN 393 MAX 2980 MIN 27 CFSM 2.77 IN 37.58

01064140 PRESUMPCOT RIVER NEAR WEST FALMOUTH, ME

LOCATION.--Lat 43°43'28", long 70°18'12", Cumberland County, Hydrologic Unit 01080001, on right bank, 50 ft (15 m) upstream from bridge on Blackstrap Road, 0.1 mi (0.2 km) downstream from Maine Turnpike, 0.6 mi (1.0 km) downstream from Meader Brook, 0.9 mi (1.4 km) upstream from Piscataqua River, and 1.5 mi (2.4 km) south of West Falmouth.

DRAINAGE AREA.--590 mi² (1,528 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 11.15 ft (3.399 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Sebago Lake and many small powerplants upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s (354 m³/s) Mar. 14, 1977, gage height, 21.11 ft (6.434 m); minimum daily, 39 ft³/s (1.10 m³/s) July 9, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,080 ft³/s (172 m³/s) Jan. 9, gage height, 14.21 ft (4.331 m); minimum daily, 122 ft³/s (3.46 m³/s) July 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	752	841	1840	1250	1960	1080	2100	1550	1340	828	1010	728
2	1800	849	2100	1220	2140	1070	2310	1980	1080	464	977	835
3	1100	941	1640	1200	2710	1060	1900	1980	966	122	918	828
4	897	928	1480	1190	2560	1060	1690	1970	1390	182	914	846
5	756	970	1390	1190	2490	1060	2290	1830	1260	337	911	735
6	663	920	1290	1150	2500	1050	2440	1370	1130	292	940	700
7	658	891	1320	1160	2520	1060	2080	1370	1020	206	914	725
8	661	903	1230	1150	2420	1070	1810	1320	1070	608	922	703
9	1190	2860	1200	3360	2400	1060	1820	1520	1260	818	885	696
10	2260	2090	1180	3820	2430	1020	1770	1590	1490	835	871	703
11	1340	1550	1160	2030	2410	1080	1830	1370	1230	944	874	700
12	1020	1420	1090	1580	2390	1070	2390	1220	1070	874	889	925
13	933	1310	1050	1430	2370	1030	2290	1050	1190	955	878	728
14	847	1230	1050	1610	2370	1070	1930	1030	1340	907	878	689
15	731	1140	1220	1520	2370	1410	1800	1150	1070	853	878	608
16	905	1310	1380	1330	2370	1490	1670	2810	1050	867	878	638
17	3020	1070	1250	1300	2360	1360	1570	4260	1020	890	835	700
18	2690	1440	1190	1290	2350	1270	1450	2470	994	915	951	714
19	1580	1310	1160	1270	2050	1230	1440	1690	980	920	892	721
20	1960	1240	1150	1280	871	1230	2860	1540	966	925	818	703
21	1950	1080	1410	1310	989	1100	2650	1670	933	950	807	638
22	1490	1120	4070	1250	922	1300	1930	2350	1070	975	846	665
23	1220	1120	2800	1230	918	1570	1620	2240	1000	980	842	707
24	1010	1210	1890	1350	901	1520	1470	1830	885	980	853	693
25	935	1250	1780	1390	935	1420	1390	1720	907	980	864	761
26	951	2260	2200	1710	931	1280	1340	1760	900	985	853	804
27	893	2490	1640	2680	936	2500	1160	1470	892	985	853	696
28	877	1660	1530	2670	1050	4010	1550	1400	896	990	857	689
29	871	1430	1310	2410	---	3050	1580	1380	892	1010	889	750
30	891	1360	1270	2220	---	2520	1540	1360	885	984	903	686
31	856	---	1280	2060	---	2110	---	1330	---	991	772	---
TOTAL	37707	40193	47550	51610	53623	45210	55670	53580	32176	24552	27372	21714
MEAN	1216	1340	1534	1665	1915	1458	1856	1728	1073	792	883	724
MAX	3020	2860	4070	3820	2710	4010	2860	4260	1490	1010	1010	925
MIN	658	841	1050	1150	871	1020	1160	1030	885	122	772	608
CAL YR 1977	TOTAL	428932	MEAN	1175	MAX	9760	MIN	90				
WTR YR 1978	TOTAL	490957	MEAN	1345	MAX	4260	MIN	122				

01064140 PRESUMPSHOT RIVER NEAR WEST FALMOUTH, ME--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-74; 1976 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1976 to current year.

pH: July 1976 to current year.

WATER TEMPERATURES: July 1976 to current year.

DISSOLVED OXYGEN: July 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1976.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--A dissolved oxygen of 1.6 mg/L was observed July 9, 1976.

REMARKS.--Interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 296 micromhos Sept. 16; minimum, 30 micromhos June 17-24, 1977.

pH: Maximum, 9.4 units Dec. 7, 1977; minimum, 5.3 units May 22, 1978.

WATER TEMPERATURES: Maximum, 29.0°C July 21, 1977; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 14.0 mg/L Feb. 15, 1978; minimum, 4.5 mg/L July 18, 1976.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 195 micromhos Oct. 7; minimum, 40 micromhos Nov. 26, Feb. 6-8.

pH: Maximum, 7.4 units July 19; minimum, 5.3 units May 22.

WATER TEMPERATURES: Maximum, 27.5°C July 23-24; minimum, 0.0°C on many days during winter period.

DISSOLVED OXYGEN: Maximum, 14.0 mg/L Feb. 15; minimum, 6.8 mg/L Aug. 17.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	125	110	117	101	95	99	118	80	92	84	78	81
2	---	---	---	105	94	96	85	71	81	84	75	80
3	---	---	---	---	---	---	85	80	82	81	74	79
4	148	101	120	98	80	88	81	74	77	85	75	81
5	138	110	127	85	74	80	85	74	79	84	74	80
6	159	105	128	91	84	88	85	80	81	95	71	85
7	195	90	118	90	68	82	85	70	78	85	69	82
8	171	104	124	98	85	91	95	78	83	85	65	77
9	130	71	110	95	64	76	98	80	86	---	---	---
10	90	80	86	84	74	78	90	78	86	80	65	75
11	---	---	---	85	78	82	91	81	87	85	75	82
12	120	94	107	84	78	80	90	84	86	91	71	82
13	121	99	108	89	64	78	85	78	83	89	74	79
14	124	91	105	91	80	84	---	---	---	98	84	90
15	131	94	123	81	69	78	141	105	127	---	---	---
16	121	110	116	91	65	78	105	90	97	---	---	---
17	---	---	---	101	81	94	94	80	89	---	---	---
18	---	---	---	85	75	79	91	81	89	88	80	83
19	---	---	---	80	74	77	---	---	---	85	74	80
20	91	79	83	75	70	74	---	---	---	81	70	77
21	84	80	81	85	65	77	---	---	---	85	75	80
22	89	80	83	94	70	86	---	---	---	89	80	85
23	91	84	87	94	81	88	---	---	---	89	81	85
24	131	85	97	90	70	84	---	---	---	84	74	80
25	105	89	96	91	80	85	---	---	---	105	74	83
26	104	90	96	85	40	76	---	---	---	---	---	---
27	100	90	93	80	69	74	---	---	---	---	---	---
28	105	90	96	81	70	76	91	80	84	71	68	70
29	108	88	98	85	79	82	95	81	90	70	65	68
30	104	71	96	84	80	81	95	84	90	71	65	69
31	109	94	100	---	---	---	85	80	83	70	64	66
MONTH	195	71	104	105	40	82	141	70	87	105	64	79

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	71	61	66	81	75	78	96	77	85	78	68	73
2	68	58	64	82	77	79	88	80	83	71	55	67
3	64	44	52	89	79	84	88	81	84	72	65	67
4	48	41	44	89	82	85	87	76	83	72	61	66
5	48	41	45	86	81	84	99	72	84	81	62	68
6	45	40	43	90	80	84	78	70	75	84	75	79
7	48	40	44	91	81	86	81	74	78	77	70	73
8	45	40	44	91	74	83	86	70	79	74	62	70
9	45	41	44	95	79	89	87	67	78	91	72	78
10	59	44	52	110	86	94	87	81	86	80	75	77
11	61	54	58	96	79	89	84	73	79	83	73	77
12	58	51	55	93	85	89	89	73	78	92	78	82
13	59	54	56	98	86	91	77	69	72	93	78	88
14	58	51	53	124	85	98	79	71	76	96	78	89
15	53	47	51	133	83	97	76	66	70	110	86	93
16	56	51	54	93	78	88	76	70	73	90	71	78
17	57	53	56	94	83	89	83	72	76	74	60	64
18	58	54	56	93	87	90	80	73	77	---	---	---
19	81	54	61	104	86	93	89	73	80	---	---	---
20	115	86	102	95	88	91	101	67	76	---	---	---
21	98	81	91	109	87	98	76	68	72	---	---	---
22	114	80	96	103	86	98	80	73	77	65	62	63
23	101	89	93	122	86	98	81	58	77	66	60	62
24	102	84	92	95	84	89	84	75	79	71	62	66
25	97	81	90	95	85	90	89	72	80	70	61	65
26	90	82	86	102	75	86	96	79	90	68	64	66
27	92	83	88	125	71	102	159	82	98	76	69	72
28	85	78	82	75	65	69	81	61	73	76	72	74
29	---	---	---	79	70	75	71	62	68	75	66	71
30	---	---	---	79	74	76	76	63	72	85	69	79
31	---	---	---	89	68	82	---	---	---	85	69	74
MONTH	115	40	65	133	65	88	159	58	79	110	55	73

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	77	60	70	89	73	82	90	66	75	83	62	77
2	82	70	79	146	78	101	88	74	79	---	---	---
3	99	72	81	---	---	---	79	69	74	---	---	---
4	111	69	81	---	---	---	88	72	80	---	---	---
5	86	75	81	91	70	80	---	---	---	82	71	76
6	83	72	79	86	72	78	86	51	75	83	72	80
7	87	79	83	132	95	109	86	47	73	85	75	79
8	87	80	83	127	68	88	89	47	74	85	69	79
9	91	70	78	119	73	99	---	---	---	85	75	82
10	77	71	73	115	70	78	---	---	---	81	70	77
11	77	69	72	88	70	80	81	69	76	89	71	80
12	79	68	76	92	71	85	78	70	75	88	67	74
13	76	67	70	94	60	82	---	---	---	94	69	86
14	69	58	65	101	73	88	---	---	---	95	62	84
15	79	71	75	104	86	94	---	---	---	110	91	98
16	75	62	69	89	74	83	---	---	---	102	77	87
17	81	59	72	89	71	81	---	---	---	86	54	66
18	85	70	81	87	61	76	---	---	---	84	53	66
19	95	85	90	93	61	79	---	---	---	83	52	75
20	96	89	93	97	66	82	---	---	---	89	55	73
21	95	86	90	88	65	79	---	---	---	91	47	69
22	93	79	83	86	59	76	---	---	---	91	45	73
23	85	78	82	93	66	83	80	73	76	95	80	89
24	91	83	85	98	69	91	78	66	73	94	76	85
25	87	76	83	87	72	82	78	63	73	82	67	77
26	86	76	83	93	71	88	76	69	72	80	66	76
27	---	---	---	88	63	78	77	66	72	100	81	90
28	---	---	---	86	74	79	84	67	73	100	84	92
29	---	---	---	84	74	79	81	70	74	87	79	82
30	100	80	90	85	75	80	78	72	76	91	78	84
31	---	---	---	78	65	74	128	69	79	---	---	---
MONTH	111	58	80	146	59	84	128	47	75	110	45	80
YEAR	195	40	81									

PRESUMPCOT RIVER BASIN

171

01064140 PRESUMPCOT RIVER NEAR WEST FALMOUTH, ME--Continued

PH (UNITS). WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.6	6.3	6.5	6.4	6.3	6.3	6.4	6.3	6.4	6.7	6.6	6.7
2	---	---	---	6.4	6.3	6.3	6.4	6.3	6.4	6.7	6.6	6.7
3	---	---	---	---	---	---	6.5	6.3	6.4	6.7	6.5	6.6
4	---	---	---	6.5	6.3	6.4	6.4	6.3	6.3	6.7	6.5	6.7
5	6.3	6.1	6.2	6.3	6.1	6.2	6.4	6.3	6.4	6.7	6.6	6.6
6	6.3	6.0	6.1	6.2	6.1	6.2	6.4	6.3	6.4	6.8	6.6	6.7
7	6.3	5.9	6.0	6.2	6.1	6.2	6.4	6.3	6.3	6.7	6.6	6.7
8	6.2	5.9	6.0	6.3	6.1	6.3	6.3	6.2	6.3	6.7	6.6	6.7
9	---	---	---	6.7	6.1	6.3	6.2	6.2	6.2	---	---	---
10	---	---	---	6.3	6.3	6.3	6.2	6.2	6.2	7.0	6.8	6.9
11	---	---	---	6.3	6.3	6.3	6.3	6.2	6.2	7.0	6.9	6.9
12	---	---	---	6.3	6.3	6.3	6.5	6.3	6.4	7.0	6.8	6.9
13	6.3	6.2	6.2	6.4	6.2	6.3	6.5	6.3	6.4	7.0	6.8	6.9
14	6.3	6.1	6.2	6.4	6.3	6.3	---	---	---	7.0	6.9	6.9
15	6.3	6.1	6.2	6.3	6.3	6.3	6.3	6.2	6.3	---	---	---
16	6.3	6.2	6.2	6.4	6.3	6.3	6.6	6.2	6.4	---	---	---
17	---	---	---	6.5	6.2	6.4	6.5	6.5	6.5	---	---	---
18	---	---	---	6.3	6.2	6.3	6.5	6.4	6.5	6.8	6.7	6.8
19	---	---	---	6.3	6.3	6.3	---	---	---	6.8	6.7	6.7
20	6.9	6.8	6.9	6.3	6.2	6.2	---	---	---	7.1	6.7	6.9
21	6.9	6.6	6.7	6.4	6.2	6.2	---	---	---	7.1	7.0	7.0
22	6.6	6.4	6.5	6.4	6.3	6.4	---	---	---	7.0	6.9	6.9
23	6.5	6.4	6.4	6.4	6.2	6.3	---	---	---	6.9	6.8	6.9
24	6.5	6.4	6.4	6.3	6.1	6.2	---	---	---	7.0	6.8	6.9
25	6.4	6.3	6.4	6.3	6.2	6.2	---	---	---	6.9	6.8	6.8
26	---	---	---	6.6	6.2	6.3	---	---	---	---	---	---
27	6.9	6.5	6.7	6.5	6.4	6.5	---	---	---	---	---	---
28	6.6	6.3	6.5	6.4	6.3	6.3	6.3	6.1	6.2	6.7	6.6	6.6
29	6.5	6.4	6.5	6.4	6.3	6.3	6.3	6.3	6.3	6.7	6.6	6.6
30	6.5	6.3	6.4	6.4	6.3	6.4	6.7	6.3	6.6	6.8	6.6	6.7
31	6.4	6.3	6.4	---	---	---	6.7	6.6	6.7	6.7	6.5	6.6
MONTH	6.9	5.9	6.4	6.7	6.1	6.3	6.7	6.1	6.4	7.1	6.5	6.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	6.7	6.6	6.6	6.6	6.6	6.6	6.8	6.7	6.7	6.8	6.6	6.6
2	6.8	6.5	6.7	6.6	6.6	6.6	6.7	6.7	6.7	6.8	6.6	6.7
3	6.8	6.6	6.6	6.7	6.6	6.6	6.8	6.7	6.7	6.8	6.7	6.8
4	---	---	---	6.7	6.6	6.7	6.8	6.7	6.7	6.8	6.7	6.8
5	---	---	---	6.7	6.6	6.6	6.8	6.6	6.7	6.8	6.7	6.7
6	---	---	---	6.6	6.6	6.6	6.7	6.6	6.6	6.8	6.7	6.8
7	---	---	---	6.6	6.6	6.6	6.7	6.6	6.6	6.7	6.7	6.7
8	---	---	---	6.7	6.5	6.6	6.7	6.6	6.7	6.7	6.6	6.7
9	---	---	---	6.7	6.6	6.6	6.7	6.6	6.7	6.8	6.7	6.7
10	---	---	---	6.7	6.6	6.6	6.7	6.7	6.7	6.8	6.7	6.7
11	---	---	---	6.7	6.5	6.6	6.7	6.6	6.7	6.7	6.7	6.7
12	---	---	---	6.6	6.5	6.6	6.7	6.6	6.6	6.7	6.7	6.7
13	---	---	---	6.6	6.5	6.5	6.6	6.6	6.6	6.8	6.7	6.7
14	---	---	---	6.7	6.5	6.5	6.6	6.6	6.6	6.8	6.7	6.7
15	6.9	6.8	6.8	6.8	6.5	6.5	6.7	6.6	6.6	6.8	6.7	6.7
16	6.9	6.8	6.9	6.5	6.5	6.5	6.7	6.6	6.7	6.9	6.7	6.7
17	6.8	6.7	6.8	6.5	6.5	6.5	6.6	6.6	6.6	7.0	6.7	6.8
18	6.8	6.8	6.8	6.5	6.5	6.5	6.7	6.6	6.6	---	---	---
19	6.8	6.7	6.8	6.5	6.4	6.4	6.7	6.6	6.6	---	---	---
20	6.9	6.8	6.9	6.4	6.4	6.4	7.0	6.5	6.6	---	---	---
21	6.9	6.7	6.8	6.5	6.4	6.4	6.6	6.5	6.6	---	---	---
22	6.9	6.7	6.8	6.5	6.4	6.4	6.6	6.6	6.6	6.8	5.3	6.4
23	6.8	6.7	6.7	6.6	6.4	6.5	6.6	6.5	6.6	6.8	6.8	6.8
24	6.9	6.7	6.7	6.4	6.4	6.4	6.6	6.6	6.6	6.9	6.8	6.8
25	6.7	6.6	6.7	6.5	6.4	6.4	6.7	6.6	6.6	6.9	6.8	6.8
26	6.7	6.6	6.6	6.5	6.4	6.4	6.7	6.6	6.7	6.8	6.8	6.8
27	6.7	6.6	6.6	6.6	6.4	6.5	6.8	6.6	6.7	6.9	6.8	6.8
28	6.6	6.6	6.6	6.6	6.5	6.5	6.6	6.6	6.6	6.9	6.8	6.8
29	---	---	---	6.7	6.6	6.6	6.6	6.5	6.6	6.8	6.7	6.8
30	---	---	---	6.7	6.6	6.7	6.7	6.5	6.6	6.9	6.7	6.8
31	---	---	---	6.7	6.7	6.7	---	---	---	6.8	6.7	6.8
MONTH	6.9	6.5	6.7	6.8	6.4	6.5	7.0	6.5	6.6	7.0	5.3	6.7

PRESUMPCOT RIVER BASIN

01064140 PRESUMPCOT RIVER NEAR WEST FALMOUTH, ME--Continued

PH (UNITS), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	6.8	6.7	6.7	7.0	6.9	6.9	6.8	6.7	6.8	6.7	6.5	6.6
2	6.8	6.7	6.8	7.0	6.9	6.9	6.8	6.7	6.8	6.8	6.5	6.6
3	6.8	6.7	6.8	---	---	---	6.8	6.7	6.7	6.8	6.5	6.6
4	7.0	6.7	6.8	---	---	---	6.9	6.7	6.8	6.9	6.5	6.7
5	7.0	6.8	6.8	7.0	6.7	6.8	7.0	6.8	6.9	6.9	6.7	6.8
6	6.9	6.8	6.8	7.0	6.6	6.8	6.9	6.7	6.8	6.8	6.6	6.7
7	6.9	6.9	6.9	7.0	6.6	6.8	6.9	6.7	6.8	6.8	6.6	6.7
8	6.9	6.8	6.8	7.1	6.7	6.9	6.9	6.7	6.8	6.8	6.6	6.7
9	7.0	6.8	6.8	7.1	6.9	7.0	6.9	6.8	6.8	6.8	6.6	6.7
10	6.9	6.8	6.8	7.1	6.8	6.9	7.0	6.7	6.9	6.8	6.7	6.7
11	6.8	6.8	6.8	7.1	6.8	7.0	6.9	6.7	6.8	6.7	6.6	6.7
12	6.8	6.8	6.8	7.0	6.8	6.9	6.8	6.7	6.7	6.7	6.6	6.7
13	6.8	6.7	6.7	6.9	6.8	6.9	6.9	6.6	6.8	6.8	6.6	6.7
14	6.8	6.7	6.7	6.9	6.8	6.9	7.1	6.7	6.9	6.8	6.6	6.7
15	6.9	6.8	6.9	6.8	6.7	6.8	7.0	6.8	6.9	6.8	6.7	6.7
16	7.0	6.8	6.9	6.8	6.7	6.7	6.9	6.7	6.8	6.8	6.6	6.7
17	7.1	6.9	7.0	6.8	6.7	6.8	6.9	6.7	6.8	6.7	6.6	6.7
18	7.0	6.9	7.0	6.9	6.8	6.8	6.9	6.7	6.8	6.7	6.6	6.6
19	7.2	7.1	7.1	7.4	6.7	7.0	6.9	6.7	6.8	6.7	6.6	6.6
20	7.1	7.0	7.0	7.0	6.8	6.9	6.8	6.7	6.7	6.8	6.6	6.7
21	7.1	7.0	7.0	7.0	6.8	6.9	6.8	6.7	6.7	6.8	6.6	6.7
22	7.1	6.9	7.0	7.0	6.8	6.9	---	---	---	7.0	6.6	6.9
23	7.0	6.9	7.0	7.0	6.7	6.9	6.9	6.7	6.8	6.9	6.7	6.8
24	7.0	6.9	6.9	6.9	6.7	6.8	6.8	6.6	6.7	6.8	6.7	6.7
25	7.0	6.8	6.9	6.8	6.6	6.7	6.7	6.6	6.6	6.8	6.7	6.7
26	6.9	6.8	6.9	6.8	6.6	6.7	6.8	6.6	6.7	6.8	6.7	6.8
27	6.9	6.9	6.9	6.8	6.5	6.7	6.9	6.6	6.7	6.8	6.7	6.7
28	---	---	---	6.9	6.7	6.8	6.7	6.6	6.6	6.8	6.7	6.8
29	7.1	7.0	7.0	6.8	6.7	6.8	6.9	6.6	6.7	6.8	6.7	6.7
30	7.0	6.9	7.0	6.9	6.7	6.8	6.8	6.7	6.8	6.8	6.7	6.7
31	---	---	---	6.8	6.7	6.7	6.7	6.6	6.6	---	---	---
MONTH	7.2	6.7	6.9	7.4	6.5	6.8	7.1	6.6	6.8	7.0	6.5	6.7
YEAR	7.4	5.3	6.6									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.0	15.5	15.5	11.0	10.0	10.5	6.0	5.0	5.0	2.0	1.0	1.5
2	---	---	---	11.0	10.0	10.5	5.0	4.5	5.0	1.0	.5	1.0
3	---	---	---	---	---	---	5.5	4.0	4.5	1.0	.5	1.0
4	15.0	14.5	15.0	13.0	11.5	12.0	6.0	5.0	5.5	1.0	.0	.5
5	15.5	14.0	14.5	13.0	12.5	13.0	5.5	3.5	4.5	2.0	.5	1.0
6	14.5	14.0	14.5	13.0	12.5	12.5	4.0	2.5	3.0	2.0	1.5	1.5
7	14.5	13.5	14.0	12.5	12.0	12.0	3.0	2.0	2.5	1.5	.5	1.0
8	13.5	12.5	13.0	12.0	11.5	12.0	3.0	1.5	2.0	1.5	.5	1.0
9	13.0	12.5	12.5	13.0	11.0	11.0	2.0	1.0	1.5	---	---	---
10	12.0	11.5	12.0	13.5	11.5	12.0	1.0	.0	.5	.0	.0	.0
11	---	---	---	12.5	11.5	12.0	1.0	.0	.5	.5	.0	.0
12	12.5	12.0	12.5	11.5	10.0	11.0	2.0	1.0	1.5	.5	.0	.5
13	12.5	12.0	12.0	10.0	9.0	9.5	1.5	1.0	1.5	.5	.0	.0
14	12.0	11.5	11.5	9.0	8.0	8.5	---	---	---	.5	.0	.0
15	12.0	11.0	11.5	8.0	7.0	7.5	1.5	1.0	1.0	---	---	---
16	11.0	10.5	11.0	8.5	7.0	7.5	2.0	1.0	1.5	---	---	---
17	---	---	---	9.0	8.0	8.5	2.0	1.0	1.5	---	---	---
18	---	---	---	8.5	7.5	8.0	4.0	2.0	2.5	1.0	.0	.5
19	---	---	---	8.0	7.0	7.5	---	---	---	1.0	.5	1.0
20	11.5	11.0	11.0	7.5	7.0	7.0	---	---	---	.5	.0	.5
21	12.0	11.0	11.0	8.0	7.0	7.0	---	---	---	.5	.0	.0
22	12.0	11.0	11.5	8.0	7.0	7.5	---	---	---	1.5	.5	.5
23	11.0	10.0	11.0	7.5	7.0	7.0	---	---	---	1.5	.5	.5
24	10.5	9.5	10.0	7.5	7.0	7.0	---	---	---	1.0	.0	.5
25	10.5	9.0	10.0	7.0	6.5	7.0	---	---	---	2.0	.5	1.0
26	11.0	10.0	10.5	7.5	6.0	7.0	---	---	---	---	---	---
27	12.0	11.0	11.5	---	---	---	---	---	---	---	---	---
28	12.0	11.0	11.5	---	---	---	1.5	1.0	1.0	1.0	.5	1.0
29	11.5	10.5	11.0	5.5	5.0	5.0	1.5	1.0	1.0	1.5	.5	1.0
30	11.0	10.0	10.5	5.5	4.5	5.0	1.5	1.0	1.0	1.5	.5	1.0
31	11.5	9.5	10.5	---	---	---	2.5	1.5	2.0	2.0	.5	1.0
MONTH	16.0	9.0	12.0	13.5	4.5	9.0	6.0	.0	2.5	2.0	.0	.5

PRESUMPCOT RIVER BASIN

01064140 PRESUMPCOT RIVER NEAR WEST FALMOUTH, ME--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.0	8.6	8.8	10.8	10.4	10.6	11.6	11.3	11.5	12.2	12.1	12.1
2	---	---	---	10.6	10.2	10.5	11.6	11.4	11.5	12.2	12.0	12.1
3	---	---	---	---	---	---	11.7	11.5	11.6	12.9	12.2	12.6
4	---	---	---	9.8	9.6	9.7	11.6	11.4	11.5	13.2	12.9	13.0
5	8.9	8.3	8.6	9.8	9.6	9.7	11.6	11.4	11.6	13.2	12.9	13.0
6	8.9	8.7	8.8	9.8	9.6	9.7	12.0	11.6	11.8	13.1	13.0	13.1
7	9.0	8.8	8.9	9.9	9.8	9.9	12.2	11.9	12.0	13.4	13.1	13.2
8	9.3	9.0	9.1	10.0	9.8	9.9	12.4	12.0	12.2	13.4	13.2	13.3
9	---	---	---	---	---	---	12.2	11.8	12.0	---	---	---
10	---	---	---	9.8	9.6	9.6	12.2	11.9	12.1	---	---	---
11	---	---	---	9.5	9.1	9.3	12.4	12.2	12.3	13.4	12.5	12.9
12	---	---	---	9.9	9.3	9.6	12.8	12.4	12.7	12.9	12.6	12.7
13	9.5	9.2	9.4	9.9	9.7	9.8	---	---	---	13.1	12.7	12.9
14	9.7	9.2	9.5	10.6	10.0	10.4	---	---	---	13.5	12.5	12.8
15	9.4	9.0	9.2	10.8	10.6	10.6	13.9	13.7	13.8	13.0	12.5	12.8
16	9.5	9.2	9.4	10.9	10.4	10.6	13.8	12.5	13.0	---	---	---
17	---	---	---	10.5	10.1	10.3	12.7	11.9	12.3	---	---	---
18	---	---	---	10.5	10.2	10.3	12.2	11.7	12.0	12.6	12.2	12.4
19	---	---	---	10.8	10.4	10.6	---	---	---	12.7	12.4	12.5
20	10.2	9.9	10.1	10.9	10.7	10.8	---	---	---	12.5	11.5	11.9
21	---	---	---	10.9	10.6	10.8	---	---	---	11.7	11.4	11.5
22	9.7	9.4	9.6	10.8	10.5	10.6	---	---	---	11.7	11.5	11.6
23	10.2	9.7	9.9	10.8	10.4	10.6	---	---	---	11.7	11.6	11.6
24	10.5	10.0	10.2	10.5	10.3	10.4	---	---	---	12.0	11.6	11.7
25	10.4	10.0	10.2	10.6	10.4	10.5	---	---	---	11.8	11.4	11.6
26	---	---	---	10.4	9.8	10.2	---	---	---	---	---	---
27	9.8	9.2	9.6	11.2	10.2	10.8	---	---	---	---	---	---
28	10.0	9.6	9.8	11.9	11.0	11.5	11.9	11.7	11.8	11.6	11.5	11.6
29	10.3	10.0	10.2	11.9	11.7	11.8	11.8	11.7	11.7	11.7	11.4	11.5
30	10.5	10.3	10.4	11.8	11.6	11.7	12.4	11.7	12.2	11.5	11.3	11.4
31	10.7	10.5	10.6	---	---	---	12.3	12.1	12.2	11.9	11.3	11.6
MONTH	10.7	8.3	9.6	11.9	9.1	10.4	13.9	11.3	12.1	13.5	11.3	12.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	12.2	11.8	12.0	12.8	12.6	12.7	11.2	10.8	11.0	10.9	10.6	10.8
2	12.3	12.0	12.1	12.7	12.6	12.7	11.6	11.1	11.3	11.0	10.7	10.9
3	13.8	12.0	12.8	12.9	12.7	12.8	11.8	11.2	11.5	11.2	10.8	11.0
4	13.7	13.1	13.3	12.7	12.3	12.4	11.5	10.8	11.1	11.1	10.7	11.0
5	13.4	13.1	13.2	12.6	12.4	12.5	11.3	10.8	11.0	11.0	10.7	10.9
6	13.2	13.0	13.1	12.6	12.5	12.5	12.1	11.1	11.6	10.8	10.5	10.7
7	13.0	12.8	12.9	12.7	12.4	12.6	11.9	11.4	11.6	10.8	10.5	10.6
8	13.2	12.9	13.0	12.8	12.3	12.6	12.0	11.6	11.8	10.7	10.4	10.6
9	13.4	13.1	13.2	12.5	12.0	12.3	12.2	11.4	11.9	10.3	9.9	10.2
10	13.7	12.9	13.3	12.5	12.1	12.2	---	---	---	10.3	9.9	10.1
11	13.3	13.0	13.1	12.3	12.1	12.2	---	---	---	10.0	9.8	10.0
12	13.5	13.0	13.2	12.2	12.0	12.1	---	---	---	10.0	9.6	9.9
13	---	---	---	12.4	12.0	12.2	---	---	---	9.9	9.7	9.7
14	---	---	---	12.2	11.8	12.0	---	---	---	9.7	9.4	9.6
15	14.0	13.7	13.8	12.1	11.7	12.0	11.8	11.5	11.7	9.6	9.3	9.5
16	13.8	13.4	13.6	12.4	12.1	12.3	11.9	11.5	11.7	---	---	---
17	13.6	13.1	13.4	12.2	12.0	12.1	12.0	11.7	11.8	---	---	---
18	13.4	13.0	13.2	12.1	11.8	11.9	12.0	11.8	11.9	---	---	---
19	13.1	12.4	12.8	12.0	11.4	11.7	12.0	11.4	11.9	---	---	---
20	12.4	12.0	12.3	11.8	11.6	11.7	---	---	---	---	---	---
21	12.5	12.1	12.3	11.8	11.1	11.4	---	---	---	---	---	---
22	12.4	11.8	12.1	11.4	11.0	11.1	---	---	---	9.9	9.2	9.5
23	12.2	11.7	12.0	11.6	11.3	11.4	---	---	---	9.8	8.5	9.2
24	12.4	11.9	12.2	11.5	11.1	11.3	---	---	---	8.6	8.4	8.5
25	12.6	12.2	12.4	11.6	11.4	11.5	---	---	---	8.7	8.5	8.6
26	12.5	12.2	12.4	11.6	11.4	11.5	11.1	10.9	11.0	8.9	8.6	8.8
27	12.5	12.2	12.3	11.6	10.5	11.3	11.0	9.8	10.4	9.0	8.8	8.9
28	12.6	12.5	12.6	---	---	---	10.9	10.3	10.6	8.8	8.6	8.7
29	---	---	---	---	---	---	10.8	10.6	10.7	8.8	8.6	8.7
30	---	---	---	---	---	---	10.8	10.6	10.6	8.6	8.4	8.5
31	---	---	---	---	---	---	---	---	---	8.6	8.3	8.5
MONTH	14.0	11.7	12.8	12.9	10.5	12.0	12.2	9.8	11.3	11.2	8.3	9.7

01064140 PRESUMPCOT RIVER NEAR WEST FALMOUTH, ME--Continued

[illegible]

SACO RIVER BASIN

01064500 SACO RIVER NEAR CONWAY, NH

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

DRAINAGE AREA.--386 mi² (1,000 km²).

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

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

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

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

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

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

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

Date	Time	Discharge (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. 2	0800	9920	281	8.39	2.557	Jan 9	2200	*20400	578	11.41	3.478
Oct. 10	0100	15500	439	10.08	3.072	May 9	1600	10600	300	8.63	2.630
Oct. 17	1700	14200	402	9.70	2.957	May 17	1000	14900	422	9.92	3.024

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	754	774	590	740	310	727	3040	1350	472	182	147
2	6220	687	1020	560	690	305	723	2490	1080	412	185	137
3	2560	651	933	530	650	305	678	2580	1350	381	179	130
4	1600	624	819	520	610	300	653	2560	1430	361	209	126
5	1220	635	733	500	590	295	712	2810	1060	346	211	121
6	996	613	650	480	560	295	849	2930	977	329	188	120
7	846	580	610	460	540	290	840	3260	856	310	178	116
8	739	577	580	450	520	290	794	4260	2300	294	166	121
9	4170	2660	550	3000	500	285	782	8250	2040	282	164	116
10	8320	1870	530	9280	485	285	826	7840	1960	274	158	112
11	3060	2680	510	3620	470	285	1010	5530	1310	261	150	116
12	2090	2190	490	2680	455	290	1440	4990	1060	251	153	166
13	1630	1520	480	2230	445	300	1610	4890	926	243	157	180
14	1340	1260	480	1600	435	350	1830	4660	1020	231	147	152
15	1620	1090	885	1350	420	540	1840	5240	1010	258	141	139
16	1660	997	1440	1200	410	490	1660	9720	816	325	136	138
17	8370	964	1190	1050	400	450	1510	11800	712	283	128	135
18	6440	1180	877	970	390	420	1490	6130	648	371	125	122
19	3400	1050	795	900	380	390	1750	4500	625	290	123	120
20	2670	900	700	830	370	380	2100	4660	774	254	119	117
21	2170	824	683	770	365	379	2590	4560	927	238	116	113
22	1780	850	906	730	355	500	3030	3280	1040	227	112	110
23	1520	815	861	1500	345	662	3110	2700	1200	222	110	111
24	1320	822	740	3000	340	483	3020	2420	818	235	140	109
25	1190	859	862	2000	335	430	3100	2190	672	213	190	104
26	1090	874	1760	1450	330	421	3180	1960	593	198	154	105
27	1010	951	958	1200	325	466	3860	1790	542	190	136	108
28	931	758	767	1050	320	1100	4200	1580	508	200	165	110
29	857	735	700	950	---	988	4520	1410	483	199	228	111
30	795	684	660	870	---	834	4380	1330	517	192	183	114
31	773	---	620	800	---	745	---	1220	---	185	157	---
TOTAL	73427	31654	24563	47120	12775	13863	58814	126580	30604	8527	4890	3726
MEAN	2369	1055	792	1520	456	447	1960	4083	1020	275	158	124
MAX	8370	2680	1760	9280	740	1100	4520	11800	2300	472	228	180
MIN	739	577	480	450	320	285	653	1220	483	185	110	104
CFSM	6.14	2.73	2.05	3.94	1.18	1.16	5.08	10.6	2.64	.71	.41	.32
IN.	7.08	3.05	2.37	4.54	1.23	1.34	5.67	12.20	2.95	.82	.47	.36
CAL YR 1977	TOTAL	385953	MEAN	1057	MAX	13200	MIN 125	CFSM 2.74	IN 37.20			
WTR YR 1978	TOTAL	436543	MEAN	1196	MAX	11800	MIN 104	CFSM 3.10	IN 42.07			

SACO RIVER BASIN

177

01065000 OSSIPEE RIVER AT EFFINGHAM FALLS, NH

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

DRAINAGE AREA.--330 mi² (855 km²).

PERIOD OF RECORD.--Discharge: September 1942 to current year.

Water-quality records: Water year 1955.

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

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

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

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

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

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

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

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

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

SACO RIVER BASIN

01065500 OSSIPEE RIVER AT CORNISH, ME

LOCATION.--Lat 43°48'26", long 70°47'55", Oxford County, Hydrologic Unit 01060002, on left bank 100 ft (30 m) downstream from highway bridge in Cornish and 1.3 mi (2.1 km) upstream from mouth.

DRAINAGE AREA.--453 mi² (1,173 km²).

PERIOD OF RECORD.--July 1916 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1301: 1927-29(M).

GAGE.--Water-stage recorder. Datum of gage is 276.1 ft (84.16 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 21, 1929, nonrecording gage, and Aug. 21, 1929, to Sept. 30, 1942, water-stage recorder at same site and datum 1 ft (0.3 m) higher.

REMARKS.--Records good except those for winter period, which are fair. Flow partly regulated by mill at Kezar Falls and by Ossipee and Silver Lakes, and Pine River, Bickford, and Colcord Ponds, combined capacity, 1,600,000,000 ft³ (45,300,000 m³). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--62 years, 878 ft³/s (24.86 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,200 ft³/s (487 m³/s) Mar. 21, 1936, gage height, 16.32 ft (4.974 m, present datum), from rating curve extended above 7,500 ft³/s (210 m³/s); minimum daily, 65 ft³/s (1.84 m³/s) Sept. 8, 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,760 ft³/s (106 m³/s) Mar. 17, gage height, 6.53 ft (1.990 m); minimum daily, 161 ft³/s (4.56 m³/s) Sept. 11.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	486	1160	1110	1900	730	1590	2640	1030	360	196	183
2	1970	457	1450	1100	1750	820	1740	2430	998	340	198	177
3	2570	469	1350	1090	1650	930	1650	2230	986	351	189	172
4	2810	495	1280	1080	1550	920	1590	2050	1110	356	220	168
5	2450	685	1210	1070	1450	910	1730	1800	1030	337	212	162
6	1980	685	1200	1070	1400	900	1890	1490	902	337	201	163
7	1450	685	1180	1060	1320	890	1910	1580	852	325	191	164
8	1160	685	1150	1040	1260	880	1880	1530	1070	221	195	164
9	1430	1040	1120	1030	1200	790	1940	1690	1560	199	197	163
10	2490	1420	1100	1500	1150	710	2000	1990	1690	211	185	165
11	3210	1640	1090	1950	1100	637	2130	2150	1650	210	172	161
12	3050	1610	1060	2500	1050	611	2540	2080	1570	194	196	167
13	2720	1540	1040	2730	1010	616	2810	1960	1490	191	186	174
14	2380	1480	1020	2830	970	626	2910	1820	1440	192	184	179
15	2130	1400	1000	2780	930	718	3070	1710	1370	167	180	177
16	1980	1230	990	2600	920	760	3060	2370	1260	229	182	181
17	2730	744	1030	2400	1080	697	2980	3620	683	217	179	181
18	3280	799	1020	2150	1110	686	2880	3520	632	236	178	180
19	3290	988	1000	1850	1080	634	2850	3350	630	215	175	175
20	3170	968	980	1500	1030	625	3280	3060	657	204	176	172
21	2930	937	990	1250	980	619	3490	2780	691	197	178	172
22	2590	845	1090	1090	960	652	3460	2460	686	312	175	173
23	2280	816	800	1080	930	867	3450	2150	666	331	172	169
24	1990	875	700	1070	890	882	3380	1820	640	322	174	169
25	1640	869	680	1060	850	866	3290	1360	625	235	181	170
26	1470	833	800	1700	840	853	3200	1120	655	189	176	248
27	1140	975	980	2200	780	961	3080	587	644	196	174	261
28	1040	851	1100	2400	750	1340	2990	565	580	210	177	257
29	749	1250	1120	2300	---	1460	2890	573	564	188	197	256
30	722	1180	1130	2150	---	1520	2800	672	551	195	187	172
31	685	---	1120	2000	---	1520	---	998	---	194	186	---
TOTAL	64706	28937	32940	52740	31890	26630	78460	60155	28912	7661	5769	5475
MEAN	2087	965	1063	1701	1139	859	2615	1940	964	247	186	183
MAX	3290	1640	1450	2830	1900	1520	3490	3620	1690	360	220	261
MIN	685	457	680	1030	750	611	1590	565	551	167	172	161
CAL YR 1977	TOTAL	377319	MEAN	1034	MAX	5440	MIN	106				
WTR YR 1978	TOTAL	424275	MEAN	1162	MAX	3620	MIN	161				

SACO RIVER BASIN

179

01066000 SACO RIVER AT CORNISH, ME
(National stream-quality accounting network station)

LOCATION.--Lat 43°48'35", long 70°46'53", Cumberland County, Hydrologic Unit 01060002, on left bank 300 ft (90 m) upstream from highway bridge at Cornish and 0.4 mi (0.6 km) downstream from Ossipee River.

DRAINAGE AREA.--1,298 mi² (3,362 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1916 to current year.

REVISED RECORDS.--WSP 1301: 1917-18(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 263.48 ft (80.309 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 30, 1919, nonrecording gage on bridge downstream at different datum.

REMARKS.--Records good except those for winter period and periods of no gage-height record, which are fair. Flow partly regulated by powerplants above station and by Ossipee, Silver, Conway, and Kezar Lakes, and Moose, Hancock, Pine River, Bickford, and Colcord Ponds, combined capacity, 3,400,000,000 ft³ (96,000,000 m³).

AVERAGE DISCHARGE.--62 years, 2,716 ft³/s (76.92 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,000 ft³/s (1,270 m³/s) Mar. 21, 22, 1936, gage height, 21.90 ft (6.675 m), from floodmarks; minimum daily, 245 ft³/s (6.94 m³/s) Oct. 18, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,500 ft³/s (439 m³/s) May 19, gage height, 10.55 ft (3.216 m); minimum daily, 295 ft³/s (8.35 m³/s) Sept. 11.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5400	2980	3010	3050	5500	1850	3630	9460	4050	1480	544	530
2	6500	2740	3430	2950	5100	2000	3880	9250	3830	1400	543	445
3	7700	2640	3340	2900	4850	1950	3690	8780	3670	1340	544	440
4	8000	2480	3280	2800	4650	1900	3580	8130	3770	1290	571	370
5	7500	2590	3210	2750	4450	1850	3850	7440	3620	1210	564	380
6	6300	2500	3140	2650	4200	1800	4100	6680	3400	1150	550	425
7	5000	2410	2990	2550	3950	1750	4230	6450	3210	1060	544	385
8	3800	2320	2880	2600	3800	1700	4210	6230	3440	920	547	335
9	5300	2850	2740	3500	3550	1650	4340	6480	3980	856	547	445
10	7000	3490	2610	4500	3350	1600	4480	7030	4290	832	542	400
11	8900	3970	2550	5800	3200	1590	4750	7920	4310	798	525	295
12	8600	4130	2500	7200	3100	1570	5550	8940	4330	755	515	435
13	8000	4220	2450	8100	3000	1550	6250	9240	4000	748	540	395
14	7000	4260	2400	9000	2850	1600	6600	9020	3870	711	480	440
15	6400	4180	2950	9900	2750	2000	7030	8710	3650	648	465	400
16	5900	3900	2900	10100	2650	2070	7110	9640	3350	730	535	430
17	6400	3360	2850	9870	2600	1990	7120	12100	2760	768	530	400
18	8700	3300	2800	9100	2750	1910	7120	13800	2550	764	405	315
19	9600	3380	2750	8100	2650	1860	7190	15400	2400	742	440	420
20	10300	3280	2750	7200	2550	1810	8080	14600	2270	741	395	390
21	10600	3140	2700	6500	2450	1770	8740	13200	2320	718	400	360
22	10200	2960	2950	5900	2350	1810	8900	11800	2320	797	350	435
23	9100	2800	2750	6300	2250	2060	9150	10500	2320	815	350	390
24	7900	2850	2500	4900	2200	2090	9370	9270	2340	757	305	305
25	6700	2860	2450	4500	2100	2090	9540	7920	2320	638	455	305
26	6020	2810	2700	5200	2050	2090	9600	6960	2270	623	415	510
27	5140	2990	3050	6300	1950	2260	9560	5730	2150	601	410	480
28	4570	2820	3350	6800	1900	2960	9510	5150	1920	558	400	390
29	3980	3100	3300	6600	---	3220	9510	4570	1850	551	455	385
30	3660	3020	3200	6100	---	3480	9490	4360	1750	562	410	335
31	3330	---	3150	5800	---	3510	---	4330	---	549	445	---
TOTAL	213500	94330	89630	179520	88750	63340	200160	269090	92310	26112	14721	11970
MEAN	6887	3144	2891	5791	3170	2043	6672	8680	3077	842	475	399
MAX	10600	4260	3430	10100	5500	3510	9600	15400	4330	1480	571	530
MIN	3330	2320	2400	2550	1900	1550	3580	4330	1750	549	305	295

CAL YR 1977 TOTAL 1099152 MEAN 3011 MAX 12600 MIN 314
WTR YR 1978 TOTAL 1343433 MEAN 3681 MAX 15400 MIN 295

NOTE.--No gage-height record Oct. 1-25, Aug. 11 to Sept. 30.

SACO RIVER BASIN

01066000 SACO RIVER AT CORNISH, ME--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1975 to current year.

WATER TEMPERATURES: July 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1975.

REMARKS.--Interruptions in the record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 96 micromhos July 3, 1977; minimum, 17 micromhos Sept. 11, 1978.

WATER TEMPERATURES: Maximum, 29.0°C Aug. 2, 1975; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 92 micromhos Sept. 22; minimum, 17 micromhos Sept. 11.

WATER TEMPERATURES: Maximum, 26.0°C Aug. 22; minimum, 0.0°C on many days during winter periods.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
25...	1630	6640	33	6.1	19.0	8.0	1	--	10.8	92	K6	24
NOV												
21...	1215	3120	36	6.2	4.0	3.5	1	--	13.0	99	K5	13
DEC												
13...	1415	2450	40	6.3	-9.5	.0	1	--	--	--	K4	8
JAN												
17...	1445	9870	35	6.1	-6.0	.0	3	--	12.8	89	27	35
FEB												
21...	1315	2450	43	6.1	-1.0	.0	2	--	13.8	96	13	7
MAR												
22...	1430	1810	46	6.6	6.5	.5	2	--	13.7	96	7	9
MAY												
02...	1345	11100	29	6.2	14.5	7.5	2	--	10.2	86	K1	--
25...	1300	7850	29	6.3	18.0	16.0	--	2.0	10.0	103	11	K4
JUN												
20...	1500	2340	35	6.4	23.0	19.5	--	3.0	9.0	99	26	12
JUL												
25...	1015	631	40	6.6	--	24.5	--	.00	7.8	95	K33	K3
AUG												
21...	1600	519	49	6.6	20.5	24.5	--	1.0	8.5	103	K8	K2
SEP												
11...	1140	476	45	6.8	17.0	16.5	--	1.0	9.5	99	26	>120

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)
OCT												
25...	9	5	2.8	.4	2.5	36	.4	.7	5	0	4	6.4
NOV												
21...	8	0	2.7	.4	2.6	38	.4	.6	10	0	8	10
DEC												
13...	9	0	2.8	.5	3.2	41	.5	.7	15	0	12	12
JAN												
17...	8	5	2.5	.4	2.6	40	.4	.6	4	0	3	5.1
FEB												
21...	9	4	2.8	.4	2.9	40	.4	<.5	6	0	5	7.6
MAR												
22...	9	3	2.6	.5	3.2	39	.5	1.9	7	--	6	2.8
MAY												
02...	7	0	2.2	.3	2.2	40	.4	.4	19	0	16	19
25...	6	1	2.1	.3	2.2	40	.4	.5	--	--	5	--
JUN												
20...	8	3	2.7	.4	2.8	40	.4	.7	--	--	5	--
JUL												
25...	10	3	3.3	.5	3.4	40	.5	.7	--	--	7	--
AUG												
21...	11	5	3.6	.5	4.1	43	.5	.8	--	--	6	--
SEP												
11...	9	2	2.7	.5	3.8	46	.6	.6	--	--	7	--

01066000 SACO RIVER AT CORNISH, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)
OCT 25...	4.8	3.3	.2	5.3	26	22	466	.07	.01	--	--	--
NOV 21...	4.3	3.2	.2	7.0	33	26	278	.11	.01	--	--	--
DEC 13...	4.4	3.5	.2	6.9	37	30	245	.13	.00	--	--	--
JAN 17...	5.6	3.3	.2	7.0	32	24	853	.15	.01	--	--	--
FEB 21...	4.7	3.6	.2	7.4	39	26	258	.14	.02	.15	.17	.10
MAR 22...	4.8	3.9	.2	7.7	26	28	127	.15	.01	.18	.19	.00
MAY 02...	3.7	2.4	.2	5.0	22	26	659	.08	.00	.11	.11	.00
25...	4.3	3.8	.2	4.3	30	--	636	.06	.01	--	--	--
JUN 20...	3.7	3.5	.2	5.7	27	23	171	.12	.00	.35	.35	.06
JUL 25...	4.6	6.3	.2	5.4	35	29	59.6	.15	.00	.87	.87	.63
AUG 21...	2.9	5.5	.3	5.7	30	27	42.0	.12	.00	.32	.32	.01
SEP 11...	3.9	4.6	.3	5.8	34	26	43.7	.10	.00	.01	.01	.00

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDEED TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDEED RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 25...	.18	--	--	.01	.01	--	--	--	--	--	--	--
NOV 21...	.39	--	--	.01	.00	0	0	0	0	0	0	2
DEC 13...	.57	--	--	.01	.02	--	--	--	--	--	--	--
JAN 17...	.00	--	--	.01	.00	--	--	--	--	--	--	--
FEB 21...	.07	.31	1.4	.01	.01	1	0	1	0	0	0	0
MAR 22...	--	.34	1.5	.00	.00	--	--	--	--	--	--	--
MAY 02...	--	.19	.84	.01	.00	--	--	--	--	--	--	--
25...	.17	--	--	.42	.00	1	0	1	0	0	0	0
JUN 20...	.29	.47	2.1	.01	.00	--	--	--	--	--	--	--
JUL 25...	.24	1.0	4.5	.01	.00	--	--	--	--	--	--	--
AUG 21...	.31	.44	1.9	.01	.00	0	0	0	0	0	0	3
SEP 11...	--	.11	.49	.00	.00	--	--	--	--	--	--	--

SACO RIVER BASIN

01066000 SACO RIVER AT CORNISH, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

[illegible][illegible]

01066000 SACO RIVER AT CORNISH, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MERCURY SUS- PENDE RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT 25...	--	--	--	--	--	--	--	--	--
NOV 21...	.0	<.5	0	0	0	0	0	0	10
DEC 13...	--	--	--	--	--	--	--	--	--
JAN 17...	--	--	--	--	--	--	--	--	--
FEB 21...	--	<.5	0	0	0	2	2	0	10
MAR 22...	--	--	--	--	--	--	--	--	--
MAY 02...	--	--	--	--	--	--	--	--	--
25...	.2	<.5	0	0	0	0	0	0	80
JUN 20...	--	--	--	--	--	--	--	--	--
JUL 25...	--	--	--	--	--	--	--	--	--
AUG 21...	.0	<.5	0	0	0	1	1	0	20
SEP 11...	--	--	--	--	--	--	--	--	--

DATE	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 25...	--	--	9.5	--	--	12	215	61
NOV 21...	0	10	8.9	--	--	11	93	100
DEC 13...	--	--	9.3	--	--	--	--	--
JAN 17...	--	--	9.0	--	--	6	160	48
FEB 21...	10	0	--	8.0	.2	4	26	100
MAR 22...	--	--	2.8	--	--	8	39	52
MAY 02...	--	--	4.8	--	--	15	450	82
25...	60	20	--	7.4	--	16	339	56
JUN 20...	--	--	9.8	--	--	1	6.3	100
JUL 25...	--	--	4.9	--	--	20	34	100
AUG 21...	10	10	--	3.1	--	13	18	18
SEP 11...	--	--	1.7	--	--	2	2.6	100

QUALITATIVE AND QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

PERIPHYTON

DATE	LENGTH OF EXPOSURE (DAYS)	BIOMASS (G/SQ M)		CHLOROPHYLL A (MG/SQ M)	CHLOROPHYLL B (MG/SQ M)	BIOMASS PIGMENT RATIO	SAMPLING METHOD
		DRY WEIGHT	ASH WEIGHT				
JUL 25	35	.709	.394	.170	.040	1850	ARTIFICIAL SUBSTRATE
AUG 21	27	5.75	2.52	2.22	.520	1460	ARTIFICIAL SUBSTRATE
SEP 11	21	.709	.472	.420	.090	564	ARTIFICIAL SUBSTRATE

SACO RIVER BASIN

01066000 SACO RIVER AT CORNISH, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	NOV 21,77 1215	MAR 22,78 1245	MAY 25,78 1300	JUN 20,78 1500				
TOTAL CELLS/ML	63	46	490	580				
DIVERSITY: DIVISION	0.9	0.7	0.9	1.2				
..CLASS	0.9	0.7	1.1	1.4				
..ORDER	0.9	0.7	1.2	1.6				
...FAMILY	1.2	1.3	2.1	1.6				
....GENUS	1.2	1.8	2.2	1.6				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....COELASTRACEAE								
.....COELASTRUM	--	-	--	-	--	-	--	-
....HYDRODICTYACEAE								
.....PEDIASTRUM	--	-	--	-	--	-	--	-
....OOCYSTACEAE								
.....ANKISTRODESMUS	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	57	12	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-
....TETRAEDKON	--	-	--	-	--	-	22	4
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	14	3	--	-
....SCENEDESMUS	--	-	--	-	57	12	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	8#	17	14	3	380#	65
...ZYGNEATALES								
....DESMIDIACEAE								
....COSMARIVUM	--	-	--	-	--	-	--	-
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
....COSCINODISCACEAE								
.....CYCLOTELLA	°	0	--	-	--	-	22	4
....MELOSIRA	--	-	--	-	--	-	--	-
...PENNALES								
....ACHNANTHACEAE								
.....ACHNANTHES	--	-	23#	50	--	-	22	4
....COCCONEIS	6	10	8#	17	--	-	--	-
....CYMBELLACEAE								
.....AMPHORA	--	-	--	-	14	3	--	-
....FRAGILARIACEAE								
.....FRAGILARIA	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	14	3	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	--	-	14	3	--	-
....NAVICULACEAE								
.....NAVICULA	--	-	8#	17	--	-	--	-
....PINNULARIA	--	-	--	-	14	3	--	-
....NITZSCHIA	13#	20	--	-	--	-	--	-
....TABELLARIACEAE								
....TABELLARIA	--	-	--	-	270#	56	--	-
..CHRYSTOPHYCEAE								
...CHRYSOMONADALES								
....OCHROMONADACEAE								
.....DINOBRYON	--	-	--	-	14	3	--	-
....OCHROMONAS	--	-	--	-	--	-	45	8
..XANTHOPHYCEAE								
...METEROCOCCALES								
....CENTRITRACTACEAE								
.....CENTRITRACTUS	--	-	--	-	--	-	--	-
....CHLOROTHECIACEAE								
.....OPHTHOCYTUM	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONIDALES								
....CRYPTOCHRYSIDACEAE								
.....CHROOMONAS	--	-	--	-	--	-	--	-
....CRYPTOMONODACEAE								
.....CRYPTOMONAS	44#	70	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...HORMOGONALES								
....NOSTOCACEAE								
.....ANABAENA	--	-	--	-	--	-	89#	15
PYRRHOPHYTA (FIRE ALGAE)								
..DINOPHYCEAE								
...GYMNODINIALES								
....GYMNODINIACEAE								
.....GYMNODINIUM	--	-	--	-	--	-	--	-
....PERIDINIALES								
.....PERIDINIACEAE	--	-	--	-	--	-	--	-
....PERIDINIUM	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

° - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01066000 SACO RIVER AT CORNISH, ME--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1977 TO SEPTEMBER 1978

DATE TIME	JUL 25,78 1015	AUG 21,78 1600	SEP 11,78 1140			
TOTAL CELLS/ML	540	120	240			
DIVERSITY: DIVISION	1.1	1.5	0.9			
..CLASS	1.8	1.8	1.6			
...ORDER	2.3	2.0	1.6			
...FAMILY	3.0	3.3	1.9			
....GENUS	3.1	3.5	1.9			
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
...COELASTRACEAE						
....COELASTRUM	--	-	19#	16	--	-
...HYDRODICTYACEAE						
....PEDIASTRUM	55	10	5	5	--	-
...OOCYSTACEAE						
....ANKISTROEDEMUS	27	5	7	6	--	-
....DICTYOSPHAERIUM	--	-	5	5	--	-
...OOCYSTIS	--	-	--	-	89#	36
....TETRAEDRON	--	-	1	1	--	-
...SCENEDESMACEAE						
....ACTINASTRUM	--	-	--	-	--	-
....SCENEDESMUS	140#	26	24#	21	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	4	3	--	-
..ZYGNEMATALES						
...DESMIDIACEAE						
....COSMARIUM	27	5	--	-	--	-
CHRYSTOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	27	5	--	-	--	-
...MELOSIHA	--	-	5	5	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	3	2	67#	27
...COCONEIS	--	-	--	-	--	-
...CYMBELLACEAE						
....AMPHORA	--	-	--	-	--	-
...FRAGILARIACEAE						
....FRAGILARIA	--	-	1	1	--	-
...SYNEDRA	--	-	--	-	--	-
...GOMPHONEMATAACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	82#	15	3	2	22	9
...PINNULARIA	14	3	--	-	--	-
...NITZSCHIA						
....NITZSCHIA	--	-	--	-	--	-
...TABELLARIACEAE						
....TABELLARIA	27	5	--	-	--	-
CHRYSTOPHYCEAE						
...CHRYSSOMONADALES						
...OCHROMONADACEAE						
....DINOBRYON	--	-	5	5	--	-
...OCHROMONAS	96#	18	--	-	67#	27
...XANTHOPHYCEAE						
...HETEROCOCCALES						
...CENTRITRACTACEAE						
....CENTRITRACTUS	27	5	--	-	--	-
...CHLOROTHECIACEAE						
....OPHIOCYTUM	--	-	3	2	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
..CRYPTOPHYCEAE						
...CRYPTOMONIDALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	--	-	7	6	--	-
...CRYPTOMONODACEAE						
....CRYPTOMONAS	--	-	22#	18	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)						
..DINOPHYCEAE						
...GYMNODINIALES						
...GYMNODINIACEAE						
....GYMNODINIUM	--	-	3	2	--	-
...PERIDINIALES						
...PERIDINIACEAE						
....PERIDINIUM	14	3	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

SACO RIVER BASIN

01066000 SACO RIVER AT CORNISH, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	36	34	35	32	29	31	39	38	38	41	40	41
2	37	34	35	33	30	32	39	37	38	41	39	40
3	35	29	32	34	32	33	40	38	39	41	39	40
4	31	29	30	35	32	34	39	38	38	41	40	40
5	32	29	31	---	---	---	37	36	37	42	40	41
6	33	31	32	---	---	---	38	37	37	42	41	42
7	35	32	33	---	---	---	38	37	38	42	41	41
8	34	33	34	---	---	---	38	37	37	41	41	41
9	36	34	35	---	---	---	38	37	38	43	39	41
10	35	33	34	---	---	---	39	37	38	38	35	37
11	33	28	29	---	---	---	38	38	38	38	32	34
12	30	29	30	---	---	---	38	37	38	35	32	33
13	30	29	30	---	---	---	40	38	39	35	33	34
14	31	30	30	---	---	---	40	39	39	34	33	34
15	31	30	31	---	---	---	43	40	41	35	34	34
16	31	30	31	---	---	---	42	41	41	35	34	35
17	32	30	31	---	---	---	41	39	40	35	34	35
18	30	27	29	---	---	---	40	39	40	36	35	36
19	27	26	27	---	---	---	39	38	39	37	35	36
20	28	27	28	---	---	---	40	39	39	37	36	36
21	31	28	29	---	---	---	40	39	40	37	36	37
22	30	29	30	38	36	37	41	40	40	38	36	37
23	32	29	30	38	37	37	40	39	39	39	36	38
24	31	29	30	38	37	37	41	39	40	39	37	38
25	33	27	30	38	37	37	41	39	40	39	38	39
26	29	27	29	38	38	38	40	39	40	41	39	40
27	31	29	30	38	36	36	40	38	39	39	35	37
28	31	29	30	36	35	36	40	36	37	38	34	36
29	31	29	30	37	36	37	40	36	38	34	33	34
30	33	29	30	38	36	37	41	38	39	35	33	34
31	32	29	30	---	---	---	42	40	41	35	33	34
MONTH	37	26	31	38	29	36	43	36	39	43	32	37

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	36	34	35	41	40	41	42	40	41	35	33	34
2	35	34	34	42	40	41	42	40	41	36	33	34
3	35	34	35	41	40	41	43	39	41	35	33	34
4	35	34	35	43	41	42	42	41	42	36	34	35
5	36	35	35	43	41	42	44	41	42	35	34	35
6	37	36	36	43	42	42	43	41	42	35	34	35
7	40	37	38	44	43	43	43	41	42	35	34	35
8	41	39	39	45	42	43	44	41	42	35	34	34
9	39	37	38	45	43	44	44	41	43	34	32	33
10	38	37	38	46	44	45	45	40	43	32	30	31
11	38	36	37	48	44	46	43	40	42	31	29	30
12	39	37	37	46	45	45	43	40	41	31	30	31
13	39	37	38	48	44	45	41	39	40	31	29	30
14	39	37	38	46	44	45	41	38	40	32	30	31
15	39	38	39	46	44	45	42	37	40	31	29	30
16	41	39	40	45	44	44	43	39	40	29	27	28
17	41	39	40	44	43	44	40	39	40	28	25	27
18	40	39	39	45	43	44	41	39	40	27	22	25
19	40	39	39	45	43	44	40	38	39	29	21	24
20	40	38	39	46	44	45	39	37	38	32	27	29
21	40	38	39	46	44	45	38	36	37	30	29	30
22	40	39	39	47	45	46	40	36	38	30	28	29
23	41	40	40	47	45	46	39	37	38	29	28	28
24	41	41	41	47	45	46	39	37	38	30	28	29
25	42	40	41	47	44	45	37	36	37	30	26	28
26	42	40	41	45	44	44	38	36	37	27	25	26
27	42	41	41	45	44	44	37	36	37	28	26	27
28	42	40	41	44	43	44	37	36	36	29	27	28
29	---	---	---	43	41	42	37	35	36	29	28	29
30	---	---	---	44	40	42	36	34	35	30	28	29
31	---	---	---	43	41	42	---	---	---	30	29	29
MONTH	42	34	38	48	40	44	45	34	40	36	21	30

01066000 SACO RIVER AT CORNISH, ME--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	30	29	30	---	---	---	45	43	44	47	45	46
2	30	29	29	---	---	---	47	45	46	46	43	44
3	30	29	29	---	---	---	47	47	47	60	43	46
4	31	29	30	---	---	---	47	46	46	53	42	44
5	30	29	30	---	---	---	47	46	46	54	36	42
6	31	29	30	---	---	---	48	46	46	45	35	39
7	33	30	31	---	---	---	47	46	47	48	37	39
8	32	31	32	---	---	---	47	46	47	---	---	---
9	33	31	32	---	---	---	48	47	48	---	---	---
10	32	27	28	---	---	---	---	---	---	43	36	37
11	30	28	29	---	---	---	---	---	---	54	17	38
12	32	29	30	---	---	---	---	---	---	74	30	45
13	31	30	31	---	---	---	---	---	---	51	44	46
14	31	31	31	---	---	---	---	---	---	88	35	44
15	33	30	32	---	---	---	---	---	---	55	43	45
16	33	32	33	---	---	---	---	---	---	69	46	50
17	33	31	32	---	---	---	---	---	---	51	45	47
18	34	33	33	---	---	---	---	---	---	79	37	45
19	38	34	35	---	---	---	---	---	---	55	28	42
20	35	34	35	---	---	---	---	---	---	51	45	46
21	35	34	35	---	---	---	---	---	---	73	35	46
22	35	34	35	---	---	---	62	47	51	92	26	43
23	35	34	35	---	---	---	67	47	52	49	39	45
24	35	33	34	---	---	---	75	46	54	50	25	39
25	34	32	33	---	---	---	73	46	53	56	19	38
26	35	32	34	---	---	---	56	47	49	50	38	42
27	36	35	35	46	43	44	58	47	51	48	42	44
28	36	36	36	46	45	46	61	45	47	48	40	44
29	36	35	36	46	44	45	63	46	53	48	39	44
30	39	36	38	44	43	44	61	46	49	71	39	47
31	---	---	---	44	43	43	73	45	52	---	---	---
MONTH	39	27	32	46	43	44	75	43	49	92	17	43
YEAR	92	17	38									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.5	13.0	13.0	8.0	8.0	8.0	1.5	1.0	1.5	.0	.0	.0
2	13.5	13.0	13.5	8.0	7.5	7.5	2.0	1.5	2.0	.0	.0	.0
3	13.5	13.0	13.0	8.5	8.0	8.0	2.5	2.0	2.0	.0	.0	.0
4	13.0	12.5	12.5	9.5	8.5	9.0	---	---	---	.0	.0	.0
5	12.5	11.5	12.0	---	---	---	1.5	.5	1.0	.0	.0	.0
6	12.5	12.0	12.0	---	---	---	.5	.0	.5	.5	.0	.0
7	12.5	11.5	12.0	---	---	---	.5	.0	.5	.0	.0	.0
8	11.5	11.0	11.0	---	---	---	.5	.0	.0	.0	.0	.0
9	11.0	10.5	10.5	---	---	---	.0	.0	.0	.5	.0	.0
10	11.0	10.5	10.5	---	---	---	.0	.0	.0	.0	.0	.0
11	11.0	10.0	10.5	---	---	---	.0	.0	.0	.0	.0	.0
12	11.0	10.5	10.5	---	---	---	.0	.0	.0	.0	.0	.0
13	11.0	10.5	10.5	---	---	---	.0	.0	.0	.0	.0	.0
14	10.5	9.5	10.0	---	---	---	.0	.0	.0	.0	.0	.0
15	9.5	9.0	9.0	---	---	---	.5	.0	.0	.0	.0	.0
16	9.0	8.5	8.5	---	---	---	.5	.0	.0	.0	.0	.0
17	9.0	8.5	9.0	---	---	---	.0	.0	.0	.0	.0	.0
18	9.0	8.5	9.0	---	---	---	.0	.0	.0	.0	.0	.0
19	9.0	8.5	9.0	---	---	---	.0	.0	.0	.0	.0	.0
20	9.0	9.0	9.0	---	---	---	.0	.0	.0	.0	.0	.0
21	9.5	9.0	9.0	---	---	---	.0	.0	.0	.0	.0	.0
22	9.5	9.5	9.5	4.5	4.0	4.0	.5	.0	.5	.0	.0	.0
23	9.5	8.5	9.0	4.5	4.0	4.0	.5	.0	.0	.0	.0	.0
24	8.5	8.0	8.5	4.0	4.0	4.0	.5	.0	.0	.0	.0	.0
25	8.5	8.0	8.5	4.0	4.0	4.0	.5	.0	.5	.0	.0	.0
26	9.5	8.5	9.0	4.0	4.0	4.0	.5	.0	.5	.5	.0	.0
27	10.5	9.0	10.0	4.0	2.5	3.0	.0	.0	.0	.0	.0	.0
28	11.0	10.0	10.5	2.5	1.0	2.0	.0	.0	.0	.0	.0	.0
29	10.5	10.0	10.0	1.5	1.0	1.0	.0	.0	.0	.0	.0	.0
30	10.0	9.0	9.5	1.0	1.0	1.0	.0	.0	.0	.0	.0	.0
31	9.0	8.0	8.5	---	---	---	.5	.0	.0	.0	.0	.0
MONTH	13.5	8.0	10.0	9.5	1.0	4.5	2.5	.0	.5	.5	.0	.0

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	.0	.0	.0	.5	.0	.0	1.0	.5	1.0	8.0	7.5	7.5
2	.0	.0	.0	.0	.0	.0	1.5	.5	1.0	8.0	7.0	7.5
3	.0	.0	.0	.0	.0	.0	2.0	.5	1.5	9.0	8.0	8.5
4	.0	.0	.0	.0	.0	.0	2.0	1.5	1.5	9.5	8.5	9.0
5	.0	.0	.0	.0	.0	.0	2.5	1.5	2.0	10.5	9.5	10.0
6	.0	.0	.0	.0	.0	.0	3.5	2.0	2.5	10.5	9.5	10.0
7	.0	.0	.0	.0	.0	.0	2.5	1.5	2.0	11.0	10.0	10.5
8	.5	.0	.0	.0	.0	.0	2.5	1.5	2.0	11.5	10.5	11.0
9	.0	.0	.0	.5	.0	.0	3.5	2.0	2.5	11.5	10.5	11.0
10	.0	.0	.0	.5	.0	.0	4.5	2.5	3.5	10.5	9.5	10.0
11	.0	.0	.0	.5	.0	.0	4.5	3.5	4.0	11.0	9.5	10.5
12	.0	.0	.0	.5	.0	.0	4.5	3.5	4.0	12.0	11.0	11.5
13	.0	.0	.0	.5	.0	.0	4.0	3.0	3.5	12.5	12.0	12.0
14	.0	.0	.0	.5	.0	.0	4.0	2.5	3.5	13.0	12.0	12.5
15	.0	.0	.0	.5	.0	.0	4.0	3.0	3.5	13.0	12.0	12.5
16	.5	.0	.0	.5	.0	.0	4.0	3.0	3.5	12.0	11.0	11.5
17	.5	.0	.0	.5	.0	.0	4.0	3.0	3.5	10.5	10.0	10.5
18	.0	.0	.0	.5	.0	.0	4.5	2.5	3.5	10.5	10.0	10.5
19	.5	.0	.0	.5	.0	.0	4.5	3.5	4.0	11.0	10.0	10.5
20	.0	.0	.0	.5	.0	.0	4.0	3.5	4.0	13.0	11.0	12.0
21	.0	.0	.0	.5	.0	.0	4.0	3.0	3.5	14.5	13.0	13.5
22	.0	.0	.0	.5	.0	.5	5.0	3.5	4.0	14.5	13.5	14.0
23	.5	.0	.0	.5	.0	.5	5.5	4.5	5.0	15.5	14.5	15.0
24	.5	.0	.0	1.0	.0	.5	6.0	5.5	5.5	16.0	15.0	15.5
25	.5	.0	.0	1.0	.0	.5	6.0	5.5	6.0	16.0	15.5	16.0
26	.5	.0	.0	.5	.0	.5	7.0	6.0	6.5	17.0	15.5	16.0
27	.5	.0	.0	.5	.0	.5	8.0	7.0	7.5	18.5	16.5	17.5
28	.5	.0	.0	1.0	.5	.5	8.0	8.0	8.0	20.0	17.5	19.0
29	---	---	---	1.0	.5	.5	8.5	8.0	8.5	21.0	19.5	20.0
30	---	---	---	1.5	.5	1.0	8.5	8.0	8.5	21.5	20.0	20.5
31	---	---	---	1.5	.5	1.0	---	---	---	21.0	20.0	20.5
MONTH	.5	.0	.0	1.5	.0	.0	8.5	.5	4.0	21.5	7.0	13.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	20.5	20.0	20.0	---	---	---	21.5	21.0	21.0	21.5	18.5	20.0
2	20.0	19.0	19.0	---	---	---	22.0	21.0	21.5	22.0	18.0	19.5
3	18.5	17.0	17.5	---	---	---	23.0	20.5	21.5	22.5	14.0	19.0
4	17.0	16.5	16.5	---	---	---	22.0	21.5	21.5	22.5	19.0	20.5
5	16.0	15.5	15.5	---	---	---	23.5	20.5	21.5	22.0	13.0	18.0
6	16.0	14.5	15.5	---	---	---	22.5	21.0	21.5	21.0	14.0	18.5
7	17.0	15.5	16.0	---	---	---	24.5	21.5	22.5	20.5	14.0	19.5
8	17.0	16.5	17.0	---	---	---	24.0	22.0	23.0	19.5	7.5	14.0
9	17.5	16.0	17.0	---	---	---	25.5	22.0	23.5	19.0	10.0	15.0
10	15.5	14.5	15.0	---	---	---	---	---	---	18.0	14.5	16.5
11	16.0	14.5	15.0	---	---	---	---	---	---	17.0	13.0	15.5
12	18.5	15.5	17.0	---	---	---	---	---	---	18.5	16.5	17.0
13	19.0	18.0	18.5	---	---	---	---	---	---	18.5	13.0	16.0
14	19.0	17.0	18.0	---	---	---	---	---	---	17.5	7.5	13.0
15	17.0	16.0	16.5	---	---	---	---	---	---	15.5	13.0	14.5
16	16.0	15.0	15.5	---	---	---	---	---	---	17.0	11.5	14.5
17	16.5	15.5	16.0	---	---	---	---	---	---	17.0	14.5	15.5
18	17.5	16.5	17.0	---	---	---	---	---	---	16.5	9.5	13.5
19	19.0	16.5	17.5	---	---	---	---	---	---	17.0	7.5	14.0
20	19.5	18.0	18.5	---	---	---	---	---	---	17.5	14.0	15.5
21	18.5	18.0	18.5	---	---	---	---	---	---	19.5	13.5	16.5
22	18.0	17.5	18.0	---	---	---	26.0	19.0	23.0	17.5	15.5	17.0
23	18.5	16.5	17.5	---	---	---	25.0	17.5	22.5	18.0	11.5	16.0
24	18.5	16.0	17.5	---	---	---	23.0	18.5	20.5	17.5	7.0	13.0
25	19.0	16.5	18.0	---	---	---	23.0	15.5	21.0	17.0	8.5	13.0
26	19.5	17.5	18.5	---	---	---	22.5	19.5	21.5	16.0	9.5	13.5
27	21.5	18.5	20.0	25.0	23.5	24.0	22.5	16.0	21.5	16.5	13.5	14.5
28	22.5	20.0	21.0	25.0	23.0	24.0	20.5	17.0	21.5	15.5	12.5	14.0
29	22.0	19.5	21.0	24.0	22.0	23.0	22.0	16.5	21.5	14.5	10.5	12.5
30	---	---	---	24.5	22.0	23.0	22.5	19.0	21.5	15.0	8.0	12.0
31	---	---	---	22.5	21.0	22.0	19.5	18.0	22.5	---	---	---
MONTH	22.5	14.5	17.5	25.0	21.0	23.0	26.0	15.5	22.0	22.5	7.0	15.5
YEAR	26.0	.0	8.0									

01066500 LITTLE OSSIPEE RIVER NEAR SOUTH LIMINGTON, ME

LOCATION.--Lat 43°41'22", long 70°40'15", York County, Hydrologic Unit 01060002, on right bank 25 ft (8 m) upstream from highway bridge, 2 mi (3 km) southeast of South Limington, and 5.8 mi (9.3 km) upstream from mouth.

DRAINAGE AREA.--161 mi² (417 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 273.84 ft (83.466 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Little Ossipee Lake, Ledgemere and Balch Ponds, combined capacity, 581,000,000 ft³ (16,450,000 m³). Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--38 years, 294 ft³/s (8.326 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,760 ft³/s (163 m³/s) Mar. 15, 1977, gage height, 7.04 ft (2.146 m); minimum daily, 1.7 ft³/s (0.048 m³/s) Oct. 7, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, 8,530 ft³/s (242 m³/s) Mar. 19, 1936, at Ledgemere Dam 3.6 mi (5.8 km) upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,450 ft³/s (69.4 m³/s) May 17, gage height, 5.04 ft (1.536 m); minimum daily, 31 ft³/s (0.88 m³/s) May 8, 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	283	468	362	564	230	900	323	228	55	57	56
2	432	271	480	350	470	230	800	40	360	72	58	53
3	546	273	480	340	420	225	750	40	416	79	59	49
4	464	270	477	330	385	225	900	38	394	82	68	45
5	253	269	469	315	360	225	1080	36	334	86	75	41
6	35	269	476	308	340	225	1000	36	224	85	74	38
7	144	269	472	296	325	220	910	35	301	83	72	36
8	212	270	461	285	310	220	840	31	386	78	77	34
9	254	336	536	589	305	220	810	31	512	76	85	34
10	538	613	699	1620	295	176	850	153	508	74	82	37
11	624	688	695	1680	290	178	980	285	484	75	73	37
12	552	595	667	1600	285	179	1150	332	436	70	67	43
13	490	528	634	1480	275	201	1350	347	370	69	64	43
14	441	410	609	1310	275	245	1340	326	206	66	60	41
15	426	308	569	1050	270	253	1200	225	164	67	57	42
16	406	313	303	900	270	261	1120	961	118	77	54	45
17	924	316	133	880	339	336	989	2100	155	118	52	44
18	1530	395	389	680	388	399	901	2300	157	152	46	54
19	1280	474	396	630	356	369	847	1710	201	133	44	51
20	1010	456	374	580	310	359	1110	1160	146	114	42	49
21	913	460	388	550	270	338	1570	894	191	101	46	46
22	820	456	622	510	240	306	1580	724	308	90	45	40
23	720	451	770	490	235	270	1290	328	314	83	46	37
24	525	453	681	470	235	280	949	286	219	74	46	36
25	354	446	587	450	235	400	842	471	204	67	49	36
26	400	462	629	712	235	600	731	445	186	63	47	37
27	394	465	663	1020	230	900	665	419	170	62	46	39
28	368	460	618	1120	230	1250	616	396	157	66	43	40
29	338	456	531	1060	---	1200	552	369	143	62	55	40
30	314	454	444	841	---	1050	534	267	101	61	52	43
31	293	---	372	673	---	990	---	134	---	60	53	---
TOTAL	16160	12169	16092	23481	8742	12560	29156	15242	8093	2500	1794	1266
MEAN	521	406	519	757	312	405	972	492	270	80.6	57.9	42.2
MAX	1530	688	770	1680	564	1250	1580	2300	512	152	85	56
MIN	35	269	133	285	230	176	534	31	101	55	42	34

CAL YR 1977 TOTAL 129759.8 MEAN 356 MAX 4880 MIN 5.2
WTR YR 1978 TOTAL 147255.0 MEAN 403 MAX 2300 MIN 31

01069500 MOUSAM RIVER NEAR WEST KENNEBUNK, ME

LOCATION.--Lat 43°25'04", long 70°39'32", York County, Hydrologic Unit 01060003, on right bank 100 ft (30 m) upstream from highway bridge, 1.4 mi (2.3 km) downstream from Middle Branch, and 4.0 mi (6.4 km) west of West Kennebunk.

DRAINAGE AREA.--105 mi² (272 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 170 ft (52 m), from topographic map.

REMARKS.--Records good. Flow regulated by Square Pond and Mousam and Estes Lakes, combined capacity, about 700,000,000 ft³ (20,000,000 m³) and powerplants upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--39 years, 181 ft³/s (5.126 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,540 ft³/s (100 m³/s) Mar. 14, 1977, gage height, 5.82 ft (1.774 m); minimum daily, 0.4 ft³/s (0.011 m³/s) Nov. 10, 15, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,540 ft³/s (43.6 m³/s) May 17, gage height, 3.68 ft (1.122 m); minimum daily, 5.0 ft³/s (0.142 m³/s) Sept. 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	284	410	270	385	155	593	333	204	14	15	11
2	273	265	574	262	350	115	614	331	187	14	106	11
3	247	248	466	248	324	124	519	316	187	15	108	11
4	201	247	397	235	297	139	446	283	198	15	15	11
5	174	212	357	241	286	128	576	258	197	16	15	48
6	172	170	338	233	278	127	691	261	207	16	15	137
7	169	159	318	225	279	125	639	194	203	18	15	93
8	165	88	292	227	273	125	559	192	220	19	16	8.3
9	113	480	288	752	262	125	531	192	262	21	17	8.5
10	356	465	273	1120	261	117	524	75	248	103	14	8.2
11	276	354	226	644	257	96	535	137	212	96	55	8.9
12	235	296	240	524	252	115	644	192	199	149	8.6	51
13	222	319	252	435	249	128	675	192	197	98	8.2	146
14	200	286	265	378	244	161	640	192	204	18	81	139
15	210	293	323	366	211	236	570	198	194	19	55	67
16	213	294	378	338	108	236	533	980	192	19	87	5.0
17	967	306	352	314	146	242	494	1470	153	91	108	5.2
18	991	340	318	317	153	223	458	1100	15	146	9.9	5.5
19	619	337	261	291	153	210	444	832	109	144	11	6.0
20	531	237	309	290	147	185	769	665	176	58	12	46
21	523	219	362	277	145	152	783	579	169	17	11	139
22	446	211	785	262	140	211	644	489	167	18	50	75
23	383	200	683	263	140	269	555	426	98	17	114	5.7
24	366	208	531	248	137	300	506	390	14	15	14	5.6
25	401	216	487	257	136	332	476	367	14	15	14	5.6
26	374	303	526	510	135	285	444	348	113	16	14	6.0
27	331	447	443	708	134	412	418	336	164	16	14	35
28	365	335	371	649	135	804	390	324	163	16	14	130
29	325	280	326	566	---	813	347	305	113	15	14	75
30	302	265	301	493	---	706	360	273	13	15	69	6.0
31	293	---	287	430	---	618	---	223	---	59	117	---
TOTAL	10590	8364	11739	12373	6017	8014	16377	12453	4792	1308	1216.7	1309.5
MEAN	342	279	379	399	215	259	546	402	160	42.2	39.2	43.7
MAX	991	480	785	1120	385	813	783	1470	262	149	117	146
MIN	113	88	226	225	108	96	347	75	13	14	8.2	5.0
MEAN†	340	261	377	416	184	280	603	362	178	23.2	22.2	18.7
CFSM†	3.24	2.49	3.59	3.96	1.75	2.67	5.74	3.45	1.70	.22	.21	.18
IN.†	3.74	2.78	4.14	4.56	1.82	3.08	6.40	3.98	1.90	.25	.24	.20
CAL YR 1977 TOTAL	86400.6	MEAN 237	MAX 2660	MIN 2.7	MEAN† 240	CFSM† 2.29	IN.† 35.02					
WTR YR 1978 TOTAL	94553.2	MEAN 259	MAX 1470	MIN 5.0	MEAN† 256	CFSM† 2.44	IN.† 33.12					

† Adjusted for change in contents in Square Pond and Mousam Lake. Records furnished by Town of Sanford.

01072100 SALMON FALLS RIVER AT MILTON, NH

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

DRAINAGE AREA.--108 mi² (280 km²).

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

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

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

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	254	348	235	429	194	537	215	95	39	37	36
2	285	244	458	225	388	168	537	156	98	39	37	36
3	431	233	486	216	352	153	438	126	108	39	37	36
4	436	248	469	209	315	147	373	45	125	39	37	36
5	357	279	414	202	286	143	402	52	127	39	37	36
6	295	257	374	192	276	135	501	52	154	39	37	36
7	309	253	354	188	265	135	537	62	172	39	37	36
8	329	236	321	184	248	130	535	78	163	39	37	36
9	346	351	300	269	234	122	529	107	236	39	37	36
10	516	494	295	703	228	117	508	173	347	39	37	36
11	665	502	271	806	222	117	492	204	308	39	37	36
12	570	467	251	671	210	115	567	207	181	39	37	36
13	550	403	245	542	207	114	704	197	92	39	37	36
14	547	337	242	477	202	114	736	181	106	38	37	36
15	477	295	263	408	193	115	736	185	109	38	36	36
16	456	279	319	366	187	125	692	969	95	38	36	36
17	909	273	352	348	184	137	611	1770	72	38	36	36
18	1360	273	352	339	178	138	536	1540	69	38	36	36
19	1130	273	347	318	172	138	494	957	54	39	36	36
20	787	273	327	302	169	138	611	699	40	39	36	36
21	607	264	325	299	163	138	864	640	40	39	36	35
22	557	237	387	286	154	138	880	452	40	39	36	35
23	505	226	457	274	153	139	789	316	40	39	36	35
24	443	226	459	261	151	158	664	330	44	39	36	35
25	405	229	439	253	142	172	572	329	45	38	36	35
26	381	275	428	301	135	174	482	311	45	38	36	35
27	365	409	403	517	183	194	433	286	45	38	36	35
28	344	435	309	694	214	300	391	262	45	38	36	35
29	322	395	290	706	---	449	289	212	44	38	36	35
30	304	345	270	613	---	531	317	159	43	38	36	35
31	274	---	250	512	---	537	---	133	---	37	36	---
TOTAL	15478	9265	10805	11916	6240	5625	16757	11405	3182	1196	1130	1070
MEAN	499	309	349	384	223	181	559	368	106	38.6	36.5	35.7
MAX	1360	502	486	806	429	537	880	1770	347	39	37	36
MIN	216	226	242	184	135	114	289	45	40	37	36	35
†	855.8	789.6	797.3	888.8	710.0	810.1	1149.2	1206.7	1230.6	1135.2	1068.9	945.8
CAL YR 1977	TOTAL	86304	MEAN	236	MAX	3220	MIN	35				
WTR YR 1978	TOTAL	94069	MEAN	258	MAX	1770	MIN	35				

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

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1978

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water Years	Measurements	
					Date	Discharge (ft ³ /s)
Little Madawaska River	Aroostook River	St. John River basin				
		Lat 46°53'05", long 67°56'53", Aroostook County, downstream side of bridge on State Highway 223, near Caribou.			05-11-78	2590
Dennys River	Atlantic Ocean	Dennys River basin				
		Lat 45°02'19", long 67°21'30", Washington County, next to bridge on State Highway 191, at Meddybemps.		many	06-08-78 08-14-78	72 30
St. George River	Atlantic Ocean	St. George River basin				
		Lat 44°07'23", long 69°14'40", Knox County, upstream side of bridge on State Highway 90, at Warren.		1977	04-10-78 09-08-78	1300 12
Tributary B	Little Pond	Pemaquid River basin				
		Lat 44°02'05", long 69°28'40", Lincoln County, 100 ft (30m) downstream from mouth, near Damariscotta.		1976- 1977	03-28-78 04-20-78	0.2 0.2
Outlet of Little Pond	Biscay Pond	Lat 44°02'31", long 69°28'01", Lincoln County, 20 ft (6m) downstream from dam at outlet of Little Pond, near Damariscotta.			10-20-77	1.0
					11-09-77	18
West Outlet Stream	Kennebec River	Lat 45°39'06", long 69°44'43", Somerset County, just downstream from West Outlet dam of Moosehead Lake, near Rockwood.		many	03-28-78	5.8
					04-20-78	6.1
Austin Stream	Kennebec River	Lat 45°03'55", long 69°52'55", Somerset County, 8 mi (1.3 km) upstream from mouth, at Bingham.	90.3	many	04-26-78	0.8
					04-26-78	1.7
Sandy River	Kennebec River	Lat 44°48'10", long 70°13'18", Franklin County, downstream side of bridge on State Highway 145, at Strong.		1977	04-26-78	3.4
					05-17-78	9.0
Unnamed Tributary	McGrath Pond	Kennebec River basin			05-17-78	11
Unnamed Tributary	McGrath Pond	Lat 44°34'12", long 69°46'03", Kennebec County, downstream side of culvert on McGrath Pond Rd., 2.9 mi. (4.6 km) from junction of State Highway 8 and McGrath Pond Road, near No. Belgrade.	0.66		10-13-77	50
					06-12-78	60
Unnamed Tributary	McGrath Pond	Lat 44°33'59", long 69°46'07", Kennebec County, downstream side of culvert on McGrath Pond Road, 2.6 mi (4.1 km) from junction of State Highway 8 and McGrath Pond Road, near No. Belgrade.	0.13		06-28-78	50
Unnamed Tributary	McGrath Pond	Lat 44°34'08", long 69°45'14", Kennebec County, downstream side of culvert on McGrath Pond Road, 3.6 mi (5.7 km) from junction of State Highway 8 and McGrath Pond Road, near No. Belgrade.	0.56		04-27-78	2670
					05-01-78	1620
Unnamed Tributary	McGrath Pond	Lat 44°33'42", long 69°46'19", Kennebec County, downstream side of culvert on McGrath Pond Road, 2.2 mi. (3.5 km) from junction of State Highway 8 and McGrath Pond Road, near No. Belgrade.	0.05		09-21-78	32
Unnamed Tributary	McGrath Pond				03-22-78	1.5
					04-05-78	3.0
Unnamed Tributary	McGrath Pond				04-30-78	0.7
					05-17-78	4.7
Unnamed Tributary	McGrath Pond				06-01-78	0.4
					06-13-78	0.1
Unnamed Tributary	McGrath Pond				07-22-78	< .01
					07-24-78	< .01
Unnamed Tributary	McGrath Pond				07-26-78	< .01
Unnamed Tributary	McGrath Pond				11-10-77	0.8
					11-15-77	0.3
Unnamed Tributary	McGrath Pond				03-22-78	0.6
					03-28-78	1.8
Unnamed Tributary	McGrath Pond				04-05-78	1.0
					04-30-78	0.4
Unnamed Tributary	McGrath Pond				05-17-78	1.8
					06-13-78	.08
Unnamed Tributary	McGrath Pond				07-24-78	< .01
					07-26-78	.04
Unnamed Tributary	McGrath Pond				09-13-78	< .01
Unnamed Tributary	McGrath Pond				03-22-78	9.0
					04-05-78	6.1
Unnamed Tributary	McGrath Pond				04-30-78	1.0
					05-17-78	6.2
Unnamed Tributary	McGrath Pond				07-24-78	.02
					07-26-78	.02
Unnamed Tributary	McGrath Pond				11-10-77	0.4
					11-15-77	0.2
Unnamed Tributary	McGrath Pond				03-22-78	0
					04-30-78	.06
Unnamed Tributary	McGrath Pond				05-17-78	1.4
					07-24-78	0
Unnamed Tributary	McGrath Pond				07-26-78	0

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1978--CONTINUED

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Unnamed Tributary	McGrath Pond	Lat 44°33'54", long 69°44'58", Kennebec County, downstream side of culvert on Town Farm Road, 0.4 mi. (0.7 km) from junction of McGrath Pond Road and State Highway 137, near No. Belgrade.	0.32		11-10-77	1.3
					11-15-77	0.7
					03-14-78	0.4
					03-22-78	1.3
					04-05-78	2.5
					04-30-78	0.8
					05-17-78	2.4
					06-13-78	0.2
					07-24-78	.01
					07-26-78	.01
Unnamed Tributary	McGrath Pond	Lat 44°33'49", long 69°44'58", Kennebec County, downstream side of culvert on Town Farm Road, 0.3 mi. (0.4 km) from junction of State Highway 137 and Town Farm Road, near No. Belgrade.	0.04		09-13-78	< .01
					04-05-78	0.4
					04-30-78	1.2
					05-17-78	.03
					06-13-78	< .01
					07-24-78	0
					07-26-78	0
Unnamed Tributary	McGrath Pond	Lat 44°33'35", long 69°45'06", Kennebec County, downstream side of culvert on Town Farm Road, 0.4 mi. (0.6 km) from junction of State Highway 137 and Town Farm Road, near No. Belgrade.	0.02		11-10-77	0.1
					11-15-77	.04
					03-22-78	0.2
					04-05-78	0.6
					04-30-78	.02
					05-17-78	0.3
					07-24-78	0
					07-26-78	0
					04-05-78	3.2
					04-30-78	0.1
Unnamed Tributary	McGrath Pond	Lat 44°33'30", long 69°45'09", Kennebec County, downstream side of culvert on Town Farm Road, 0.5 mi. (0.8 km) from junction of State Highway 137 and Town Farm Road, near No. Belgrade.	0.25		05-17-78	2.1
					06-13-78	.02
					07-24-78	0
					07-26-78	0
					11-10-77	.07
					11-15-77	.06
					03-22-78	0.1
					03-28-78	0.2
					04-05-78	0.2
					04-30-78	0.1
Unnamed Tributary	McGrath Pond	Lat 44°33'33", long 69°46'23", Kennebec County, downstream side of culvert on McFrath Pond Road, 2.0 mi. (3.2 km) from junction of State Highway 8 and McGrath Pond Road, near No. Belgrade.	0.05		05-17-78	0.3
					06-13-78	.06
					07-24-78	< .01
					07-28-78	< .01
					09-13-78	.01
					11-10-77	.07
					11-15-77	.03
					04-05-78	0.7
					04-30-78	.02
					05-17-78	0.1
Unnamed Tributary	McGrath Pond	Lat 44°33'12", long 69°45'21", Kennebec County, downstream side of of culvert on Town Farm Road, 0.9 mi. (1.5 km) from junction of State Highway 137 and Town Farm Road, near No. Belgrade.	0.03		06-13-78	.01
					07-24-78	< .01
					07-26-78	0
					03-22-78	0
					04-30-78	0.2
					05-17-78	1.2
					07-24-78	0
Unnamed Tributary	McGrath Pond	Lat 44°32'59", long 69°45'32", Kennebec County, downstream side of culvert on Town Farm Road, 1.2 mi. (1.9 km) from junction of State Highway 137 and Town Farm Road, near No. Belgrade.	0.19		07-26-78	0
					11-10-77	.07
					11-15-77	.03
					03-22-78	0
					04-05-78	0.3
					04-30-78	.03
					05-17-78	0.1
Unnamed Tributary	McGrath Pond	Lat 44°32'47", long 69°45'40", Kennebec County, downstream side of culvert on Town Farm Road, 1.4 mi. (2.3 km) from junction of State Highway 137 and Town Farm Road, near No. Belgrade.	0.03		07-24-78	0
					07-26-78	0
					03-22-78	0
					04-05-78	0.1
					04-30-78	0.4
					05-17-78	0.2
					07-24-78	0
Unnamed Tributary	McGrath Pond	Lat 44°32'35", long 69°45'45", Kennebec County, downstream side of culvert on Town Farm Road, 1.6 mi. (2.6 km) from junction of State Highway 137 and Town Farm Road, near No. Belgrade.	0.05		07-26-78	0
					03-22-78	.05
					04-30-78	.04
					05-17-78	0.8
					07-24-78	0
					07-26-78	0
					03-22-78	.05
Unnamed Tributary	McGrath Pond	Lat 44°32'35", long 69°45'46", Kennebec County, downstream side of culvert on Town Farm Road, 1.8 mi. (2.9 km) from junction of State Highway 137 and Town Farm Road, near No. Belgrade.	0.08		04-30-78	.04
					05-17-78	0.8
					07-24-78	0
					07-26-78	0

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1978--CONTINUED

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Unnamed Tributary	Ellis Pond	Lat 44°32'39", long 69°47'19", Kennebec County, downstream side of culvert on McGrath Pond Road, 0.4 mi (0.6 km) from junction of State Highway 8 and McGrath Pond Road, near No. Belgrade.	0.08		11-15-77	.09
					04-05-78	0.5
					04-30-78	0.1
					05-17-78	0.9
					06-13-78	.02
					07-24-78	0
Unnamed Tributary	Ellis Pond	Lat 44°32'13", long 69°47'30", Kennebec County, downstream side of culvert on State Highway 8, 1.2 mi. (2.0 km) north of No. Belgrade.	(2.0 km)		07-26-78	0
					04-30-78	.01
					05-17-78	0.3
					07-24-78	0
					07-26-78	0
					11-09-77	12
Unnamed Tributary	Ellis Pond	Lat 44°32'07", long 69°47'19", Kennebec County, downstream side of culvert on town road, 0.2 mi. (0.3 km) from junction of State Highway 8 and town road, and 1.2 mi. (2.0 km) north of No. Belgrade.	0.31		11-10-77	1.4
					03-22-78	0.3
					03-28-78	6.5
					04-05-78	2.6
					04-14-78	2.4
					04-21-78	4.1
Unnamed Tributary	Ellis Pond	Lat 44°32'02", long 69°47'31", Kennebec County, downstream side of culvert on State Highway 8, 0.9 mi. (1.5 km) north of No. Belgrade.	0.03		04-30-78	0.3
					06-13-78	.02
					07-22-78	< .01
					07-24-78	< .01
					07-26-78	< .01
					03-22-78	0.1
Unnamed Tributary	Ellis Pond	Lat 44°31'56", long 69°47'30", Kennebec County, downstream side of culvert, on State Highway 8, 0.8 mi. (1.3 km) north of No. Belgrade.	0.02		04-05-78	0.3
					04-30-78	0.1
					05-17-78	1.4
					07-24-78	0
					07-26-78	0
					09-15-77	.01
Unnamed Tributary	Ellis Pond	Lat 44°31'50", long 69°47'31", Kennebec County, downstream side of culvert, on State Highway 8, 0.7 mi. (1.1 km) north of No. Belgrade.	0.05		11-09-77	0.1
					11-10-77	.02
					12-23-77	.05
					03-22-78	.04
					03-28-78	0.2
					04-05-78	0.3
Unnamed Tributary	Ellis Pond	Lat 44°32'00", long 69°45'49", Kennebec County, downstream side of culvert on Town Farm Road, 2.4 mi. (3.9 km) from junction of State Highway 137 and Town Farm Road, near No. Belgrade.	0.05		04-30-78	< .01
					05-17-78	.09
					06-13-78	0
					07-24-78	0
					07-26-78	0
					11-10-77	.09
Unnamed Tributary	Ellis Pond	Lat 44°31'42", long 69°47'34", Kennebec County, downstream side of culvert on State Highway 8, 0.5 mi. (0.4 km) north of No. Belgrade.	0.05		11-15-77	.02
					03-22-78	0
					04-30-78	< .01
					05-17-78	0.3
					06-13-78	0
					07-24-78	0
Unnamed Tributary	Ellis Pond	Lat 44°31'33", long 69°47'42", Kennebec County, downstream side of culvert on State Highway 8, 0.3 mi. (0.4 km) north of No. Belgrade.	0.05		07-26-78	0
					03-22-78	0
					04-05-78	1.4
					04-30-78	.04
					05-17-78	1.6
					06-13-78	.02
Unnamed Tributary	Ellis Pond	Lat 44°31'33", long 69°47'42", Kennebec County, downstream side of culvert on State Highway 8, 0.3 mi. (0.4 km) north of No. Belgrade.	0.05		07-24-78	0
					07-26-78	0
					04-05-78	0.2
					04-30-78	.07
					05-17-78	0.7
					07-24-78	0

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

195

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1978--CONTINUED

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Unnamed Tributary	Ellis Pond	Lat 44°30'39", long 69°47'22", Kennebec County, downstream side of culvert on town road, 0.2 mi. (0.3 km) from junction of State Highway 11 and town road, near No. Belgrade.	0.12		03-14-78	< .01
					03-22-78	0.3
					04-30-78	0.5
					05-17-78	0.4
					06-07-78	0.7
					06-13-78	0.1
Unnamed Tributary	Ellis Pond	Lat 44°30'42", long 69°47'50", Kennebec County, 300 ft (91 m) upstream of culvert on town road, 0.6 mi. (0.9 km) from junction of State Highway 11 and town road, near No. Belgrade.	0.11		11-10-77	0.2
					11-15-77	.09
					04-30-78	0.1
					05-17-78	0.4
					06-13-78	.06
					07-24-78	< .01
Unnamed Tributary	Ellis Pond	Lat 44°30'41", long 69°47'36", Kennebec County, downstream side of culvert on town road, 0.4 mi. (0.6 km) from junction of State Highway 11 and town road, near No. Belgrade.	0.02		11-10-77	0.1
					11-15-77	.06
					04-13-78	.04
					04-30-78	.06
					05-17-78	4.1
					07-24-78	< .01
Unnamed Tributary	Ellis Pond	Lat 44°31'05", long 69°47'55", Kennebec County, downstream side of culvert on State Highway 8, 0.4 mi. (0.6 km) north of junction of town road and State Highway 8, near No. Belgrade.	0.03		07-26-78	0
					03-22-78	.03
					04-05-78	0.2
					04-30-78	0.2
					05-17-78	0.3
					06-13-78	< .01
Threecornered Pond Outlet	Three Mile Pond	Lat 44°20'04", long 69°38'38", Kennebec County, upstream end of culvert on town road, near West Windsor.		1976	10-18-77	25
Dead Stream	Maranacook Lake	Lat 44°23'44", long 69°58'56", Kennebec County, bridge on Old Kents Hill Road, at Readfield.			11-01-77	15
Lower Narrows Pond Outlet	Lake Annabessacook	Lat 44°19'33", long 70°01'32", Kennebec County, on left bank, 5 ft (1 m) upstream from culvert on town road, near Winthrop.	9.45	1977	10-18-77	22
					10-21-77	28
Jug Stream	Cobbosseecontee Lake	Lat 44°14'34", long 69°58'38", Kennebec County, upstream side of bridge on State Highway 135, near East Monmouth.	84.6	1976	10-25-77	331
Cobbosseecontee Stream	Kennebec River	Lat 44°14'42", long 69°53'42", Kennebec County, upstream side of bridge on town road, near French's Corner.		1976	10-04-77	603
Swift River	Androscoggin River	Lat 44°33'19", long 70°32'48", Oxford County, upstream site of bridge on US Route 2, at Mexico.			04-24-78	976
					05-01-78	766
					07-20-78	59
Taylor Pond Outlet	Echo Lake	Lat 44°27'09", long 70°00'53", Kennebec County, bridge on State Highway 41, at West Mount Vernon.			10-06-77	153
					10-12-77	212
Echo Lake Outlet	Lovejoy Pond	Lat 44°24'34", long 70°01'55", Kennebec County, bridge on State Highway 17, at Fayette.			10-05-77	226
Pocasset Lake Outlet	Androscoggin Lake	Lat 44°20'58", long 70°04'09", Kennebec County, bridge on State Highway 133, at Wayne.			10-06-77	259
					10-12-77	264
West Branch Nezinscot River	Nezinscot River	Lat 44°17'53", long 70°23'21", Oxford County, upstream side of bridge on town road, near North Buckfield.		1977	04-27-78	523
East Branch Nezinscot River	Nezinscot River	Lat 44°18'07", long 70°21'39", Oxford County, upstream side of bridge on State Highway 140, at Buckfield.		1977	04-27-78	272

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1978--CONTINUED

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
Lively Brook	Martin Stream	Lat 44°18'03", long 70°15'09", Androscoggin County, upstream end of culvert on town road, near Turner.		1977	04-27-78	24
Martin Stream	Nezinscot River	Lat 44°15'35", long 70°17'32", Androscoggin County, upstream side of bridge on State Highway 117, at Chase Mills.		1977	04-27-78	253
Nezinscot River	Androscoggin River	Lat 44°15'22", long 70°15'24", Androscoggin County, downstream side of bridge on State Highway 4, at Turner.			04-21-78	2570
					05-23-78	223
					05-24-78	185
					05-25-78	159
					07-11-79	23
					07-13-78	18
Little Andro- scoggin River	Androscoggin River	Lat 44°14'56", long 70°31'00", Oxford County, 1.5 mi. (2.4 km) upstream from bridge on State Highway 117, at South Paris.		1977	09-25-78	2.4
					09-25-78	2.4
					09-28-78	2.0
					05-23-78	22
					05-24-78	18
					05-25-78	16
					07-11-78	2.4
					07-14-78	1.2
Stony Brook	Little Andro- scoggin River	Lat 44°13'23", long 70°30'24", Oxford County, upstream side of bridge on State Highway 117, at South Paris	14.7	many	09-16-78	3.9
					09-25-78	.09
					09-27-78	.05
					09-25-78	0.3
Little Andro- scoggin River	Androscoggin River	Lat 44°12'40", long 70°31'02", Oxford County, approx. 200 ft (61 m) above railroad bridge, at South Paris.			09-29-78	3.8
					09-30-78	3.2
					05-23-78	76
					05-24-78	73
					05-25-78	9.0
					07-11-78	1.0
					07-14-78	0.7
					07-15-78	1.8
					09-25-78	0.2
					09-27-78	0.1
					09-29-78	0.1
					05-23-78	383
					05-24-78	334
					05-25-78	240
					07-13-78	31
					07-14-78	37
					07-16-78	39
					09-25-78	13
					09-27-78	13
					09-30-78	11
					05-24-78	498
					07-11-78	105
					07-13-78	107
					09-25-78	52
					09-28-78	33
					05-23-78	599
					05-24-78	538
					07-11-78	117
					07-14-78	102
					09-25-78	53
				many	09-28-78	41
					05-23-78	54
					05-24-78	52
					05-25-78	49
					07-11-78	15
					07-14-78	11
					07-15-78	23
					07-16-78	18
					09-25-78	2.8
					09-27-78	2.4
					09-29-78	2.9
					09-30-78	2.4
Range Brook	Little Andro- scoggin River	Lat 44°06'14", long 70°23'31", Androscoggin County, upstream side of culvert on town road, .09 mi. (.14 km) from junction with State Highway 11, at Mechanic Falls	14.6			

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

197

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1978--CONTINUED

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements						
					Date	Discharge (ft ³ /s)					
Bog Brook	Little Andro- scoggin River	Lat 44°06'49", long 70°22'51", Androscoggin County, upstream side of bridge on town road, 0.7 mi. (1.1 km) from junction with State Highway 124, at Mechanic Falls.	45.3		05-23-78	152					
					05-24-78	130					
					05-25-78	104					
					07-11-78	9.2					
					07-14-78	3.2					
					07-16-78	15					
					09-25-78	0.7					
					09-27-78	0.2					
					05-23-78	953					
					05-24-78	854					
Little Andro- scoggin River	Androscoggin River	Lat 44°05'18", long 70°13'37", Androscoggin County, downstream side of bridge on Main Street, at Auburn.	354		05-25-78	740					
					07-11-78	174					
					07-14-78	149					
					07-15-78	129					
					08-21-78	56					
					09-25-78	72					
					09-27-78	57					
					09-29-78	52					
					Hooper Brook	Sabattus Pond	Lat 44°11'36", long 70°07'04", Androscoggin County, on left bank 300 ft (91 m) east of town road, 0.5 mi. (0.8 km) south of junction of U.S. Route 202 and town road, at Sprague Mill.	8.30		07-27-78	0.2
										07-28-78	0.2
07-30-78	0.3										
08-09-78	0.2										
Dead River	Sabattus Pond	Lat 44°12'20", long 70°04'46", Androscoggin County, 10 ft (3.0 m) upstream of bridge on town road, 1.2 mi. (2.0 km) south of junction of U.S. Route 202 and town road, at Leeds Junction.	8.77							07-27-78	0.5
					07-30-78	0.5					
					08-09-78	1.9					
					Lombard Brook	Sabattus Pond	Lat 44°09'45". long 70°06'28", Androscoggin County, upstream side of culvert on private road, 0.2 mi. (0.4 km) east of junction with town road, 2.7 mi. (4.3 km) south of Green.	0.25		07-27-78	0
										07-28-78	0
07-30-78	0										
drainage ditch	Sabattus Pond	Lat 44°08'19", long 70°05'30", Androscoggin County, in field 0.3 mi. (0.5 km) east of State Highway 132, 1.2 mi. (1.9 km) north of junction of State Highway 126 and State Highway 132, near Sabattus.			07-27-78	0					
					08-09-78	0					
Sabattus River	Androscoggin River	Lat 44°07'12", long 70°06'32", Androscoggin County, 75 ft (23 m) below bridge, at Sabattus.	34.2	1975- 1977	07-27-78	10					
					07-28-78	10					
					07-30-78	11					
					08-09-78	14					
Presumpscot River basin											
Panther Pond Outlet	Sebago Lake	Lat 43°54'20", long 70°28'00", Cumberland County, 2 mi. (3 km) upstream from mouth of Panther Run at Sebago Lake, at Raymond.	30		04-26-78	253					
					05-11-78	19					
Ditch Brook	Pleasant River	Lat 43°48'56", long 70°25'16", Cumberland County, 1000 ft (304 m) upstream from bridge on Varney Mill Road, near Fosters Corner, near Windham.			04-22-78	132					
					Saco River basin						
Saco River	Atlantic Ocean	Lat 40°01'45", long 70°55'15", Oxford County, upstream side of bridge on U.S. Highway 302, near Fryeburg.	652		04-28-78	6090					
Cooks Brook	Saco River	Lat 43°33'41", long 70°37'10", York County, upstream side of bridge on State Highway 5, near South Hollis.			04-26-78	33					
					05-11-78	23					
Cooks Brook	Saco River	Lat 43°34'36", long 70°36'04", York County, upstream side of bridge on State Highway 35, at Clarks Mills.			04-26-78	37					
					05-11-78	29					
					05-24-78	40					

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1978--CONTINUED

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
		Mousam River basin				
Mousam River	Atlantic Ocean	Lat 43°29'37", long 70°50'46", York County, upstream side of bridge on North Lebanon Road, at Emery Mills.	29.4		08-03-78 08-03-78	8.8 8.4
Mousam River	Atlantic Ocean	Lat 43°28'04", long 70°47'52", York County, downstream side of bridge on Bridge Street, at Springvale.	37.3		08-03-78 08-03-78	7.1 7.2
Mousam River	Atlantic Ocean	Lat 43°25'54", long 70°45'42", York County, downstream side of bridge on School Street, near Sanford.	42.9		04-11-78 08-03-78 08-03-78	182 7.7 7.4
Mousam River	Atlantic Ocean	Lat 43°25'05", long 70°44'20", York County, upstream side of bridge on State Highway 4, near Sanford.	44.0		08-04-78 08-04-78 08-09-78	16 14 6.8
Mousam River	Atlantic Ocean	Lat 43°24'26", long 70°43'26", York County, 0.4 mi (0.7 km) downstream from Jagger Pond dam, near Sanford.	44.6		08-09-78 08-10-78	8.2 7.2
Middle Branch Mousam River	Estes Lake	Lat 43°31'29", long 70°46'00", York County, downstream side of culvert on Alfred-Gore Road, at No. Alfred.	4.32		08-04-78 08-04-78	.09 .09
Middle Branch Mousam River	Estes Lake	Lat 43°28'11", long 70°43'12", York County, upstream side of bridge on State Highway 4, at Alfred.	15.3		08-01-78	0.4
Shaker Pond Outlet	Littlefield River	Lat 43°29'33", long 70°43'10", York County, downstream side of bridge on State Highway 4, near Alfred.	19.4		08-01-78	3.0
					04-11-78 06-13-78 08-01-78 08-04-78 08-04-78 08-09-78 09-05-78	140 41 3.6 3.1 3.6 5.1 2.1
Littlefield River	Estes Lake	Lat 43°28'33", long 70°42'03", York County, upstream side of bridge of State Highway 111, at Alfred.	21.6			
Hay Brook	Estes Lake	Lat 43°26'34", long 70°43'50", York County, downstream side of culvert on State Highway 4, near Sanford.	3.11		08-01-78	.02

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
01010100 - SHIELDS BR BIG BLACK RIVER NR SEVEN ISLANDS, ME (LAT 46 56 30 LONG 069 38 58)									
OCT , 1977					JUL , 1978				
01... 1730	534	7.0	65		12... 1045	24	18.0	125	
NOV					AUG				
17... 1115	139	.0	111		14... 1730	6.7	26.0	150	
MAY , 1978									
05... 0945	1690	.0	49						
01013500 - FISH RIVER NEAR FORT KENT, ME (LAT 47 14 14 LONG 068 34 56)									
NOV , 1977					MAR , 1978				
08... 1600	1550	7.0	64		07... 1525	590	.0	83	
DEC					MAY				
05... 1105	1030	1.0	81		11... 1505	8960	5.0	64	
JAN , 1978					JUN				
10... 1515	1080	.0	98		20... 1725	1290	15.5	62	
FEB									
07... 1715	1180	.0	68						
01015800 - AROOSTOOK RIVER NEAR MASARDIS, ME (LAT 46 31 21 LONG 068 22 23)									
NOV , 1977					APR , 1978				
07... 1605	1100	5.0	58		18... 1400	1730	.0	48	
JAN , 1978					MAY				
09... 1515	904	.0	67		10... 1600	11100	7.5	30	
FEB					JUN				
06... 1610	1280	.0	65		19... 1510	825	18.0	52	
MAR									
06... 1600	616	.0	48						
01016500 - MACHIAS RIVER NEAR ASHLAND, ME (LAT 46 37 42 LONG 068 26 07)									
NOV , 1977					DEC , 1977				
07... 1645	389	4.5	64		06... 0935	260	.0	62	
01017000 - AROOSTOOK RIVER AT WASHBURN, ME (LAT 46 46 36 LONG 068 09 29)									
NOV , 1977					DEC , 1977				
08... 0920	1870	4.0	149		06... 0905	1340	.0	76	
01017900 - MARLEY BROOK NEAR LUDLOW, ME (LAT 46 08 42 LONG 068 03 42)									
OCT , 1977					DEC , 1977				
06... 1130	3.4	7.5	90		05... 1150	1.6	.5	109	
NOV									
07... 1220	1.5	5.0	94						
01018000 - MEDUXNEKEAG RIVER NEAR HOULTON, ME (LAT 46 06 17 LONG 067 52 00)									
OCT , 1977					NOV , 1977				
06... 1200	486	9.5	102		07... 1340	234	7.0	148	
01018500 - ST. CROIX RIVER AT VANCEBORO, ME (LAT 45 34 08 LONG 067 25 47)									
OCT , 1977					MAY , 1978				
04... 1220	221	12.0	34		12... 1325	490	10.0	26	
NOV					JUN				
07... 1740	514	7.0	33		09... 0855	1430	15.5	24	
DEC					JUL				
08... 1455	519	1.0	37		20... 1758	369	23.0	27	
JAN , 1978					AUG				
05... 1535	510	.5	40		16... 1420	560	22.0	--	
31... 1545	2690	1.0	34						
MAR									
23... 1010	509	1.5	39						

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
01019000 - GRAND LAKE STREAM AT GRAND LAKE STREAM, ME (LAT 45 10 23 LONG 067 46 06)									
OCT , 1977					JUN , 1978				
04...	1705	220	13.5	28	09...	1305	288	13.0	24
NOV					JUL				
07...	1600	363	9.0	28	21...	0935	204	23.0	24
DEC					AUG				
08...	1630	436	.5	40	15...	1435	271	26.0	23
JAN , 1978					SEP				
05...	1620	468	.5	31	06...	1350	241	19.0	26
MAR					28...	1745	271	13.0	--
22...	1415	594	1.5	30					
MAY									
12...	1205	305	11.0	25					
01020000 - ST. CROIX RIVER NEAR BAILEYVILLE, ME (LAT 45 15 55 LONG 067 28 36)									
OCT , 1977					JUN , 1978				
04...	1910	4940	12.0	39	09...	1400	2180	16.5	28
NOV					JUL				
07...	1500	1920	8.0	48	21...	1320	850	26.0	29
DEC					AUG				
08...	1750	1780	.5	39	15...	1535	769	24.0	29
JAN , 1978					SEP				
05...	1515	2990	.0	39	06...	1050	769	20.0	49
MAR					28...	1630	900	14.5	--
22...	1510	2900	.5	38					
MAY									
12...	0850	2600	13.0	25					
01021000 - ST. CROIX RIVER AT BARING, ME (LAT 45 08 12 LONG 067 19 05)									
OCT , 1977					JUN , 1978				
04...	0850	5650	13.0	60	08...	1845	2170	17.5	95
NOV					JUL				
07...	1320	1830	8.5	101	21...	0830	808	21.5	151
DEC					AUG				
08...	1315	1680	1.0	131	03...	1700	743	22.5	157
JAN , 1978					04...	1225	801	22.0	128
05...	1415	3130	.5	108	15...	0800	650	22.5	155
31...	1410	9250	.0	50	SEP				
MAR					06...	1520	944	19.0	86
22...	1600	3070	1.0	99	21...	1030	841	16.0	115
MAY					28...	1515	841	16.5	--
12...	1740	2320	16.0	99					
01021200 - DENNY'S RIVER AT DENNYVILLE, ME (LAT 44 54 03 LONG 067 14 56)									
OCT , 1977					APR , 1978				
03...	1820	703	12.0	36	21...	1240	1320	3.0	24
NOV					JUN				
07...	1230	106	7.0	38	08...	1545	114	16.5	34
DEC					JUL				
08...	1150	114	.0	48	20...	1535	48	24.0	34
JAN , 1978					AUG				
05...	1245	180	.5	42	14...	1540	31	22.5	38
FEB					SEP				
07...	0920	442	.0	35	06...	1650	24	16.0	45
MAR					28...	1400	31	13.0	--
22...	1155	119	.0	48					
01023000 - WEST BRANCH UNION RIVER AT AMHERST, ME (LAT 44 50 25 LONG 068 22 22)									
OCT , 1977					MAR , 1978				
05...	1400	721	13.0	34	16...	1310	243	1.0	38
NOV					MAY				
07...	0900	218	7.0	33	11...	1705	487	14.0	23
DEC					JUN				
13...	1500	174	.0	--	13...	1000	190	17.0	27
JAN , 1978					JUL				
13...	1130	923	.0	44	21...	1605	20	26.0	32
FEB					AUG				
06...	1635	484	.0	41	28...	1519	6.1	18.0	43

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
01024200 - GARLAND BROOK NEAR MARIAVILLE, ME (LAT 44 43 17 LONG 068 24 40)									
OCT , 1977					MAR , 1978				
05...	1730	31	10.5	30	16...	1100	50	.0	35
20...	1400	51	9.0	28	MAY				
NOV					11...	1910	28	13.0	26
07...	0835	12	5.0	33	JUN				
DEC					13...	0910	7.4	15.5	32
13...	1400	11	.0	--	JUL				
JAN , 1978					31...	1210	1.6	17.0	48
13...	1245	31	.0	31	AUG				
FEB					28...	1428	.49	14.0	60
06...	1400	15	.0	40					
01029500 - EAST BRANCH PENOBSCOT RIVER AT GRINDSTONE, ME (LAT 45 43 49 LONG 068 35 22)									
OCT , 1977					MAY , 1978				
12...	1130	2920	9.0	35	09...	1625	7200	7.0	28
NOV					JUN				
08...	0735	1370	4.0	39	16...	0830	1060	13.0	31
DEC					JUL				
18...	1040	1020	.0	41	19...	1610	546	21.5	35
JAN , 1978					AUG				
06...	1010	1150	.0	33	02...	1740	587	21.0	36
FEB					SEP				
15...	1015	2020	.0	48	12...	1540	1180	14.5	40
MAR									
17...	1005	1470	.0	60					
01030000 - PENOBSCOT RIVER NEAR MATTAWAMKEAG, ME (LAT 45 34 01 LONG 068 24 10)									
OCT , 1977					MAY , 1978				
12...	1225	5650	11.0	38	09...	1520	10400	8.5	34
NOV					JUN				
08...	0845	6350	8.0	42	15...	1905	6360	17.0	39
DEC					JUL				
12...	1150	4600	.0	43	19...	1450	3090	22.0	36
JAN , 1978					AUG				
06...	1305	5630	.0	58	02...	1700	3230	21.5	34
FEB					SEP				
15...	1100	6300	.5	51	12...	1125	4230	15.5	45
MAR									
17...	1045	5700	.0	52					
01030500 - MATTAWAMKEAG RIVER NEAR MATTAWAMKEAG, ME (LAT 45 30 18 LONG 068 18 07)									
NOV , 1977					MAY , 1978				
08...	1600	1950	6.0	55	09...	1100	7380	10.0	40
DEC					JUN				
19...	1245	1280	.0	61	15...	1730	1030	17.0	46
JAN , 1978					19...	1205	221	23.0	61
06...	1400	2880	.0	69	AUG				
FEB					02...	1537	162	24.5	62
15...	1150	1470	.0	62	29...	1000	41	17.0	72
MAR									
17...	1130	1220	.0	75					
01031500 - PISCATAQUIS RIVER NEAR DOVER-FOXCROFT, ME (LAT 45 10 31 LONG 069 18 55)									
OCT , 1977					MAR , 1978				
13...	1615	1350	10.0	46	29...	1020	1230	.0	42
NOV					MAY				
14...	1200	1140	4.0	39	08...	1110	2340	10.0	63
DEC					JUN				
07...	1320	358	.0	58	12...	1505	516	20.5	25
13...	1030	1060	.0	--	JUL				
JAN , 1978					06...	1030	62	22.0	55
27...	1215	2530	.0	40	28...	1525	44	26.0	60
FEB					AUG				
28...	1155	194	.0	57	23...	1110	14	23.5	80

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
01033000 - SEBEC RIVER AT SEBEC, ME (LAT 45 16 12 LONG 069 06 44)									
OCT , 1977					MAY , 1978				
11...	1620	2030	12.0	39	08...	1440	1860	7.0	27
NOV					JUN				
14...	1300	619	6.5	30	14...	1545	621	17.5	26
DEC					JUL				
01...	1220	646	3.0	33	06...	1145	321	22.0	25
JAN , 1978					AUG				
11...	1055	3730	.0	33	03...	0940	272	21.5	25
FEB					24...	1500	185	24.0	30
09...	1630	736	.5	30	25...	1130	175	22.0	--
MAR									
08...	1320	335	2.0	34					
01033500 - PLEASANT RIVER NEAR MILO, ME (LAT 45 16 58 LONG 069 00 13)									
OCT , 1977					MAY , 1978				
11...	1320	4020	10.0	24	11...	1450	4420	9.5	18
NOV					JUN				
09...	1545	669	6.0	28	16...	1515	478	17.5	26
DEC					JUL				
07...	1510	684	.0	39	06...	1335	203	26.0	30
JAN , 1978					AUG				
11...	1420	5270	.0	26	03...	1300	112	20.0	34
FEB					23...	1840	52	21.0	47
15...	1535	421	.0	34	25...	1305	44	22.5	54
MAR									
15...	1230	291	1.0	47					
01034000 - PISCATAQUIS RIVER AT MEDFORD, ME (LAT 45 15 40 LONG 068 52 07)									
OCT , 1977					JUN , 1978				
06...	1655	4950	11.5	35	16...	1050	1640	17.0	31
NOV					JUL				
09...	1425	1920	6.5	25	18...	1515	687	25.0	31
DEC					AUG				
07...	1425	1660	.0	33	03...	1200	435	21.0	35
FEB , 1978					23...	1445	266	25.5	40
14...	1205	1580	.0	57					
MAY									
11...	0950	10800	8.5	23					
01035000 - PASSADUMKEAG RIVER AT LOWELL, ME (LAT 45 11 04 LONG 068 28 29)									
OCT , 1977					MAR , 1978				
06...	0955	1180	12.0	34	16...	1700	427	.5	37
28...	1355	914	9.5	26	MAY				
NOV					15...	1340	974	16.0	25
09...	0950	471	7.0	31	JUN				
DEC					15...	1200	418	17.0	28
15...	1200	385	.0	--	JUL				
JAN , 1978					18...	1630	123	26.0	31
09...	1130	1220	4.0	41	AUG				
FEB					29...	1515	50	19.5	36
09...	1420	848	.0	32					
01036500 - KENDUSKEAG STREAM NEAR KENDUSKEAG, ME (LAT 44 53 48 LONG 068 53 04)									
OCT , 1977					APR , 1978				
05...	1045	934	11.0	93	25...	1110	1240	6.0	64
NOV					JUN				
09...	0820	182	6.0	128	14...	1125	133	19.5	115
DEC					JUL				
05...	1235	400	.0	126	05...	1435	22	22.5	150
JAN , 1978					AUG				
04...	1140	218	.0	138	03...	1510	10	22.0	140
11...	1050	3970	.0	86	28...	1150	4.6	19.0	--
FEB					SEP				
06...	0900	251	.0	--	28...	0850	4.4	13.5	--
MAR									
14...	1615	74	.0	155					
01037700 - TRIBUTARY A LITTLE POND NEAR DAMARISCOTTA, ME (LAT 44 02 44 LONG 069 28 05)									
OCT , 1977					MAY , 1978				
20...	1100	4.3	9.0	39	17...	1045	5.6	10.0	26
NOV					JUL				
09...	1300	19	9.0	33	14...	1430	.01	19.0	44
23...	1030	.44	4.0	39					
MAR , 1978									
15...	1200	2.2	.0	--					

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
01038000 - SHEEPSHOT RIVER AT NORTH WHITEFIELD, ME (LAT 44 13 23 LONG 069 35 38)									
OCT , 1977					MAY , 1978				
03...	1015	1020	11.0	50	01...	1150	339	9.5	40
NOV					JUN				
01...	1100	265	7.0	53	05...	1010	216	16.0	50
30...	1005	262	1.5	55	30...	1000	56	22.0	54
JAN , 1978					AUG				
03...	0905	415	.0	40	23...	1115	15	20.0	70
17...	1605	513	.0	56	30...	1505	17	21.0	66
31...	1010	767	.0	55					
APR									
03...	1410	1020	1.0	48					
01041000 - KENNEBEC RIVER AT MOOSEHEAD, ME (LAT 45 35 08 LONG 069 43 05)									
OCT , 1977					MAR , 1978				
13...	1110	322	11.0	33	08...	1110	4630	1.0	40
NOV					MAY				
14...	1000	2320	6.0	35	08...	0940	371	6.0	32
DEC					JUN				
07...	1110	2220	.5	72	06...	0805	3200	10.0	23
JAN , 1978					JUL				
16...	1540	4090	.0	55	06...	0800	2180	16.0	30
FEB					SEP				
13...	1440	3900	.5	44	12...	1845	434	14.0	35
01042500 - KENNEBEC RIVER AT THE FORKS, ME (LAT 45 20 25 LONG 069 57 48)									
OCT , 1977					MAY , 1978				
28...	1345	7100	8.5	35	04...	1300	6760	3.0	31
NOV					JUN				
16...	1300	5700	5.0	37	23...	0900	474	15.5	31
DEC					AUG				
21...	1215	6870	1.0	40	14...	1145	6630	21.0	32
JAN , 1978									
31...	1315	4520	.5	37					
01043500 - DEAD RIVER NEAR DEAD RIVER, ME (LAT 45 13 48 LONG 070 11 58)									
OCT , 1977					MAR , 1978				
26...	1630	1830	7.5	35	16...	1630	2460	2.0	--
NOV					MAY				
21...	1430	1310	3.0	39	02...	1630	37	5.0	35
DEC					JUN				
19...	1530	946	1.0	38	22...	1400	1300	17.0	25
JAN , 1978					AUG				
31...	1545	1100	1.0	40	09...	1530	674	22.0	29
01045000 - DEAD RIVER AT THE FORKS, ME (LAT 45 20 59 LONG 069 59 26)									
OCT , 1977					APR , 1978				
28...	1145	1340	8.0	39	03...	1400	2380	3.5	40
NOV					MAY				
16...	1330	2000	3.0	42	04...	1500	1750	4.0	30
DEC					JUN				
21...	1030	1220	.5	42	23...	0945	2360	15.0	29
JAN , 1978					AUG				
31...	1245	1850	.5	39	14...	1200	811	24.0	33
01047000 - CARRABASSETT RIVER NEAR NORTH ANSON, ME (LAT 44 52 09 LONG 069 57 20)									
OCT , 1977					APR , 1978				
26...	1300	860	6.5	36	03...	0945	760	.5	31
NOV					MAY				
21...	1230	871	1.0	39	02...	1430	1910	5.5	27
DEC					JUN				
19...	1430	366	.0	44	12...	1400	614	18.5	31
JAN , 1978					28...	0900	296	21.0	35
13...	1005	1900	1.0	27	AUG				
FEB					09...	1330	112	25.5	46
03...	1200	707	.0	39	22...	1345	70	23.0	48

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

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01047730 - WILSON STREAM AT EAST WILTON, ME (LAT 44 36 55 LONG 070 11 42)									
OCT , 1977					APR , 1978				
26...	0930	113	7.0	52	27...	1230	509	4.5	40
NOV					MAY				
14...	1500	145	4.0	53	09...	1145	332	5.0	44
DEC					JUN				
14...	1330	83	.5	60	21...	1500	33	16.0	60
FEB , 1978					AUG				
06...	0930	97	.0	53	08...	1530	7.3	23.0	63
MAR					22...	1340	5.9	23.0	85
10...	1130	70	.0	--					
01048000 - SANDY RIVER NEAR MERCER, ME (LAT 44 42 26 LONG 069 56 21)									
OCT , 1977					MAY , 1978				
26...	1100	1400	6.5	55	04...	1000	2710	6.0	38
NOV					JUN				
21...	1100	1210	2.0	53	22...	0915	1260	15.5	38
DEC					AUG				
19...	1000	702	1.0	65	09...	1015	114	25.5	73
FEB , 1978					22...	1545	62	27.5	90
03...	1515	1180	.0	60					
01049000 - SEBASTICOOK RIVER NEAR PITTSFIELD, ME (LAT 44 43 00 LONG 069 24 56)									
OCT , 1977					DEC , 1977				
11...	1140	2480	11.5	90	13...	1005	900	.0	90
NOV									
02...	1405	1040	9.0	88					
02...	1410	1040	9.0	88					
01049300 - NORTH BRANCH TANNING BROOK NEAR MANCHESTER, ME (LAT 44 21 00 LONG 069 51 07)									
NOV , 1977					FEB , 1978				
01...	1200	.75	7.0	85	13...	1100	.97	.0	86
DEC					JUN				
16...	0905	2.5	.0	70	01...	0845	.76	15.0	83
JAN , 1978					JUL				
03...	1035	1.3	.0	80	05...	1010	.22	15.0	90
17...	1335	1.6	.0	86					
01049373 - MILL STREAM AT WINTHROP, ME (LAT 44 18 24 LONG 069 58 18)									
DEC , 1977					APR , 1978				
16...	1005	65	1.0	81	24...	1115	282	4.5	62
JAN , 1978					JUN				
03...	1105	105	1.0	80	05...	1120	54	18.0	65
17...	1405	171	1.0	86	JUL				
31...	1200	154	1.0	83	05...	1100	16	19.5	63
01049396 - JOCK STREAM AT SOUTH MONMOUTH, ME (LAT 44 11 04 LONG 069 59 48)									
NOV , 1977									
16...	1450	31	4.5	89					
01049500 - COBBOSSEECONTEE STREAM AT GARDINER, ME (LAT 44 13 15 LONG 069 47 25.01)									
OCT , 1977					APR , 1978				
03...	1050	1330	14.5	87	03...	1435	1620	1.5	70
NOV					25...	0915	990	6.5	63
01...	1045	668	10.0	81	MAY				
30...	0920	1090	2.5	86	01...	1115	658	8.0	71
DEC					JUN				
07...	1405	870	.5	85	01...	1130	237	21.0	70
JAN , 1978					30...	1000	151	24.0	71
03...	0920	578	.5	85					
31...	1045	859	.0	90					
01052500 - DIAMOND RIVER NEAR WENTWORTH LOCATION, NH (LAT 44 52 40 LONG 071 03 25)									
OCT , 1977					JUN , 1978				
25...	1100	402	8.0	30	16...	0930	464	9.5	29
NOV					AUG				
15...	1200	289	.0	39	10...	1000	51	19.0	43
FEB , 1978					23...	1915	16	19.0	55
02...	1000	275	.0	27					
MAY									
10...	1400	4460	2.0	23					

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

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01053500 - ANDROSCOGGIN RIVER AT EKROL, NH (LAT 44 46 57 LONG 071 07 46)									
OCT , 1977					MAY , 1978				
25...	1230	3490	6.0	35	10...	1130	2870	8.0	20
NOV					JUN				
15...	1245	2040	3.0	35	16...	1330	4700	14.5	27
FEB , 1978					AUG				
02...	1100	2340	.5	38	10...	1230	1800	21.0	29
MAR					SEP				
23...	1000	3990	1.0	--	13...	1435	1760	14.5	--
01054000 - ANDROSCOGGIN RIVER NEAR GORHAM, NH (LAT 44 26 10 LONG 071 11 27)									
OCT , 1977					MAY , 1978				
25...	1400	5160	7.0	65	10...	0845	10800	5.0	44
NOV					JUN				
15...	1400	2560	3.0	95	16...	1430	5320	15.0	120
DEC					AUG				
16...	0945	2810	1.5	108	10...	1415	2200	22.5	75
FEB , 1978					SEP				
01...	1630	2940	1.0	109	13...	1255	2160	15.5	--
MAR									
22...	1445	4820	1.0	--					
01054300 - ELLIS RIVER AT SOUTH ANDOVER, ME (LAT 44 35 37 LONG 070 44 01)									
OCT , 1977					MAY , 1978				
18...	1230	1320	6.0	30	09...	1400	1710	4.0	23
NOV					JUN				
14...	1300	415	2.0	35	21...	1200	817	14.0	24
DEC					AUG				
15...	1230	171	1.0	39	08...	1015	38	18.5	55
JAN , 1978					18...	1430	8.7	22.0	48
30...	1630	454	.0	31	23...	1300	23	20.0	45
01055000 - SWIFT RIVER NEAR ROXBURY, ME (LAT 44 38 32 LONG 070 35 17)									
OCT , 1977					MAY , 1978				
18...	1100	862	5.5	25	09...	1200	4040	2.0	18
NOV					31...	1345	140	16.0	20
14...	1400	224	.5	29	JUN				
DEC					21...	1300	613	12.5	20
13...	1330	113	.0	34	AUG				
FEB , 1978					08...	1330	23	21.5	34
06...	1400	161	.0	31	18...	1545	13	25.0	36
01055500 - NEZINSCOT RIVER AT TURNER CENTER, ME (LAT 44 16 10 LONG 070 13 49)									
OCT , 1977					MAY , 1978				
03...	1340	1870	11.5	185	01...	1100	817	7.5	40
NOV					JUN				
01...	1400	239	7.0	61	01...	1000	260	19.0	58
JAN , 1978					30...	1145	101	22.5	60
31...	1420	814	.0	58	AUG				
APR					29...	1000	27	17.5	90
03...	0930	673	.0	48					
21...	1030	2630	2.0	45					
01057000 - LITTLE ANDROSCOGGIN RIVER NEAR SOUTH PARIS, ME (LAT 44 17 08 LONG 070 32 16)									
OCT , 1977					JUL , 1978				
13...	1445	305	9.0	39	11...	1100	16	22.0	58
NOV					13...	1330	12	22.0	52
14...	1100	201	2.0	47	14...	1020	11	20.0	50
DEC					15...	1215	11	20.5	--
12...	1415	87	.0	55	AUG				
JAN , 1978					04...	1500	5.8	21.0	80
16...	1115	233	1.0	44	23...	0845	2.1	15.0	70
30...	1400	274	.0	46	SEP				
MAR					25...	1300	1.8	14.0	--
08...	1145	65	.0	--	28...	1245	1.2	12.5	83
MAY									
19...	1145	353	11.0	32					
01058000 - THOMPSON LAKE AT OXFORD, ME (LAT 44 07 55 LONG 070 29 45)									
MAY , 1978									
19...	1245	86	8.0	80					

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

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01058005 - THOMPSON LAKE OUTLET AT OXFORD, ME (LAT 44 08 07 LONG 070 29 28)									
OCT , 1977					JUN , 1978				
11...	1000	153	13.5	41	15...	1100	252	17.5	38
13...	1100	138	10.5	42	JUL				
NOV					11...	1230	41	25.5	33
14...	1030	175	5.0	42	AUG				
JAN , 1978					04...	1030	24	23.0	210
16...	1000	185	2.0	44	22...	1515	19	24.0	170
30...	1030	332	1.5	43	SEP				
MAR					27...	1650	15	16.5	185
08...	1100	32	2.0	--					
APR									
27...	1100	382	5.0	35					
01058500 - LITTLE ANDROSCOGGIN RIVER NEAR AUBURN, ME (LAT 44 03 49 LONG 070 16 28)									
OCT , 1977					APR , 1978				
04...	1400	1830	12.5	55	03...	1100	1180	.5	65
NOV					MAY				
03...	1100	652	10.0	86	22...	1100	1100	16.0	55
DEC					JUN				
01...	1100	607	2.0	90	01...	1100	419	20.0	71
JAN , 1978					AUG				
03...	1400	647	.0	70	09...	1450	83	23.0	155
30...	1300	1580	.0	80	17...	1510	65	26.0	160
01059000 - ANDROSCOGGIN RIVER NEAR AUBURN, ME (LAT 44 04 20 LONG 070 12 31)									
OCT , 1977					MAY , 1978				
04...	1450	14900	12.5	58	22...	1045	16100	15.0	70
NOV					JUN				
03...	1115	5000	8.5	102	06...	1000	7120	14.5	68
DEC					SEP				
01...	1115	6500	2.5	165	11...	1200	1930	17.5	170
JAN , 1978									
03...	1415	5270	--	140					
30...	1330	12600	.0	73					
01059800 - COLLYER BROOK NEAR GRAY, ME (LAT 43 55 03 LONG 070 19 02)									
OCT , 1977					APR , 1978				
04...	1345	20	10.5	130	21...	1300	1910	6.0	60
NOV					JUN				
03...	1020	21	8.0	118	06...	0930	32	10.5	100
DEC					AUG				
02...	1045	63	3.0	90	10...	1200	16	16.0	137
JAN , 1978					29...	1045	18	12.0	140
05...	1105	27	.0	128	SEP				
30...	1220	48	.0	110	11...	1130	14	10.5	141
APR									
05...	1020	103	2.0	--					
01060000 - ROYAL RIVER AT YARMOUTH, ME (LAT 43 47 57 LONG 070 10 45)									
OCT , 1977					JAN , 1978				
04...	1215	510	13.0	75	30...	1000	845	.0	80
NOV					APR				
03...	0900	172	7.0	90	05...	0900	932	1.0	72
DEC					21...	1555	1910	4.5	45
02...	1000	1170	2.5	73	JUN				
JAN , 1978					06...	0900	304	12.0	72
05...	1000	313	.0	95					
01064500 - SACO RIVER NEAR CONWAY, NH (LAT 43 59 27 LONG 071 05 29)									
OCT , 1977					APR , 1978				
14...	1445	1320	6.5	40	27...	1645	3400	6.0	35
NOV					JUN				
22...	1115	859	2.0	42	14...	1330	992	13.5	34
DEC					JUL				
20...	1200	700	1.5	46	18...	1330	383	19.5	42
JAN , 1978					AUG				
16...	1330	1200	1.0	42	03...	1500	183	20.5	55
MAR									
22...	1100	740	.5	--					

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
01065500 - OSSIPEE RIVER AT CORNISH, ME (LAT 43 48 26 LONG 070 47 55)									
OCT , 1977					MAR , 1978				
27...	1300	1170	11.0	39	21...	1400	619	2.0	--
NOV					APR				
22...	1315	839	4.5	40	27...	1800	3060	5.5	31
DEC					JUN				
20...	1500	975	1.0	--	13...	1145	1460	20.0	27
JAN , 1978					AUG				
16...	1530	990	1.0	56	03...	0945	180	20.5	50
FEB									
01...	1045	1840	1.0	42					
01066500 - LITTLE OSSIPEE RIVER NEAR SOUTH LIMINGTON, ME (LAT 43 41 22 LONG 070 40 15)									
OCT , 1977					MAR , 1978				
27...	1500	394	9.0	50	21...	1200	337	1.0	--
NOV					APR				
22...	1415	455	3.0	55	21...	1530	1610	5.0	31
DEC					JUN				
20...	1630	379	1.0	49	13...	1515	366	20.5	38
JAN , 1978					AUG				
27...	1145	1110	1.0	45	03...	0645	58	21.0	55
01069500 - MOUSAM RIVER NEAR WEST KENNEBUNK, ME (LAT 43 25 04 LONG 070 39 32)									
OCT , 1977					MAR , 1978				
21...	1330	495	9.0	108	21...	1730	155	2.0	--
NOV					APR				
22...	1515	214	4.0	73	21...	1330	757	6.0	48
DEC					JUN				
20...	1730	323	1.0	82	13...	1630	185	19.5	62
JAN , 1978					AUG				
27...	1045	708	.5	110	02...	1600	147	21.5	80

GROUND-WATER LEVELS

ANDROSCOGGIN COUNTY

440438070261601. Local number, An 986.

LOCATION.--Lat 44°04'38", long 70°26'16", Hydrologic Unit 01040002, in gravel pit west of Winter Brook, 1.0 mi (1.6 km) west of intersection of State Highways 11 and 26, Poland.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel (ice-contact deposits) of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in (0.15 m), depth 45 ft (13.7 m), screened 42 to 45 ft (12.8 to 13.7 m).

DATUM.--Altitude of land-surface datum is 310 ft (94 m). Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.76 ft (1.45 m) below land-surface datum, Apr. 12, 1977; lowest measured, 7.73 ft (2.36 m) below land-surface datum, Sept. 19, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	7.26	NOV 07	6.59	DEC 12	6.18	APR 24	4.88	MAY 31	5.64	AUG 04	6.90
13	6.63	14	6.14	JAN 30	5.56	27	4.90	JUN 14	5.87	SEP 19	7.53
21	6.26	23	6.29	MAR 08	6.40	MAY 17	5.23	JUL 11	6.47		

440730070035304. Local number, An 988C.

LOCATION.--Lat 44°07'30", long 70°03'53", Hydrologic Unit 01040002, on Old Bowdoin Road, 0.6 mi (1.0 km) east of State Highway 126, in Sabattus.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel (ice-contact deposits) of Pleistocene age.

WELL CHARACTERISTICS.--Wash-bored observation artesian well, diameter 1.5 in (0.04 m), depth 45 ft (13.7 m), screened 40 to 45 ft (12.2 to 13.7 m).

DATUM.--Altitude of land-surface datum is 220 ft (67 m). Measuring point: Top of pipe at land-surface datum.

PERIOD OF RECORD.--October 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.00 ft (1.22 m) below land-surface datum, Apr. 12, 1977; lowest measured, 5.79 ft (1.76 m) below land-surface datum, Sept. 28, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	4.61	DEC 28	4.34	MAR 29	M	JUL 28	5.64	SEP 28	5.79C		
21	4.09	JAN 30	4.12	APR 26	4.25	AUG 14	5.65C				
NOV 23	4.57	FEB 28	M	MAY 31	5.20	30	5.74C				

C - Nearby well pumping

M - Frozen

AROOSTOOK COUNTY

464619068280401. Local number, Ar 1.

LOCATION.--Lat 46°46'19", long 68°28'04", Hydrologic Unit 01010003, on State Highway 11, 1.1 mi (1.8 km) north of village of Portage Lake.

Owner: H. L. Stevens.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug and driven observation water-table well, diameter 1.5 in (0.04 m), filled to a depth of 8 ft (2.4 m), formerly 11 ft (3.4 m), screened 8 to 11 ft (2.4 to 3.4 m).

DATUM.--Altitude of land-surface datum is 930 ft (283 m). Measuring point: Top of pipe, 2.0 ft (0.61 m) above land-surface datum.

PERIOD OF RECORD.--November 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, overflowed, Dec. 21, 1957 and Apr. 28, 1975; lowest estimated, 14.0 ft (4.3 m) Nov. 30, 1955. Has been dry frequently.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	0.70	DEC 13	5.38	FEB 13	4.88	APR 13	2.45	JUN 13	5.50	AUG 12	5.55
28	2.75	30	2.67	27	6.20	27	0.20	30	6.85	29	6.84
NOV 14	4.13	JAN 12	M	MAR 13	7.10	MAY 15	0.30	JUL 15	2.68	SEP 12	8.10E
29	3.30	30	M	29	5.40	29	0.70	31	4.11E	27	9.60E

M - Frozen

E - Estimated

GROUND-WATER LEVELS
AROOSTOOK COUNTY--Continued

209

455611068194601. Local number, Ar 2.
LOCATION.--Lat 45°56'11", long 68°19'46", Hydrologic Unit 01020003, on U.S. Highway 2, 0.75 mi (1.2 km) southwest of Crystal town line, in Sherman.
Owner: Donald McKellar IV.
AQUIFER.--Till of late Pleistocene age and bedrock of Silurian age.
WELL CHARACTERISTICS.--Dug and drilled observation water-table well, diameter 28 in (0.71 m) top 12 ft (3.6 m), 8 in (0.20 m) below 12 ft (3.6 m); depth 31 ft (9.4 m), open end.
DATUM.--Altitude of land-surface datum is 730 ft (222 m). Measuring point: Top of cover at land-surface datum.
PERIOD OF RECORD.--July 1939 to September 1966; July 1968 to October 1970; November 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, overflows nearly every spring; lowest measured, 17.48 ft (5.33 m) below land-surface datum, Oct. 25, 1953.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	3.21	DEC 01	8.90	JAN 22	1.25	MAR 25	9.40	JUN 25	11.30	AUG 18	13.70
22	1.40	26	4.39	FEB 05	3.90	MAY 02	5.90	JUL 16	11.90	SEP 09	14.70
NOV 05	1.16	JAN 02	5.74	19	9.90	25	0.50	30	12.40	24	14.70
19	3.13	09	0.45	MAR 05	10.70	JUN 10	11.50	AUG 12	13.10		

460855067552201. Local number, Ar 887.
LOCATION.--Lat 46°08'55", long 67°55'22", Hydrologic Unit 01010005, on Ludlow Road, 0.2 mi (0.3 km) east of intersection of Hemore Road, in Ludlow.
Owner: Charles Marshall.
AQUIFER.--Glacial till of late Pleistocene age.
WELL CHARACTERISTICS.--Dug observation water-table well, diameter 20 in (0.51 m), depth 12.5 ft (3.8 m), cased with rock to 12.5 ft (3.8 m), open end.
DATUM.--Altitude of land-surface datum is 675 ft (206 m). Measuring point: Top of concrete curb at land-surface datum.
PERIOD OF RECORD.--November 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.30 ft (0.40 m) below land-surface datum, May 26, 1976; lowest measured, 8.00 ft (2.44 m) below land-surface datum, Sept. 22, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	2.47	JAN 13	3.00	MAR 14	3.70	MAY 23	3.10	AUG 23	7.03		
26	2.98	24	5.45	22	2.50	JUN 14	5.30	SEP 14	6.05		
DEC 15	4.00	FEB 13	3.60	APR 13	2.00	24	5.20	22	8.00		
22	2.50	22	2.40	24	1.50	JUL 12	6.01				

471457068353001. Local number, Ar 890.
LOCATION.--Lat 47°14'57", long 68°35'30", Hydrologic Unit 01010003, at southwest edge of athletic field of University of Maine at Fort Kent, west of Pleasant Street, Fort Kent.
Owner: U.S. Geological Survey.
AQUIFER.--Glacial sand and gravel (ice-contact deposits) of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 50 ft (15.2 m), open end.
DATUM.--Altitude of land-surface datum is 530 ft (162 m). Measuring point: Floor of recorder shelter at land-surface datum.
PERIOD OF RECORD.--November 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.99 ft (0.91 m) below land-surface datum, May 13, 1978; lowest, 14.16 ft (4.32 m) below land-surface datum, Sept. 30, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.06	9.94	9.97	10.21	9.96	11.35	12.45	4.63	6.65	9.69	12.35	13.59
10	11.92	9.99	10.00	10.44	10.05	11.65	12.61	3.29	7.17	10.28	12.53	13.67
15	11.58	10.04	9.95	9.90	10.44	11.81	12.41	3.19	7.56	10.77	12.83	13.71
20	10.86	10.14	10.00	10.02	10.72	12.47	10.59	4.18	8.01	11.19	13.13	13.85
25	10.37	10.54	10.12	10.14	10.99	12.41	7.08	5.07	8.42	11.60	13.27	13.99
EOM	10.09	10.12	10.19	9.97	11.15	12.46	4.77	6.07	9.13	12.06	13.46	14.16

GROUND-WATER LEVELS
AROSTOOK COUNTY--Continued

443642069344601. Local number, Ar 891.

LOCATION.--Lat 46°36'42", long 69°34'46", Hydrologic Unit 01010002, about 2.7 mi (4.34 km) west of village of Clayton Lake, T 11, R 14.

Owner: International Paper Co.

AQUIFER.--Seboomook Formation of Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 83 ft (25.3 m), open hole.

DATUM.--Altitude of land-surface datum is 1,050 ft (320 m). Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--July to September 1978.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.45 ft (4.71 m) below land-surface datum, July 12, 1978; lowest measured, 16.50 ft (5.03 m) below land-surface datum, Aug. 14, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 12	15.45	AUG 14	16.50								

CUMBERLAND COUNTY

435453070013601. Local number, C 26.

LOCATION.--Lat 43°54'53", long 70°01'36", Hydrologic Unit 01060001, north of Durham Road, 0.7 mi (1.1 km) west of U.S. Highway 1, Brunswick.

Owner: Brunswick and Topsham Water District.

AQUIFER.--Stratified sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 12 in (0.30 m), depth 101 ft (30.8 m), screened 81 to 101 ft (24.7 to 30.8 m).

DATUM.--Altitude of land-surface datum is 139 ft (42.3 m). Measuring point: Base of water-level recorder at land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.28 ft (8.31 m) below land-surface datum, Jan. 5, 1978; lowest, 36.41 ft (11.10 m) below land-surface datum, Feb. 10, 1966.

* WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.15	28.32	28.51	27.28	27.44	27.86	27.91	27.59	27.43	---	28.19	28.59
10	---	28.26	28.57	---	---	27.94	27.77	27.58	27.51	27.77	28.24	28.66
15	29.02H	28.88	28.24	---	27.64	27.95	27.73	27.53	27.52	27.83	28.33	28.75
20	28.71	28.31	28.41	---	27.67	28.00	27.58	27.38	27.52	27.91	28.41	28.85
25	28.39	---	---	---	27.74	28.11	27.55	27.39	---	27.99	28.45	29.94
EOM	28.35	28.40	28.22H	27.46	27.81	27.96	27.48	27.37	---	28.08	28.54	29.01

H - Tape measurement

* Levels affected by atmospheric pressure

HANCOCK COUNTY

444950068220601. Local number, H 1.

LOCATION.--Lat 44°49'50", long 68°22'06", Hydrologic Unit 01050002, on State Highway 9, 0.25 mi (0.4 km) west of intersection with State Highway 181 in Amherst.

Owner: Norman Salisbury.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 18 in (0.46 m), depth 14 ft (4.3 m), cased with rock to 14 ft (4.3 m), open end.

DATUM.--Altitude of land-surface datum is 330 ft (101 m). Measuring point: Nail in top of vertical timber at land-surface datum.

REMARKS.--Digital recorder installed, May 30, 1978.

PERIOD OF RECORD.--November 1943 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.10 ft (0.64 m) below land-surface datum, May 29, 1961; lowest estimated, 17.8 ft (5.4 m) below land-surface datum, Sept. 30, 1965. Well goes dry frequently.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	4.80	DEC 28	3.40	MAR 12	7.80	JUN 30	9.77	AUG 20	13.06	SEP 15	F
31	5.30	JAN 12	M	MAY 11	5.61	JUL 31	12.04	25	13.33		
NOV 12	6.00	27	M	31	7.78	AUG 05	12.31	31	13.64		
27	5.70	FEB 15	M	JUN 05	8.03	10	12.55	SEP 05	13.80		
DEC 11	6.50	25	M	10	8.16	15	12.80	10	13.82		

F - well is dry

GROUND-WATER LEVELS

211

KENNEBEC COUNTY

441849069442001. Local number, K 52.

LOCATION.--Lat 44°18'49", long 69°44'20", Hydrologic Unit 01030003, on Cony Road, 0.3 mi (0.5 km) south of State Highway 105, in Augusta.

Owner: Walter Panek.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 36 in (0.91 m), depth 22 ft (6.7 m), cased with rock to 22 ft (6.7 m), open end.

DATUM.--Altitude of land-surface datum is 220 ft (67 m). Measuring point: Top of floor of shelter house at land-surface datum.

REMARKS.--Water-quality records for the current year are published elsewhere in this report.

PERIOD OF RECORD.--December 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.42 ft (1.04 m) below land-surface datum, Mar. 28, 1975; lowest, 14.29 ft (4.36 m) below land-surface datum, Oct. 31, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	4.99	4.51	---	5.81	7.40	4.27	5.25	5.58	7.17	9.42	11.70
10	---	5.25	4.90	---	6.27	7.58	4.45	5.22	4.89	7.52	9.79	12.09
15	---	4.19	---	---	6.60	4.72	4.23	5.42	5.63	7.82	10.12	12.45
20	---	4.41	---	---	---	4.62	4.31	4.35	6.10	8.19	10.50	12.82
25	---	---	---	---	---	4.45	4.45	4.98	6.49	8.51	10.86	13.22
EOM	4.87H	4.62H	4.32	4.60	7.16	4.12	4.81	5.82	6.85	9.04	11.24	13.38

H - Tape measurement

442023069553801. Local number K 88.

LOCATION.--Lat 44°20'23", long 69°55'38", Hydrologic Unit 01030003, on State Highway 135, 1.4 mi (2.3 km) north of U.S. Highway 202, in East Winthrop.

Owner: A. Allen Stackpole.

AQUIFER.--Bedrock of Silurian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 298 ft (90.8 m), open hole.

DATUM.--Altitude of land-surface datum is 350 ft (107 m). Measuring point: Top of pipe at land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.79 ft (8.78 m) below land-surface datum, May 31, 1978; lowest measured, 62.31 ft (18.99 m) below land-surface datum, Sept. 30, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	48.97	OCT 31	45.48	NOV 29	44.80	MAY 31	28.79	JUL 28	53.09	AUG 30	58.52

440918069564001. Local number, K 766.

LOCATION.--Lat 44°09'18", long 69°56'40", Hydrologic Unit 01030003, in Litchfield, 300 ft (91 m) east of town office.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel (ice-contact deposits) of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in (0.15 m), depth 65 ft (19.8 m), cased to 62 ft (18.9 m), open end.

DATUM.--Altitude of land-surface datum is 300 ft (91 m). Measuring point: Floor of recorder shelter at land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.88 ft (12.16 m) below land-surface datum, Mar. 29, 1978; lowest measured, 47.63 ft (14.52 m) below land-surface datum, Sept. 25, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	46.01	44.70	43.75	42.55	43.66	41.33	41.73	42.05	43.19	44.58	45.49
10	46.82	45.27	44.81	---	42.77	43.83	41.05	41.89	42.08	43.40	44.70	45.49
15	46.87	45.26	44.81	---	42.99	44.01	40.81	42.15	42.36	43.64	44.92	46.05
20	46.12	45.26	44.81	---	43.18	43.83	41.08	41.69	42.59	43.80	44.15	46.08
25	45.78	45.26	---	---	43.37	43.48	41.04	42.04	42.76	44.03	45.38	46.08
EOM	45.97H	44.88	43.47	42.06	43.50	40.38	41.39	42.32	42.95	44.32	45.48	46.61

H - Tape measurement

OXFORD COUNTY

444637070552301. Local number, 0 400.

LOCATION.--Lat 44°46'37", long 70°55'23", Hydrologic Unit 01040001, at Middle Dam, Lower Richardson Lake.

Owner: Union Water Power Co.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in (0.61 m), depth 15 ft (4.6 m), cased with concrete pipe to 15 ft (4.6 m), open end.

DATUM.--Altitude of land-surface datum is 1,450 ft (442 m). Measuring point: Top of casing, 2.0 ft (0.61 m) above land-surface datum.

PERIOD OF RECORD.--April 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.4 ft (0.12 m) above land-surface datum, Apr. 11, 1976; lowest measured, 12.2 ft (3.7 m) below land-surface datum, Oct. 9, 16, 23, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	4.30	DEC 11	4.00	FEB 12	3.40	APR 16	2.50	JUN 18	3.30	AUG 20	8.50
16	3.30	18	4.30	19	4.30	23	0.80	25	2.10	27	8.80
23	2.50	25	4.30	26	4.70	30	0.50	JUL 02	3.70	SEP 03	9.50
30	3.40	JAN 01	4.30	MAR 05	5.00	MAY 07	0.70	09	5.30	10	9.80
NOV 06	3.70	08	4.90	12	5.10	14	0.60	16	6.50	17	10.10
13	3.00	15	3.00	19	5.40	21	1.10	23	6.30	24	10.80
20	3.00	22	3.40	26	5.50	28	3.50	30	7.00		
27	2.60	29	1.90	APR 02	4.40	JUN 04	3.60	AUG 06	7.80		
DEC 04	3.40	FEB 05	3.90	09	0.80	11	2.90	13	8.10		

441507070310201. Local number, 0 413.

LOCATION.--Lat 44°15'07", long 70°31'02", Hydrologic Unit 01040002, off Dump Road, 2 mi (3.2 km) north of village of South Paris.

Owner: Paris Utility District.

AQUIFER.--Sand and gravel (outwash) of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 2 in (0.51 m), depth 67 ft (20.4 m), screened from 64 to 67 ft (19.5 to 20.4 m).

DATUM.--Altitude of land-surface datum is 350 ft (107 m). Measuring point: Top of pipe at land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.58 ft (2.62 m) below land-surface datum, Aug. 16, 1976; lowest measured, 16.98 ft (5.18 m) below land-surface datum, Sept. 26, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 23	11.01C	JUN 13	12.96C	AUG 15	15.91C	SEP 26	16.98C				

C - nearby well being pumped

440642070583401. Local number 0 615.

LOCATION.--Lat 44°06'42", long 70°58'34", Hydrologic Unit 01060002, at intersection of State Highways 5 and 113, Fryeburg.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel (outwash) of Pleistocene age.

WELL CHARACTERISTICS.--Wash-bored observation water-table well, diameter 1.5 in (0.04 m), depth 43 ft (13.1 m), screened 38 to 43 ft (11.6 to 13.1 m).

DATUM.--Altitude of land-surface datum is 390 ft (119 m). Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--August to September 1978.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.08 ft (3.07 m) below land-surface datum, Aug. 7, 1978; lowest measured, 10.65 ft (3.25 m) below land-surface datum, Sept. 17, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 07	10.08	AUG 08	10.09	AUG 16	10.26	AUG 21	10.39	SEP 17	10.65		

442515070481001. Local number, 0 616.

LOCATION.--Lat 44°25'15", long 70°48'10", Hydrologic Unit 01040002, at Bethel Airport, Bethel.

Owner: U.S. Geological Survey.

WELL CHARACTERISTICS.--Wash-bored observation water-table well, diameter 1.5 in (0.04 m), depth 24 ft (7.3 m), screened 19 to 24 ft (5.8 to 7.3 m).

DATUM.--Altitude of land-surface datum is 650 ft (198 m). Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--August to September 1978.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.28 ft (3.13 m), below land-surface datum, Aug. 16, 1978; lowest measured, 11.60 ft (3.54 m) below land-surface datum, Sept. 21, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 15	10.34	AUG 16	10.39	AUG 16	10.28	AUG 16	10.33	AUG 28	10.60	SEP 21	11.60

PENOBSCOT COUNTY

451047068512201. Local number, Pe 455.

LOCATION.--Lat 45°10'47", long 68°51'22", Hydrologic Unit 01020005, on Medford Road, about 0.25 mi (0.4 km) north of intersection of State Highway 16, Lagrange.

Owner: Mrs. Elsie Mullins.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic and observation water-table well, diameter 36 in (0.91 m), depth 24.2 ft (7.4 m), cased with rock to 24.2 ft (7.4 m), open end.

DATUM.--Altitude of land-surface datum is 410 ft (125 m). Measuring point: Painted nail in north side of windlass housing at land-surface datum.

PERIOD OF RECORD.--November 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.13 ft (0.95 m) below land-surface datum, Mar. 31, 1977; lowest measured, 15.09 ft (4.60 m) below land-surface datum, Sept. 29, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	5.45	DEC 29	4.07	FEB 28	6.80	APR 30	4.63	JUN 29	6.52	AUG 29	13.14
NOV 15	4.75	JAN 15	4.48	MAR 15	7.86	MAY 15	5.45	JUL 15	9.08	SEP 15	14.49
30	5.30	31	4.20	31	3.75	31	6.01	29	10.67	29	15.09
DEC 15	6.03	FEB 15	5.97	APR 14	3.26	JUN 15	5.42	AUG 14	12.24		

445319068560101. Local number, Pe 456.

LOCATION.--Lat 44°53'19", long 68°56'01", Hydrologic Unit 01020005, on Kenduskeag-Levant Road, 2.5 mi (4.02 km) south of Kenduskeag, near Kenduskeag-Levant town line, Kenduskeag.

Owner: Clarence W. Parker, Jr.

AQUIFER.--Bedrock of Silurian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 101 ft (30.8 m), open hole.

DATUM.--Altitude of land-surface datum is 190 ft (57.9 m). Measuring point: Floor of fiberglass shelter at land-surface datum.

PERIOD OF RECORD.--April to September 1978.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.84 ft (5.44 m) below land-surface datum, Apr. 25, 1978; lowest, 25.75 ft (7.85 m) below land-surface datum, Sept. 30, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	19.23	21.83	22.64	23.95	25.06
10	---	---	---	---	---	---	---	19.76	22.03	22.86	24.13	25.21
15	---	---	---	---	---	---	---	20.28	22.24	23.11	24.32	25.34
20	---	---	---	---	---	---	---	---	22.50	23.33	24.51	25.50
25	---	---	---	---	---	---	17.87	---	22.39	23.56	24.70	25.63
EOM	---	---	---	---	---	---	18.48	21.50	22.45	23.77	24.89	25.74

SOMERSET COUNTY

444219069545801. Local number, Sm 1.

LOCATION.--Lat 44°42'19", long 69°54'58", Hydrologic Unit 01030003, on dirt road 2.25 mi (3.62 km) north of village of Mercer.

Owner: J. Harrison Farrand.

AQUIFER.--Eolian deposits of late Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 60 in (1.52 m), depth 14 ft (4.3 m), cased with rock to 14 ft (4.3 m), open end.

DATUM.--Altitude of land-surface datum is 270 ft (82 m). Measuring point: Nail in top of horizontal timber at northeast corner of well cover, 0.4 ft (0.1 m) above land-surface datum.

PERIOD OF RECORD.--November 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.30 ft (1.01 m) below land-surface datum, Apr. 12, 1975; lowest estimated, 14.1 ft (4.3 m) below land-surface datum, Nov. 30, 1952.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	3.23	DEC 19	5.27	FEB 25	5.42	MAY 04	4.81	JUL 10	7.27	SEP 21	11.06
26	5.67	26	4.58	MAR 10	5.58	11	4.70	24	8.14		
NOV 11	4.29	JAN 10	3.82	16	5.37	25	5.09	AUG 09	9.03		
21	4.73	25	5.04	26	4.89	JUN 10	5.22	10	9.09		
26	4.73	31	4.59	APR 10	4.10	22	6.00	25	9.76		
DEC 11	5.16	FEB 11	5.12	25	4.27	25	6.13	SEP 10	10.49		

GROUND-WATER LEVELS

WASHINGTON COUNTY

444240067283501. Local number, W 1.

LOCATION.--Lat 44°42'40", long 67°28'35", Hydrologic Unit 01050002, at barn southeast of race track at former fairgrounds on U.S. Highway 1A, 1.0 mi (1.6 km) west of village of Machias.

Owner: Julian A. Johnson.

AQUIFER.--Bedrock of Silurian age.

WELL CHARACTERISTICS.--Drilled artesian stock and observation well, diameter 6 in (0.15 m), depth 54 ft (16.5 m), open hole.

DATUM.--Altitude of land-surface datum is 140 ft (43 m). Measuring point: Top of casing at land-surface datum.

REMARKS.--Water-quality records for the current water year are published elsewhere in this report.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.29 ft (1.61 m) below land-surface datum, Apr. 16, 1961; lowest measured, 14.80 ft (4.51 m) below land-surface datum, Oct. 31, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	7.73	JAN 17	10.85	MAR 14	13.31	MAY 16	10.32	AUG 28	12.37		
31	14.808	31	9.66	29	10.008	30	12.30	SEP 12	12.45		
NOV 30	12.458	FEB 16	13.55	APR 13	10.51	AUG 02	12.12	28	12.46		
DEC 16	7.92	28	13.80	27	11.29	17	13.18				

B - well pumped recently

444955067000501. Local number, W 2.

LOCATION.--Lat 44°49'55", long 67°00'05", Hydrologic Unit 01050002, on Maple Tree Road, 1.0 mi (1.6 km) south of State Highway 189, Lubec.

Owner: Lubec Water and Light District.

AQUIFER.--Stratified sand and gravel (end moraine) of Pleistocene age.

WELL CHARACTERISTICS.--Driven artesian observation well, diameter 2.5 (0.06 m), depth 52 ft (15.8 m), screened 42 to 52 ft (12.8 to 15.8 m).

DATUM.--Altitude of land-surface datum is 50 ft (15 m). Measuring point: Top of casing at land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.31 ft (2.84 m) below land-surface datum, June 14, 1960; lowest measured, 22.30 ft (6.80 m) below land-surface datum, Sept. 30, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	12.60	OCT 31	13.08	MAR 28	13.40	APR 30	13.16	MAY 29	15.00	SEP 30	22.30

YORK COUNTY

434822070482501. Local number, Y 1.

LOCATION.--Lat 43°48'22", long 70°48'25", Hydrologic Unit 01050002, on Main Street, about 0.2 mi (0.3 km) east of intersections of State Highways 25 and 5 in Cornish.

Owner: James P. Small.

AQUIFER.--Stratified sand and gravel (outwash) of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 36 in (0.91 m), depth 24 ft (7.3 m), cased with brick to 24 ft (7.3 m), open end.

DATUM.--Altitude of land-surface datum is 370 ft (113 m). Measuring point: Mark chiseled on top of concrete curb at land-surface datum.

REMARKS.--Water-quality records for the current water year are published elsewhere in this report.

PERIOD OF RECORD.--November 1943 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.17 ft (2.19 m) below land-surface datum, Mar. 16, 1977; lowest measured, 18.40 ft (5.61 m) below land-surface datum, Nov. 14, 1948.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	10.45	9.38	10.00	9.45	12.46	8.68	10.06	10.50	12.05	14.30	16.25
10	---	11.06	9.32	10.63	9.94	12.92	8.65	10.62	10.79	12.40	14.63	16.45
15	---	10.88	---	8.82	10.55	12.96	8.75	10.85	10.34	12.62	14.88	16.72
20	---	10.49	10.54H	9.33	10.75	9.65	8.90	9.80	10.55	13.03	15.12	16.93
25	---	10.69H	10.70	10.48H	11.85	8.95	9.14	9.17	11.23	13.52	15.57	17.10
EOM	9.85	10.42	9.43	9.01	12.06	8.48	9.44	9.85	11.57	13.93	16.00	---

H - Tape measurement

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION	NUMBER	GEO-LOGIC UNIT	SAMP-LING DEPTH (FT)	DATE OF SAMPLE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CAC03)	HARD-NESS, NONCAR-BONATE (MG/L CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
CUMBERLAND COUNTY												
434459070381901	1121CCC	45	77-12-21	80	5.5	8.0	18	0	5.2	1.1	4.2	
435440070001001	300BDRK	149	77-12-27	160	7.3	8.0	41	0	12	2.6	15	
435543070042801	112MRIN	150	77-12-27	190	8.2	7.0	26	0	8.3	1.2	26	
435616070210201	1121CCC	18	77-12-22	80	5.6	10.0	8	0	2.3	.5	9.6	
435627070114401	112TILL	15	77-12-27	78	5.7	8.0	26	9	7.5	1.7	3.0	

KENNEBEC COUNTY

441849069442001	112TILL	22	78-09-28	295	5.8	9.5	76	50	18	7.6	21	
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OXFORD COUNTY

434816070550501	112TILL	18	77-12-21	70	5.3	12.0	28	9	9.2	1.3	6.4	
435658070531401	1120TSH	23	77-12-22	175	5.5	10.0	30	10	11	.7	15	
440050070520401	300BDRK	16	77-12-28	360	6.5	5.0	160	120	58	3.6	8.8	
440132070533801	1121CCC	30	77-12-28	55	5.8	3.5	16	0	6.0	.3	1.5	
440312070524601	112TILL	22	77-12-28	420	5.7	11.0	180	120	56	10	18	
440412070572801	111ALVM	15	77-12-28	73	5.5	8.0	13	2	3.9	.7	3.0	
440716070582301	111ALVM	--	77-12-28	85	5.8	8.0	33	5	10	2.0	2.5	
440727070562601	111ALVM	18	77-12-22	260	5.9	9.0	92	75	27	5.9	3.6	
440733070571201	111ALVM	21	77-12-22	400	4.9	10.0	61	55	18	3.8	40	
441042070533501	300BDRK	70	77-12-22	155	6.8	13.0	53	0	17	2.5	9.0	
441312070473201	300BDRK	400	77-12-22	315	6.9	8.0	120	0	43	3.9	10	

WASHINGTON COUNTY

444240067283501	300BDRK	71	78-09-28	150	6.4	11.0	61	0	20	2.6	5.6	
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YORK COUNTY

433852070503901	112TILL	25	77-12-21	160	6.0	10.0	43	12	15	1.4	5.9	
434352070424002	300BDRK	575	77-12-21	250	7.7	13.0	34	0	9.4	2.5	34	
434448070405701	1121CCC	50	77-12-21	320	5.8	11.0	18	0	4.8	1.4	62	
434822070482501	1120TSH	24	78-09-28	210	6.3	10.5	61	26	21	2.1	8.9	

STATION	NUMBER	DATE OF SAMPLE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HC03)	CAR-BONATE (MG/L AS C03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS C02)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
CUMBERLAND COUNTY--Continued												
434459070381901	77-12-21	.9	27	0	137	1.6	6.4	.0	10	48	1.3	
435440070001001	77-12-27	3.1	52	0	4.2	17	7.7	.0	17	102	.34	
435543070042801	77-12-27	1.7	83	0	.8	12	2.1	.4	10	103	.11	
435616070210201	77-12-22	.5	10	0	40	2.7	13	.1	7.0	50	2.2	
435627070114401	77-12-27	.6	20	0	64	7.5	5.3	.0	12	48	.20	

KENNEBEC COUNTY--Continued

441849069442001	78-09-28	2.0	32	0	81	12	56	.0	12	146	.38	
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OXFORD COUNTY--Continued

434816070550501	77-12-21	2.7	24	0	192	4.8	6.8	.0	9.3	70	4.1	
435658070531401	77-12-22	2.8	25	0	126	6.0	28	.0	5.0	82	.32	
440050070520401	77-12-28	1.9	48	0	24	2.2	29	.0	9.6	243	24	
440132070533801	77-12-28	.7	21	0	53	.4	.8	.0	8.1	28	.03	
440312070524601	77-12-28	2.8	72	0	230	2.6	120	.2	26	275	.86	
440412070572801	77-12-28	.8	13	0	66	1.7	5.4	.1	12	36	.53	
440716070582301	77-12-28	.3	34	0	86	9.6	2.9	.1	7.4	55	.84	
440727070562601	77-12-22	.8	21	0	42	17	14	.1	10	155	15	
440733070571201	77-12-22	1.6	7	0	141	12	76	.2	9.2	202	8.5	
441042070533501	77-12-22	1.9	80	0	20	9.4	1.0	1.0	14	95	.03	
441312070473201	77-12-22	1.6	180	0	36	6.4	.8	.9	17	172	.00	

WASHINGTON COUNTY--Continued

444240067283501	78-09-28	2.4	76	0	48	7.7	5.3	.0	13	95	.10	
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YORK COUNTY--Continued

433852070503901	77-12-21	4.9	38	0	61	6.4	7.9	.0	8.8	84	3.4	
434352070424002	77-12-21	2.5	99	0	3.2	22	2.0	1.4	11	134	.01	
434448070405701	77-12-21	10	69	0	175	31	37	.1	5.9	222	8.0	
434822070482501	78-09-28	6.8	43	0	34	9.3	12	.0	7.0	118	6.6	

QUALITY OF GROUND WATER

216

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

STATION	NUMBER	DATE OF SAMPLE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
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CUMBERLAND COUNTY--Continued

434459070381901	77-12-21	5.7	.01	1.3	.01	70	10	11
435440070001001	77-12-27	1.5	.00	.34	.00	150	10	12
435543070042801	77-12-27	.49	.00	.11	.12	210	20	11
435616070210201	77-12-22	9.7	.00	2.2	.00	160	20	15
435627070114401	77-12-27	.89	.00	.20	.00	50	10	14

KENNEBEC COUNTY--Continued

441849069442001	78-09-28	1.7	.01	.39	.00	370	10	8.4
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OXFORD COUNTY--Continued

434816070550501	77-12-21	18	.00	4.1	.00	110	40	9.2
435658070531401	77-12-22	1.4	.00	.32	.00	720	20	11
440050070520401	77-12-28	110	.00	24	.01	300	10	7.9
440132070533801	77-12-28	.13	.00	.03	.00	1000	20	8.4
440312070524601	77-12-28	3.8	.00	.86	.02	180	20	10
440412070572801	77-12-28	2.3	.02	.55	.00	1600	50	8.1
440716070582301	77-12-28	3.7	.00	.84	.00	1000	20	9.3
440727070562601	77-12-22	66	.00	15	.00	240	20	11
440733070571201	77-12-22	38	.00	8.5	.00	70	40	7.6
441042070533501	77-12-22	.13	.00	.03	.04	190	30	7.2
441312070473201	77-12-22	.00	.00	.00	.00	270	250	9.0

WASHINGTON COUNTY--Continued

444240067283501	78-09-28	.44	.03	.13	.00	8100	80	4.6
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YORK COUNTY--Continued

433852070503901	77-12-21	15	.00	3.4	.00	90	30	9.1
434352070424002	77-12-21	.04	.00	.01	.14	140	40	10
434448070405701	77-12-21	35	.00	8.0	.01	160	10	9.5
434822070482501	78-09-28	29	.01	6.6	.03	60	0	2.1

Geologic unit (aquifer):

111ALVM - Alluvium.
 112ICCC - Ice-contact deposits.
 112MRIN - Marine deposits.
 112OTSH - Outwash.
 112TILL - Till.
 300BDRK - Bedrock undifferentiated.

APPENDIX

Alphabetical Listing of Changes in Selected Parameter Names and Parameter Codes

(First line is new terminology and second line is old terminology.)

39332 ALDRIN, SUSPENDED TOTAL (UG/L)
 39332 ALDRIN, SUSPENDED (UG/L)

01505 ALPHA, SUSPENDED TOTAL (PCI/L)
 01505 ALPHA, SUSPENDED (PCI/L)

01506 ALPHA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 01506 ALPHA, SUSPENDED, COUNTING ERROR (PCI/L)

01105 ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
 01105 ALUMINUM, TOTAL (UG/L AS AL)

01107 ALUMINUM, SUSPENDED RECOVERABLE (UG/L AS AL)
 01107 ALUMINUM, SUSPENDED (UG/L AS AL)

01108 ALUMINUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AL)
 01108 ALUMINUM, TOTAL IN BOTTOM MATERIAL (UG/G AS AL)

01096 ANTIMONY, SUSPENDED TOTAL (UG/L AS SB)
 01096 ANTIMONY, SUSPENDED (UG/L AS SB)

39502 AROCLOR, SUSPENDED TOTAL, 1248 PCB SERIES (UG/L)
 39502 AROCLOR, SUSPENDED, 1248 PCB SERIES (UG/L)

39506 AROCLOR, SUSPENDED TOTAL, 1254 PCB SERIES (UG/L)
 39506 AROCLOR, SUSPENDED, 1254 PCB SERIES (UG/L)

39510 AROCLOR, SUSPENDED TOTAL, 1260 PCB SERIES (UG/L)
 39510 AROCLOR, SUSPENDED, 1260 PCB SERIES (UG/L)

01001 ARSENIC, SUSPENDED TOTAL (UG/L AS AS)
 01001 ARSENIC, SUSPENDED (UG/L AS AS)

01006 BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
 01006 BARIUM, SUSPENDED (UG/L AS BA)

01007 BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
 01007 BARIUM, TOTAL (UG/L AS BA)

01008 BARIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BA)
 01008 BARIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BA)

01011 BERYLLIUM, SUSPENDED RECOVERABLE (UG/L AS BE)
 01011 BERYLLIUM, SUSPENDED (UG/L AS BE)

01012 BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)
 01012 BERYLLIUM, TOTAL (UG/L AS BE)

01013 BERYLLIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BE)
 01013 BERYLLIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BE)

03505 BETA, SUSPENDED TOTAL (PCI/L)
 03505 BETA, SUSPENDED (PCI/L)

03506 BETA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 03506 BETA, SUSPENDED, COUNTING ERROR (PCI/L)

01016 BISMUTH, SUSPENDED TOTAL (UG/L AS BI)
 01016 BISMUTH, SUSPENDED (UG/L AS BI)

01021 BORON, SUSPENDED RECOVERABLE (UG/L AS B)
 01021 BORON, SUSPENDED (UG/L AS B)

01022 BORON, TOTAL RECOVERABLE (UG/L AS B)
 01022 BORON, TOTAL (UG/L AS B)

01023 BORON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS B)
 01023 BORON, TOTAL IN BOTTOM MATERIAL (UG/G AS B)

01026 CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)
 01026 CADMIUM, SUSPENDED (UG/L AS CD)

01027 CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)
 01027 CADMIUM, TOTAL (UG/L AS CD)

01028 CADMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CD)
01028 CADMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CD)

00916 CALCIUM, TOTAL RECOVERABLE (MG/L AS CA)
00916 CALCIUM, TOTAL (MG/L AS CA)

07052 CALCIUM 45, SUSPENDED TOTAL (PCI/L)
07052 CALCIUM 45, SUSPENDED (PCI/L)

07053 CALCIUM 45, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07053 CALCIUM 45, SUSPENDED, COUNTING ERROR (PCI/L)

00683 CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00683 CARBON, ORGANIC, SUSPENDED (MG/L AS C)

00688 CARBON, INORGANIC, SUSPENDED TOTAL (MG/L AS C)
00688 CARBON, INORGANIC, SUSPENDED (MG/L AS C)

00689 CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00689 CARBON, ORGANIC, SUSPENDED (MG/L AS C)

00694 CARBON, INORGANIC PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS C)
00694 CARBON, INORGANIC PLUS ORGANIC, SUSPENDED (MG/L AS C)

01116 CESIUM, SUSPENDED TOTAL (UG/L AS CS)
01116 CESIUM, SUSPENDED (UG/L AS CS)

28404 CESIUM 137, SUSPENDED TOTAL (PCI/L)
28404 CESIUM 137, SUSPENDED (PCI/L)

28405 CESIUM 137, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28405 CESIUM 137, SUSPENDED, COUNTING ERROR (PCI/L)

28412 CESIUM 134, SUSPENDED TOTAL (PCI/L)
28412 CESIUM 134, SUSPENDED (PCI/L)

28413 CESIUM 134, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28413 CESIUM 134, SUSPENDED, COUNTING ERROR (PCI/L)

39353 CHLORDANE, SUSPENDED TOTAL (UG/L)
39353 CHLORDANE, SUSPENDED (UG/L)

01029 CHROMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CR)
01029 CHROMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CR)

01031 CHROMIUM, SUSPENDED RECOVERABLE (UG/L AS CR)
01031 CHROMIUM, SUSPENDED (UG/L AS CR)

01034 CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
01034 CHROMIUM, TOTAL (UG/L AS CR)

01036 COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)
01036 COBALT, SUSPENDED (UG/L AS CO)

01037 COBALT, TOTAL RECOVERABLE (UG/L AS CO)
01037 COBALT, TOTAL (UG/L AS CO)

01038 COBALT, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CO)
01038 COBALT, TOTAL IN BOTTOM MATERIAL (UG/G AS CO)

01041 COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)
01041 COPPER, SUSPENDED (UG/L AS CU)

01042 COPPER, TOTAL RECOVERABLE (UG/L AS CU)
01042 COPPER, TOTAL (UG/L AS CU)

01043 COPPER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CU)
01043 COPPER, TOTAL IN BOTTOM MATERIAL (UG/G AS CU)

39362 DDD, SUSPENDED TOTAL (UG/L)
39362 DDD, SUSPENDED (UG/L)

39367 DDE, SUSPENDED TOTAL (UG/L)
39367 DDE, SUSPENDED (UG/L)

39372 DDT, SUSPENDED TOTAL (UG/L)
39372 DDT, SUSPENDED (UG/L)

39573 DIAZINON, SUSPENDED TOTAL (UG/L)
39573 DIAZINON, SUSPENDED (UG/L)

APPENDIX

A-3

39382 DIELDRIN, SUSPENDED TOTAL (UG/L)
39382 DIELDRIN, SUSPENDED (UG/L)

39392 ENDRIN, SUSPENDED TOTAL (UG/L)
39392 ENDRIN, SUSPENDED (UG/L)

01121 GALLIUM, SUSPENDED TOTAL (UG/L AS GA)
01121 GALLIUM, SUSPENDED (UG/L AS GA)

01126 GERMANIUM, SUSPENDED TOTAL (UG/L AS GE)
01126 GERMANIUM, SUSPENDED (UG/L AS GE)

01516 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/L AS U NATURAL)
01516 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(PCI/L AS U NATURAL)

01517 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/G AS U NATURAL)
01517 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(PCI/G AS U NATURAL)

01518 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(UG/G AS U NATURAL)
01518 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(UG/G AS U NATURAL)

80040 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(UG/L AS U NATURAL)
80040 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(UG/L AS U NATURAL)

80060 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/L AS SR/YT-90)
80060 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/L AS SR/YT-90)

03516 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/L AS CS-137)
03516 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/L AS CS-137)

03517 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/G AS SR/YT-90)
03517 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/G AS SR/YT-90)

03518 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/G AS CS-137)
03518 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/G AS CS-137)

39412 HEPTACHLOR, SUSPENDED TOTAL (UG/L)
39412 HEPTACHLOR, SUSPENDED (UG/L)

39422 HEPTACHLOR EPOXIDE, SUSPENDED TOTAL (UG/L)
39422 HEPTACHLOR EPOXIDE, SUSPENDED (UG/L)

01044 IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
01044 IRON, SUSPENDED (UG/L AS FE)

01045 IRON, TOTAL RECOVERABLE (UG/L AS FE)
01045 IRON, TOTAL (UG/L AS FE)

01170 IRON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS FE)
01170 IRON, TOTAL IN BOTTOM MATERIAL (UG/G AS FE)

07062 IRON 59, SUSPENDED TOTAL (PCI/L)
07062 IRON 59, SUSPENDED (PCI/L)

07063 IRON 59, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07063 IRON 59, SUSPENDED, COUNTING ERROR (PCI/L)

39432 ISODRIN, SUSPENDED TOTAL (UG/L)
39432 ISODRIN, SUSPENDED (UG/L)

01050 LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
01050 LEAD, SUSPENDED (UG/L AS PB)

01051 LEAD, TOTAL RECOVERABLE (UG/L AS PB)
01051 LEAD, TOTAL (UG/L AS PB)

01052 LEAD, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS PB)
01052 LEAD, TOTAL IN BOTTOM MATERIAL (UG/G AS PB)

39342 LINDANE, SUSPENDED TOTAL (UG/L)
39342 LINDANE, SUSPENDED (UG/L)

01131 LITHIUM, SUSPENDED RECOVERABLE (UG/L AS LI)
01131 LITHIUM, SUSPENDED (UG/L AS LI)

01132 LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)
01132 LITHIUM, TOTAL (UG/L AS LI)

00926 MAGNESIUM, SUSPENDED RECOVERABLE (MG/L AS MG)
00926 MAGNESIUM, SUSPENDED (MG/L AS MG)

00927 MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)
00927 MAGNESIUM, TOTAL (MG/L AS MG)

39533 MALATHION, SUSPENDED TOTAL (UG/L)
39533 MALATHION, SUSPENDED (UG/L)

01053 MANGANESE, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MN)
01053 MANGANESE, TOTAL IN BOTTOM MATERIAL (UG/G AS MN)

01054 MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)
01054 MANGANESE, SUSPENDED (UG/L AS MN)

01055 MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
01055 MANGANESE, TOTAL (UG/L AS MN)

71895 MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)
71895 MERCURY, SUSPENDED (UG/L AS HG)

71900 MERCURY, TOTAL RECOVERABLE (UG/L AS HG)
71900 MERCURY, TOTAL (UG/L AS HG)

71921 MERCURY, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS HG)
71921 MERCURY, TOTAL IN BOTTOM MATERIAL (UG/G AS HG)

39603 METHYL PARATHION, SUSPENDED TOTAL (UG/L)
39603 METHYL PARATHION, SUSPENDED (UG/L)

39757 MIREX, SUSPENDED TOTAL (UG/L)
39757 MIREX, SUSPENDED (UG/L)

01061 MOLYBDENUM, SUSPENDED RECOVERABLE (UG/L AS MO)
01061 MOLYBDENUM, SUSPENDED (UG/L AS MO)

01062 MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)
01062 MOLYBDENUM, TOTAL (UG/L AS MO)

01063 MOLYBDENUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MO)
01063 MOLYBDENUM, TOTAL IN BOTTOM MATERIAL (UG/G AS MO)

01066 NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
01066 NICKEL, SUSPENDED (UG/L AS NI)

01067 NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
01067 NICKEL, TOTAL (UG/L AS NI)

01068 NICKEL, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS NI)
01068 NICKEL, TOTAL IN BOTTOM MATERIAL (UG/G AS NI)

00623 NITROGEN, AMMONIA PLUS ORGANIC, DISSOLVED (MG/L AS N)
00623 NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)

00624 NITROGEN, AMMONIA PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS N)
00624 NITROGEN, KJELDAHL, SUSPENDED (MG/L AS N)

00625 NITROGEN, AMMONIA PLUS ORGANIC, TOTAL (MG/L AS N)
00625 NITROGEN, KJELDAHL, TOTAL (MG/L AS N)

00626 NITROGEN, AMMONIA PLUS ORGANIC,
TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
00626 NITROGEN, KJELDAHL, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)

39543 PARATHION, SUSPENDED TOTAL (UG/L)
39543 PARATHION, SUSPENDED (UG/L)

39518 PCB, SUSPENDED TOTAL (UG/L)
39518 PCB, SUSPENDED (UG/L)

APPENDIX

A-5

09505 RADIUM 226, SUSPENDED TOTAL (PCI/L)
09505 RADIUM 226, SUSPENDED (PCI/L)

07082 RHODAMINE WT, SUSPENDED TOTAL (UG/L)
07082 RHODAMINE WT, SUSPENDED (UG/L)

01136 RUBIDIUM, SUSPENDED TOTAL (UG/L AS RB)
01136 RUBIDIUM, SUSPENDED (UG/L AS RB)

29633 SCANDIUM 46, SUSPENDED TOTAL (PCI/L)
29633 SCANDIUM 46, SUSPENDED (PCI/L)

29634 SCANDIUM 46, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
29634 SCANDIUM 46, SUSPENDED, COUNTING ERROR (PCI/L)

01146 SELENIUM, SUSPENDED TOTAL (UG/L AS SE)
01146 SELENIUM, SUSPENDED (UG/L AS SE)

07102 SELENIUM 75, SUSPENDED TOTAL (PCI/L)
07102 SELENIUM 75, SUSPENDED (PCI/L)

07103 SELENIUM 75, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07103 SELENIUM 75, SUSPENDED, COUNTING ERROR (PCI/L)

01076 SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
01076 SILVER, SUSPENDED (UG/L AS AG)

01077 SILVER, TOTAL RECOVERABLE (UG/L AS AG)
01077 SILVER, TOTAL (UG/L AS AG)

0107A SILVER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AG)
0107A SILVER, TOTAL IN BOTTOM MATERIAL (UG/G AS AG)

07122 SILVER 110, SUSPENDED TOTAL (PCI/L)
07122 SILVER 110, SUSPENDED (PCI/L)

07123 SILVER 110, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07123 SILVER 110, SUSPENDED, COUNTING ERROR (PCI/L)

39763 SILVEX, SUSPENDED TOTAL (UG/L)
39763 SILVEX, SUSPENDED (UG/L)

70299 SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED TOTAL (MG/L)
70299 SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED (MG/L)

01081 STRONTIUM, SUSPENDED RECOVERABLE (UG/L AS SR)
01081 STRONTIUM, SUSPENDED (UG/L AS SR)

01082 STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)
01082 STRONTIUM, TOTAL (UG/L AS SR)

01083 STRONTIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS SR)
01083 STRONTIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS SR)

13505 STRONTIUM 90, SUSPENDED TOTAL (PCI/L)
13505 STRONTIUM 90, SUSPENDED (PCI/L)

13506 STRONTIUM 90, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
13506 STRONTIUM 90, SUSPENDED, COUNTING ERROR (PCI/L)

07142 SULFUR 35, SUSPENDED TOTAL (PCI/L)
07142 SULFUR 35, SUSPENDED (PCI/L)

07143 SULFUR 35, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07143 SULFUR 35, SUSPENDED, COUNTING ERROR (PCI/L)

01101 TIN, SUSPENDED RECOVERABLE (UG/L AS SN)
01101 TIN, SUSPENDED (UG/L AS SN)

01102 TIN, TOTAL RECOVERABLE (UG/L AS SN)
01102 TIN, TOTAL (UG/L AS SN)

01151 TITANIUM, SUSPENDED TOTAL (UG/L AS TI)
01151 TITANIUM, SUSPENDED (UG/L AS TI)

39402 TOXAPHENE, SUSPENDED TOTAL (UG/L)
39402 TOXAPHENE, SUSPENDED (UG/L)

07010 TRITIUM, SUSPENDED TOTAL (PCI/L)
07010 TRITIUM, SUSPENDED (PCI/L)

APPENDIX

07011 TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
 07011 TRITIUM, SUSPENDED, COUNTING ERROR (PCI/L)
 07014 TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (TRITIUM UNITS)
 07014 TRITIUM, SUSPENDED, COUNTING ERROR (TRITIUM UNITS)
 07016 TRITIUM, SUSPENDED TOTAL (TRITIUM UNITS)
 07016 TRITIUM, SUSPENDED (TRITIUM UNITS)
 22705 URANIUM, NATURAL, SUSPENDED TOTAL (UG/L AS U NATURAL)
 22705 URANIUM, NATURAL, SUSPENDED (UG/L AS U NATURAL)
 01086 VANADIUM, SUSPENDED TOTAL (UG/L AS V)
 01086 VANADIUM, SUSPENDED (UG/L AS V)
 01091 ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)
 01091 ZINC, SUSPENDED (UG/L AS ZN)
 01092 ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
 01092 ZINC, TOTAL (UG/L AS ZN)
 01093 ZINC, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS ZN)
 01093 ZINC, TOTAL IN BOTTOM MATERIAL (UG/G AS ZN)
 01161 ZIRCONIUM, SUSPENDED TOTAL (UG/L AS ZR)
 01161 ZIRCONIUM, SUSPENDED (UG/L AS ZR)
 39733 2,4-D, SUSPENDED TOTAL (UG/L)
 39733 2,4-D, SUSPENDED (UG/L)
 39743 2,4,5-T, SUSPENDED TOTAL (UG/L)
 39743 2,4,5-T, SUSPENDED (UG/L)

Numerical Listing of Changes in Selected Parameter Names and Parameter Codes

(First line is new terminology and second line is old terminology.)

00623 NITROGEN, AMMONIA PLUS ORGANIC, DISSOLVED (MG/L AS N)
 00623 NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)
 00624 NITROGEN, AMMONIA PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS N)
 00624 NITROGEN, KJELDAHL, SUSPENDED (MG/L AS N)
 00625 NITROGEN, AMMONIA PLUS ORGANIC, TOTAL (MG/L AS N)
 00625 NITROGEN, KJELDAHL, TOTAL (MG/L AS N)
 00626 NITROGEN, AMMONIA PLUS ORGANIC,
 TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
 00626 NITROGEN, KJELDAHL, TOTAL IN BOTTOM MATERIAL, DRY WT (MG/KG AS N)
 00683 CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
 00683 CARBON, ORGANIC, SUSPENDED (MG/L AS C)
 00688 CARBON, INORGANIC, SUSPENDED TOTAL (MG/L AS C)
 00688 CARBON, INORGANIC, SUSPENDED (MG/L AS C)
 00689 CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)
 00689 CARBON, ORGANIC, SUSPENDED (MG/L AS C)
 00694 CARBON, INORGANIC PLUS ORGANIC, SUSPENDED TOTAL (MG/L AS C)
 00694 CARBON, INORGANIC PLUS ORGANIC, SUSPENDED (MG/L AS C)
 00916 CALCIUM, TOTAL RECOVERABLE (MG/L AS CA)
 00916 CALCIUM, TOTAL (MG/L AS CA)
 00926 MAGNESIUM, SUSPENDED RECOVERABLE (MG/L AS MG)
 00926 MAGNESIUM, SUSPENDED (MG/L AS MG)

APPENDIX

A-7

00927 MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)
00927 MAGNESIUM, TOTAL (MG/L AS MG)

01001 ARSENIC, SUSPENDED TOTAL (UG/L AS AS)
01001 ARSENIC, SUSPENDED (UG/L AS AS)

01006 BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
01006 BARIUM, SUSPENDED (UG/L AS BA)

01007 BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
01007 BARIUM, TOTAL (UG/L AS BA)

01008 BARIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BA)
01008 BARIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BA)

01011 BERYLLIUM, SUSPENDED RECOVERABLE (UG/L AS BE)
01011 BERYLLIUM, SUSPENDED (UG/L AS BE)

01012 BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)
01012 BERYLLIUM, TOTAL (UG/L AS BE)

01013 BERYLLIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS BE)
01013 BERYLLIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS BE)

01016 BISMUTH, SUSPENDED TOTAL (UG/L AS BI)
01016 BISMUTH, SUSPENDED (UG/L AS BI)

01021 BORON, SUSPENDED RECOVERABLE (UG/L AS B)
01021 BORON, SUSPENDED (UG/L AS B)

01022 BORON, TOTAL RECOVERABLE (UG/L AS B)
01022 BORON, TOTAL (UG/L AS B)

01023 BORON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS B)
01023 BORON, TOTAL IN BOTTOM MATERIAL (UG/G AS B)

01026 CADMIUM, SUSPENDED RECOVERABLE (UG/L AS CD)
01026 CADMIUM, SUSPENDED (UG/L AS CD)

01027 CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)
01027 CADMIUM, TOTAL (UG/L AS CD)

01028 CADMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CD)
01028 CADMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CD)

01029 CHROMIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CR)
01029 CHROMIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS CR)

01031 CHROMIUM, SUSPENDED RECOVERABLE (UG/L AS CR)
01031 CHROMIUM, SUSPENDED (UG/L AS CR)

01034 CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
01034 CHROMIUM, TOTAL (UG/L AS CR)

01036 COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)
01036 COBALT, SUSPENDED (UG/L AS CO)

01037 COBALT, TOTAL RECOVERABLE (UG/L AS CO)
01037 COBALT, TOTAL (UG/L AS CO)

01038 COBALT, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CO)
01038 COBALT, TOTAL IN BOTTOM MATERIAL (UG/G AS CO)

01041 COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)
01041 COPPER, SUSPENDED (UG/L AS CU)

01042 COPPER, TOTAL RECOVERABLE (UG/L AS CU)
01042 COPPER, TOTAL (UG/L AS CU)

01043 COPPER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS CU)
01043 COPPER, TOTAL IN BOTTOM MATERIAL (UG/G AS CU)

01044 IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
01044 IRON, SUSPENDED (UG/L AS FE)

01045 IRON, TOTAL RECOVERABLE (UG/L AS FE)
01045 IRON, TOTAL (UG/L AS FE)

01050 LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
01050 LEAD, SUSPENDED (UG/L AS PB)

01051 LEAD, TOTAL RECOVERABLE (UG/L AS PB)
01051 LEAD, TOTAL (UG/L AS PB)

01052 LEAD, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS PB)
01052 LEAD, TOTAL IN BOTTOM MATERIAL (UG/G AS PB)

01053 MANGANESE, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MN)
01053 MANGANESE, TOTAL IN BOTTOM MATERIAL (UG/G AS MN)

01054 MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)
01054 MANGANESE, SUSPENDED (UG/L AS MN)

01055 MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
01055 MANGANESE, TOTAL (UG/L AS MN)

01061 MOLYBDENUM, SUSPENDED RECOVERABLE (UG/L AS MO)
01061 MOLYBDENUM, SUSPENDED (UG/L AS MO)

01062 MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)
01062 MOLYBDENUM, TOTAL (UG/L AS MO)

01063 MOLYBDENUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS MO)
01063 MOLYBDENUM, TOTAL IN BOTTOM MATERIAL (UG/G AS MO)

01066 NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
01066 NICKEL, SUSPENDED (UG/L AS NI)

01067 NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
01067 NICKEL, TOTAL (UG/L AS NI)

01068 NICKEL, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS NI)
01068 NICKEL, TOTAL IN BOTTOM MATERIAL (UG/G AS NI)

01076 SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
01076 SILVER, SUSPENDED (UG/L AS AG)

01077 SILVER, TOTAL RECOVERABLE (UG/L AS AG)
01077 SILVER, TOTAL (UG/L AS AG)

01078 SILVER, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AG)
01078 SILVER, TOTAL IN BOTTOM MATERIAL (UG/G AS AG)

01081 STRONTIUM, SUSPENDED RECOVERABLE (UG/L AS SR)
01081 STRONTIUM, SUSPENDED (UG/L AS SR)

01082 STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)
01082 STRONTIUM, TOTAL (UG/L AS SR)

01083 STRONTIUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS SR)
01083 STRONTIUM, TOTAL IN BOTTOM MATERIAL (UG/G AS SR)

01086 VANADIUM, SUSPENDED TOTAL (UG/L AS V)
01086 VANADIUM, SUSPENDED (UG/L AS V)

01091 ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)
01091 ZINC, SUSPENDED (UG/L AS ZN)

01092 ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
01092 ZINC, TOTAL (UG/L AS ZN)

01093 ZINC, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS ZN)
01093 ZINC, TOTAL IN BOTTOM MATERIAL (UG/G AS ZN)

01096 ANTIMONY, SUSPENDED TOTAL (UG/L AS SB)
01096 ANTIMONY, SUSPENDED (UG/L AS SB)

01101 TIN, SUSPENDED RECOVERABLE (UG/L AS SN)
01101 TIN, SUSPENDED (UG/L AS SN)

01102 TIN, TOTAL RECOVERABLE (UG/L AS SN)
01102 TIN, TOTAL (UG/L AS SN)

01105 ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)
01105 ALUMINUM, TOTAL (UG/L AS AL)

01107 ALUMINUM, SUSPENDED RECOVERABLE (UG/L AS AL)
01107 ALUMINUM, SUSPENDED (UG/L AS AL)

01108 ALUMINUM, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS AL)
01108 ALUMINUM, TOTAL IN BOTTOM MATERIAL (UG/G AS AL)

APPENDIX

A-9

01116 CESIUM, SUSPENDED TOTAL (UG/L AS CS)
01116 CESIUM, SUSPENDED (UG/L AS CS)
01121 GALLIUM, SUSPENDED TOTAL (UG/L AS GA)
01121 GALLIUM, SUSPENDED (UG/L AS GA)
01126 GERMANIUM, SUSPENDED TOTAL (UG/L AS GE)
01126 GERMANIUM, SUSPENDED (UG/L AS GE)
01131 LITHIUM, SUSPENDED RECOVERABLE (UG/L AS LI)
01131 LITHIUM, SUSPENDED (UG/L AS LI)
01132 LITHIUM, TOTAL RECOVERABLE (UG/L AS LI)
01132 LITHIUM, TOTAL (UG/L AS LI)
01136 RUBIDIUM, SUSPENDED TOTAL (UG/L AS RB)
01136 RUBIDIUM, SUSPENDED (UG/L AS RB)
01146 SELENIUM, SUSPENDED TOTAL (UG/L AS SE)
01146 SELENIUM, SUSPENDED (UG/L AS SE)
01151 TITANIUM, SUSPENDED TOTAL (UG/L AS TI)
01151 TITANIUM, SUSPENDED (UG/L AS TI)
01161 ZIRCONIUM, SUSPENDED TOTAL (UG/L AS ZR)
01161 ZIRCONIUM, SUSPENDED (UG/L AS ZR)
01170 IRON, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS FE)
01170 IRON, TOTAL IN BOTTOM MATERIAL (UG/G AS FE)
01505 ALPHA, SUSPENDED TOTAL (PCI/L)
01505 ALPHA, SUSPENDED (PCI/L)
01506 ALPHA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
01506 ALPHA, SUSPENDED, COUNTING ERROR (PCI/L)
01516 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/L AS U NATURAL)
01516 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(PCI/L AS U NATURAL)
01517 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/G AS U NATURAL)
01517 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(PCI/G AS U NATURAL)
01518 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(UG/G AS U NATURAL)
01518 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(UG/G AS U NATURAL)
03505 BETA, SUSPENDED TOTAL (PCI/L)
03505 BETA, SUSPENDED (PCI/L)
03506 BETA, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
03506 BETA, SUSPENDED, COUNTING ERROR (PCI/L)
03516 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/L AS CS-137)
03516 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/L AS CS-137)
03517 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/G AS SR/YT-90)
03517 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/G AS SR/YT-90)
03518 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/G AS CS-137)
03518 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/G AS CS-137)
07010 TRITIUM, SUSPENDED TOTAL (PCI/L)
07010 TRITIUM, SUSPENDED (PCI/L)
07011 TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07011 TRITIUM, SUSPENDED, COUNTING ERROR (PCI/L)
07014 TRITIUM, SUSPENDED TOTAL, COUNTING ERROR (TRITIUM UNITS)
07014 TRITIUM, SUSPENDED, COUNTING ERROR (TRITIUM UNITS)

APPENDIX

07016 TRITIUM, SUSPENDED TOTAL (TRITIUM UNITS)
07016 TRITIUM, SUSPENDED (TRITIUM UNITS)

07052 CALCIUM 45, SUSPENDED TOTAL (PCI/L)
07052 CALCIUM 45, SUSPENDED (PCI/L)

07053 CALCIUM 45, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07053 CALCIUM 45, SUSPENDED, COUNTING ERROR (PCI/L)

07062 IRON 59, SUSPENDED TOTAL (PCI/L)
07062 IRON 59, SUSPENDED (PCI/L)

07063 IRON 59, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07063 IRON 59, SUSPENDED, COUNTING ERROR (PCI/L)

07082 RHODAMINE WT, SUSPENDED TOTAL (UG/L)
07082 RHODAMINE WT, SUSPENDED (UG/L)

07102 SELENIUM 75, SUSPENDED TOTAL (PCI/L)
07102 SELENIUM 75, SUSPENDED (PCI/L)

07103 SELENIUM 75, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07103 SELENIUM 75, SUSPENDED, COUNTING ERROR (PCI/L)

07122 SILVER 110, SUSPENDED TOTAL (PCI/L)
07122 SILVER 110, SUSPENDED (PCI/L)

07123 SILVER 110, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07123 SILVER 110, SUSPENDED, COUNTING ERROR (PCI/L)

07142 SULFUR 35, SUSPENDED TOTAL (PCI/L)
07142 SULFUR 35, SUSPENDED (PCI/L)

07143 SULFUR 35, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
07143 SULFUR 35, SUSPENDED, COUNTING ERROR (PCI/L)

09505 RADIUM 226, SUSPENDED TOTAL (PCI/L)
09505 RADIUM 226, SUSPENDED (PCI/L)

13505 STRONTIUM 90, SUSPENDED TOTAL (PCI/L)
13505 STRONTIUM 90, SUSPENDED (PCI/L)

13506 STRONTIUM 90, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
13506 STRONTIUM 90, SUSPENDED, COUNTING ERROR (PCI/L)

22705 URANIUM, NATURAL, SUSPENDED TOTAL (UG/L AS U NATURAL)
22705 URANIUM, NATURAL, SUSPENDED (UG/L AS U NATURAL)

28404 CESIUM 137, SUSPENDED TOTAL (PCI/L)
28404 CESIUM 137, SUSPENDED (PCI/L)

28405 CESIUM 137, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28405 CESIUM 137, SUSPENDED, COUNTING ERROR (PCI/L)

28412 CESIUM 134, SUSPENDED TOTAL (PCI/L)
28412 CESIUM 134, SUSPENDED (PCI/L)

28413 CESIUM 134, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
28413 CESIUM 134, SUSPENDED, COUNTING ERROR (PCI/L)

29633 SCANDIUM 46, SUSPENDED TOTAL (PCI/L)
29633 SCANDIUM 46, SUSPENDED (PCI/L)

29634 SCANDIUM 46, SUSPENDED TOTAL, COUNTING ERROR (PCI/L)
29634 SCANDIUM 46, SUSPENDED, COUNTING ERROR (PCI/L)

39332 ALDRIN, SUSPENDED TOTAL (UG/L)
39332 ALDRIN, SUSPENDED (UG/L)

39342 LINDANE, SUSPENDED TOTAL (UG/L)
39342 LINDANE, SUSPENDED (UG/L)

39353 CHLORDANE, SUSPENDED TOTAL (UG/L)
39353 CHLORDANE, SUSPENDED (UG/L)

39362 DDD, SUSPENDED TOTAL (UG/L)
39362 DDD, SUSPENDED (UG/L)

39367 DDE, SUSPENDED TOTAL (UG/L)
39367 DDE, SUSPENDED (UG/L)

APPENDIX

A-11

39372 DDT, SUSPENDED TOTAL (UG/L)
39372 DDT, SUSPENDED (UG/L)

39382 DIELDRIN, SUSPENDED TOTAL (UG/L)
39382 DIELDRIN, SUSPENDED (UG/L)

39392 ENDRIN, SUSPENDED TOTAL (UG/L)
39392 ENDRIN, SUSPENDED (UG/L)

39402 TOXAPHENE, SUSPENDED TOTAL (UG/L)
39402 TOXAPHENE, SUSPENDED (UG/L)

39412 HEPTACHLOR, SUSPENDED TOTAL (UG/L)
39412 HEPTACHLOR, SUSPENDED (UG/L)

39422 HEPTACHLOR EPOXIDE, SUSPENDED TOTAL (UG/L)
39422 HEPTACHLOR EPOXIDE, SUSPENDED (UG/L)

39432 ISODRIN, SUSPENDED TOTAL (UG/L)
39432 ISODRIN, SUSPENDED (UG/L)

39502 AROCLOR, SUSPENDED TOTAL, 1248 PCB SERIES (UG/L)
39502 AROCLOR, SUSPENDED, 1248 PCB SERIES (UG/L)

39506 AROCLOR, SUSPENDED TOTAL, 1254 PCB SERIES (UG/L)
39506 AROCLOR, SUSPENDED, 1254 PCB SERIES (UG/L)

39510 AROCLOR, SUSPENDED TOTAL, 1260 PCB SERIES (UG/L)
39510 AROCLOR, SUSPENDED, 1260 PCB SERIES (UG/L)

39514 PCB, SUSPENDED TOTAL (UG/L)
39514 PCB, SUSPENDED (UG/L)

39533 MALATHION, SUSPENDED TOTAL (UG/L)
39533 MALATHION, SUSPENDED (UG/L)

39543 PARATHION, SUSPENDED TOTAL (UG/L)
39543 PARATHION, SUSPENDED (UG/L)

39573 DIAZINON, SUSPENDED TOTAL (UG/L)
39573 DIAZINON, SUSPENDED (UG/L)

39603 METHYL PARATHION, SUSPENDED TOTAL (UG/L)
39603 METHYL PARATHION, SUSPENDED (UG/L)

39733 2,4-D, SUSPENDED TOTAL (UG/L)
39733 2,4-D, SUSPENDED (UG/L)

39743 2,4,5-T, SUSPENDED TOTAL (UG/L)
39743 2,4,5-T, SUSPENDED (UG/L)

39757 MIREX, SUSPENDED TOTAL (UG/L)
39757 MIREX, SUSPENDED (UG/L)

39763 SILVEX, SUSPENDED TOTAL (UG/L)
39763 SILVEX, SUSPENDED (UG/L)

70299 SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED TOTAL (MG/L)
70299 SOLIDS, RESIDUE AT 110 DEG. C, SUSPENDED (MG/L)

71895 MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)
71895 MERCURY, SUSPENDED (UG/L AS HG)

71900 MERCURY, TOTAL RECOVERABLE (UG/L AS HG)
71900 MERCURY, TOTAL (UG/L AS HG)

71921 MERCURY, RECOVERABLE FROM BOTTOM MATERIAL (UG/G AS HG)
71921 MERCURY, TOTAL IN BOTTOM MATERIAL (UG/G AS HG)

80040 GROSS ALPHA RADIOACTIVITY, SUSPENDED TOTAL
(UG/L AS U NATURAL)
80040 GROSS ALPHA RADIOACTIVITY, SUSPENDED
(UG/L AS U NATURAL)

80060 GROSS BETA RADIOACTIVITY, SUSPENDED TOTAL
(PCI/L AS SR/YT-90)
80060 GROSS BETA RADIOACTIVITY, SUSPENDED
(PCI/L AS SR/YT-90)

INDEX

	Page		Page
Accuracy of field data and computed results...	13	Hydrologic conditions.....	3
Algae, definition of.....	3	graph of.....	4
Allagash River near Allagash.....	28-32	Hydrologic unit, definition of.....	6
Ambajejus Lake, contents of.....	107		
Androscoggin River, at Brunswick.....	154-164	Indian Pond, contents of.....	136
at Errol, NH.....	138	Jock Stream at South Monmouth.....	133
at Rumford.....	147		
near Auburn.....	153	Kenduskeag Stream near Kenduskeag.....	106
near Gorham, NH.....	139	Kennebec River at Bingham.....	115-124
Androscoggin River basin:		at Moosehead.....	111
gaging-station records in.....	137-164	at The Forks.....	112
reservoirs in.....	165	Kennebec River basin:	
Aquifer, definition of.....	3	gaging-station records in.....	110-135
Aroostook River at Caribou.....	47-56	reservoirs in.....	110, 134, 136
at Washburn.....	46		
near Masardis.....	44	Lake Auburn, contents of.....	165
Artesian, definition of.....	3	Lakes and reservoirs:	
Azisochos Lake, contents of.....	165	Ambejejus Lake.....	107
		Auburn, Lake.....	165
Bacteria, definition of.....	5	Azisochos Lake.....	165
Bed material, definition of.....	5	Brassua Lake.....	136
Biochemical oxygen demand, definition of.....	5	Caribou Lake.....	107
Biomass, definition of.....	5	Chamberlain Lake.....	107
Brassua Lake, contents of.....	136	Chesuncook Lake.....	107
		Cobosseecontee Lake at East Winthrop....	134
Caribou Lake, contents of.....	107	Elbow Lake.....	107
Carrabassett River near North Anson.....	125	First Roach Pond.....	136
Cells/volume, definition of.....	5	Flagstaff Lake.....	136
Cfs-day, definition of.....	6	Grand Lake.....	107
Chamberlain Lake, contents of.....	107	Gulf Island Pond.....	165
Chemical oxygen demand, definition of.....	6	Indian Pond.....	136
Chesuncook Lake, contents of.....	107	Moose Pond.....	107
Chlorophyll, definition of.....	6	Moosehead Lake at East Outlet.....	110
Cobosseecontee Lake at East Winthrop.....	134	Mooselookmeguntic Lake.....	165
Cobosseecontee Stream at Gardiner.....	135	Moxie Pond.....	136
Cold Brook near North Belgrade.....	129	North Twin Lake.....	107
Collyer Brook near Gray.....	166	Pemadumcook Lake.....	107
Color, definition of.....	6	Rangeley Lake.....	165
Computation, accuracy of results of.....	13	Richardson Lakes.....	165
Contents, definition of.....	6	Ripogenus Lake.....	107
Control, definition of.....	6	Round Pond.....	107
Control structure, definition of.....	6	Sebec Lake.....	107
Cooperation.....	1, 3	Second Lake.....	107
Cubic feet per second per square mile,		South Twin Lake.....	107
definition of.....	6	Telos Lake.....	107
Cubic foot per second, definition of.....	6	Thompson Lake.....	165
		Umbagog Lake.....	165
Data, accuracy of.....	13	Wyman Pond.....	136
explanation of.....	11-15	Land surface datum, definition of.....	7
Dead River at The Forks.....	114	Little Androscoggin River near Auburn.....	152
near Dead River.....	113	near South Paris.....	150
Dennys River at Dennysville.....	76	Little Ossipee River near South Limington..	189
Diamond River near Wentworth Location, NH....	137		
Discharge, definition of.....	6	Machias River (tributary to Aroostook River)	
Dissolved, definition of.....	6	near Ashland.....	45
Diversity index, definition of.....	6	Marley Brook near Ludlow.....	57
Drainage area, definition of.....	6	Mattawamkeag River near Mattawamkeag.....	90
Drainage basin, definition of.....	6	Measuring point, definition of.....	7
		Meduxnekeag River near Houlton.....	58
Elbow Lake, contents of.....	107	Methylene blue active substance,	
Ellis River at South Andover.....	146	definition of.....	7
		Micrograms per gram, definition of.....	7
First Roach Pond, contents of.....	136	Micrograms per liter, definition of.....	7
Fish River near Fort Kent.....	38	Milligrams per liter, definition of.....	7
Flagstaff Lake, contents of.....	136	Mill Stream at Winthrop.....	132
		Miscellaneous measurements of streamflow... 192-198	
Gage height, definition of.....	6	of water temperature and specific	
Gaging station, definition of.....	6	conductance.....	199-207
Garland Brook near Mariaville.....	87	Moose Pond, contents of.....	107
Grand Lake, contents of.....	107	Moosehead Lake at East Outlet.....	110
Grand Lake Stream at Grand Lake Stream.....	60	Mooselookmeguntic Lake, contents of.....	165
Ground water, analyses of.....	215-216	Mousam River near West Kennebunk.....	190
Ground-water levels.....	208-214	Moxie Pond, contents of.....	136
Gulf Island Pond, contents of.....	165		
		Narraguagus River at Cherryfield.....	77-85
Hardness, definition of.....	6	National Geodetic Vertical Datum of 1929	
Hatchery Brook at North Belgrade.....	130	(NGVD), definition of.....	7
Hydrologic bench-mark station,			
definition of.....	11		

	Page		Page
National stream-quality accounting network, definition of.....	11	St. John River at Dickey.....	23-27
Nezinscot River at Turner Center.....	149	at Ninemile Bridge.....	17-21
North Twin Lake, contents of.....	107	above Fish River at Fort Kent.....	34-37
		below Fish River at Fort Kent.....	39
Order of listing gaging stations.....	10	at Van Buren.....	40-43
Organism, definition of.....	7	St. John River basin:	
Organism count/area, definition of.....	7	gaging-station records in.....	17-58
Ogranism count/volume, definition of.....	7	Salmon Falls River at Milton, NH.....	191
Ossipee River at Cornish.....	178	Sandy River near Mercer.....	127
at Effingham Falls, NH.....	177	Sebasticook River near Pittsfield.....	128
Partial-record station, definition of.....	7	Sebec Lake, contents of.....	107
Particle size, definition of.....	7	Sebec River at Sebec.....	92
Particle size classification, definition of....	7	Second Lake, contents of.....	107
Passadumkeag River at Lowell.....	105	Sediment, definition of.....	8
Pemadumcook Lake, contents of.....	107	Sheepscot River at North Whitefield.....	109
Penobscot River at West Enfield.....	95-104	Shields Branch Big Black River near Seven Islands.....	22
East Branch at Grindstone.....	88	Sodium-adsorption-ratio, definition of.....	8
near Mattawamkeag.....	89	Solute, definition of.....	8
Penobscot River basin:		South Twin Lake, contents of.....	107
gaging-station records in.....	88-106	Specific conductance, definition of.....	8
reservoirs in.....	107	Stage-discharge relation, definition of....	8
Percent composition, definition of.....	7	Stations, location of.....	2
Periphyton, definition of.....	7	Station numbers.....	10
Pesticides, definition of.....	7	Streamflow, definition of.....	8
Pesticide program, definition of.....	11	Substrate, definition of.....	8
pH, definition of.....	7	Surface area, definition of.....	9
Phytoplankton, definition of.....	7	Surficial bed material, definition of.....	9
Picocurie, definition of.....	8	Suspended, definition of.....	9
Piscataquis River at Medford.....	94	Suspended, recoverable, definition of.....	9
near Dover-Foxcroft.....	91	Suspended, total, definition of.....	9
Plankton, definition of.....	8	Swift River near Roxbury.....	148
Pleasant River near Milo.....	93	Tanning Brook, North Branch, near Manchester.....	131
Polychlorinated biphenyls, definition of.....	8	Taxonomy, definition of.....	9
Presumpscot River near West Falmouth.....	168-175	Telos Lake, contents of.....	107
Publication of streamflow records by Geological Survey.....	1	Terms, definition of.....	3, 5-10
Radiochemical program, definition of.....	11	Thompson Lake, contents of.....	165
Rangeley Lake, contents of.....	165	Thompson Lake Outlet at Oxford.....	151
Recoverable from bottom material, definition of	5	Time-weighted average, definition of.....	9
Reservoirs, see Lakes and Reservoirs.....	229	Tons per day, definition of.....	9
Richardson Lakes, contents of.....	165	Total, definition of.....	9
Ripogenus Lake, contents of.....	107	Total in bottom material, definition of....	5
Round Pond, contents of.....	107	Total load, definition of.....	10
Royal River at Yarmouth.....	167	Total, recoverable, definition of.....	9
Royal River basin:		Tributary A, Little Pond near Damariscotta..	108
gaging-station records in.....	166-167	Umbagog Lake, contents of.....	165
Runoff in inches, definition of.....	8	Union River basin:	
Saco River at Cornish.....	179-188	gaging-station records in.....	86-87
near Conway, NH.....	176	Union River, West Branch at Amherst.....	86
Saco River basin:		Wells, description of.....	208-214
gaging-station records in.....	176-189	numbers of.....	10
St. Croix River at Baring.....	62	water-level measurements in.....	208-214
at Milltown.....	63-75	water quality in.....	215-216
at Vanceboro.....	59	Wild River at Gilead.....	140-145
near Baileyville.....	61	Wilson Stream at East Wilton.....	126
St. Croix River basin:		WDR, definition of.....	10
gaging-station records in.....	59-75	WSP, definition of.....	10
St. Francis River at outlet of Glasier Lake, near Connors, New Brunswick.....	33	Wyman Pond, contents of.....	136

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1 2.54×10^{-2}	millimeters (mm) meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3 4.047×10^{-1} 4.047×10^{-3}	square meters (m ²) square hectometers (hm ²) square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0 3.785×10^0 3.785×10^{-3}	liters (L) cubic decimeters (dm ³) cubic meters (m ³)
million gallons	3.785×10^3 3.785×10^{-3}	cubic meters (m ³) cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1 2.832×10^{-2}	cubic decimeters (dm ³) cubic meters (m ³)
cfs-days	2.447×10^3 2.447×10^{-3}	cubic meters (m ³) cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3 1.233×10^{-3} 1.233×10^{-6}	cubic meters (m ³) cubic hectometers (hm ³) cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1 2.832×10^1 2.832×10^{-2}	liters per second (L/s) cubic decimeters per second (dm ³ /s) cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2} 6.309×10^{-2} 6.309×10^{-5}	liters per second (L/s) cubic decimeters per second (dm ³ /s) cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1 4.381×10^{-2}	cubic decimeters per second (dm ³ /s) cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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