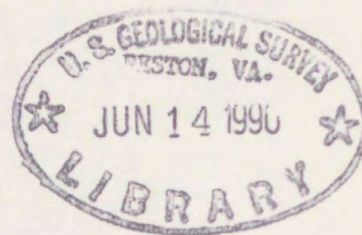


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Water Resources Data Maine Water Year 1989



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT ME-89-1
Prepared in cooperation with the State of Maine
and with other agencies

CALENDAR FOR WATER YEAR 1989

1988

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Water Resources Data Maine Water Year 1989

by W.P. Bartlett, Jr., W.B. Higgins, and W.J. Nichols, Jr.



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT ME-89-1
Prepared in cooperation with the State of Maine
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

MANUEL LUJAN JR., Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information write to
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Water Resources Division
U.S. Geological Survey
26 Ganneston Drive
Augusta, ME 04330

1990

PREFACE

This volume of the annual hydrologic data report of Maine is one of a series of annual reports that document data gathered from the U.S. Geological Survey's surface-and-ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

Kristin S. Brossy	Robert G. Lippert
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Richard A. Fontaine	Scott A. Olson
Gordon R. Keezer	Joel A. Petersen

Gloria L. Morrill prepared the illustrations for the report.

Helen D. Wyman typed the manuscripts and coordinated the word processing of the report.

This report was prepared in cooperation with the State of Maine and with other agencies under the general supervision of Derrill J. Cowing, Chief, Maine Office.

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WATER RESOURCES DATA - MAINE, 1989

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of Maine each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Maine."

This report series includes records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 51 gaging stations; stage only at 2 gaging stations; contents at 17 lakes and reservoirs; water quality at 13 river sites; and water levels at 30 observation wells. Locations of these sites are shown on figures 1 and 2. Additional water data were collected at various sites not involved in the systematic data-collection program, and are published as miscellaneous data. 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.

This series of annual reports for Maine began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1965 water year, the report included data relating to water quality. Beginning with the 1968 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Maine were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Part 1A." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States." Records of ground-water levels for the 1935 through 1955 water years were published under the title "Water Levels and Artesian Pressures in Observation Wells in the United States" and from 1956 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States or may be purchased from Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the U.S. Geological Survey for all States. These reports have 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 volume is identified as "U.S. Geological Survey Water-Data Report ME-89-1." These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

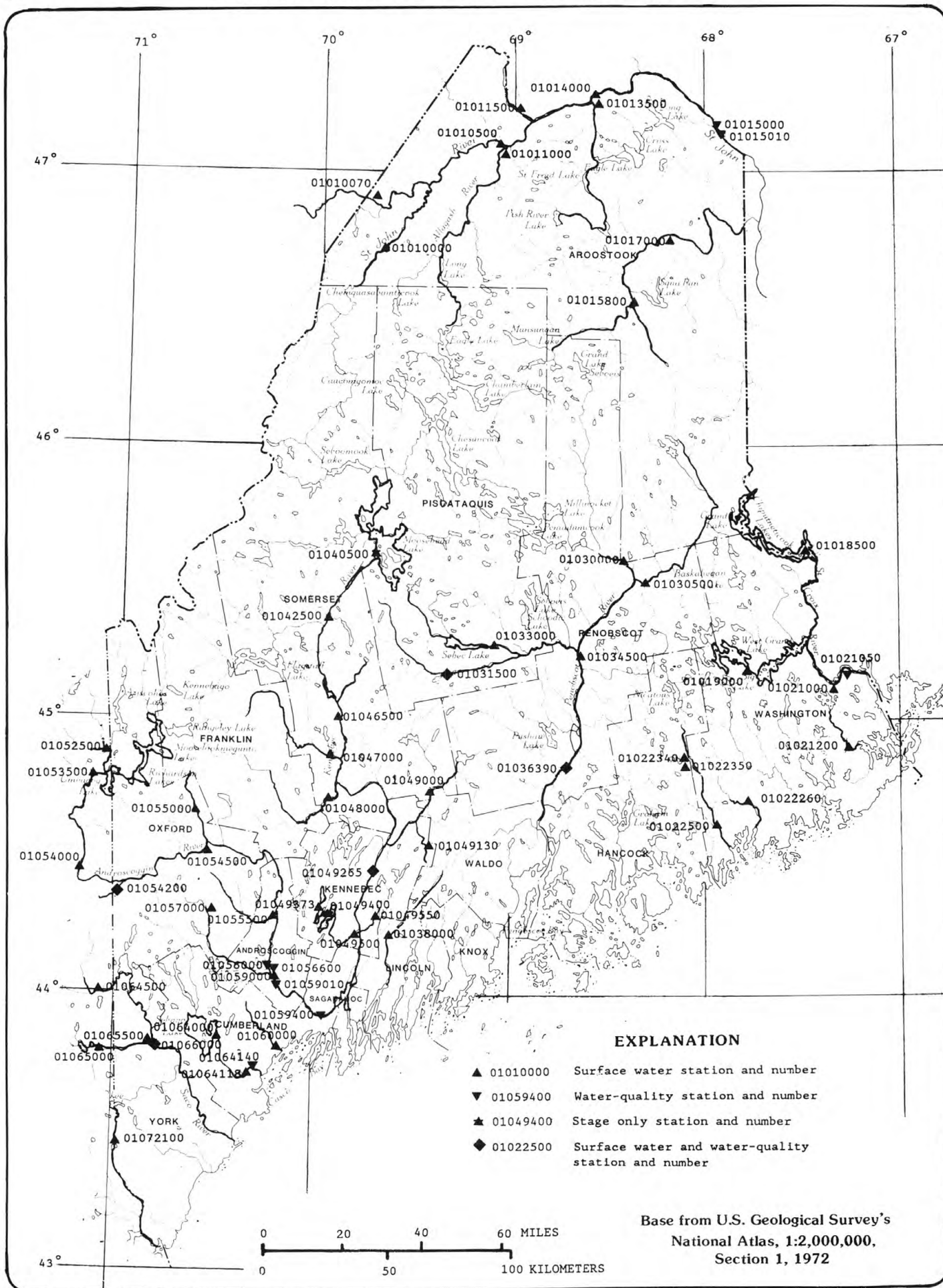


Figure 1.--Location of active surface-water data collection stations.

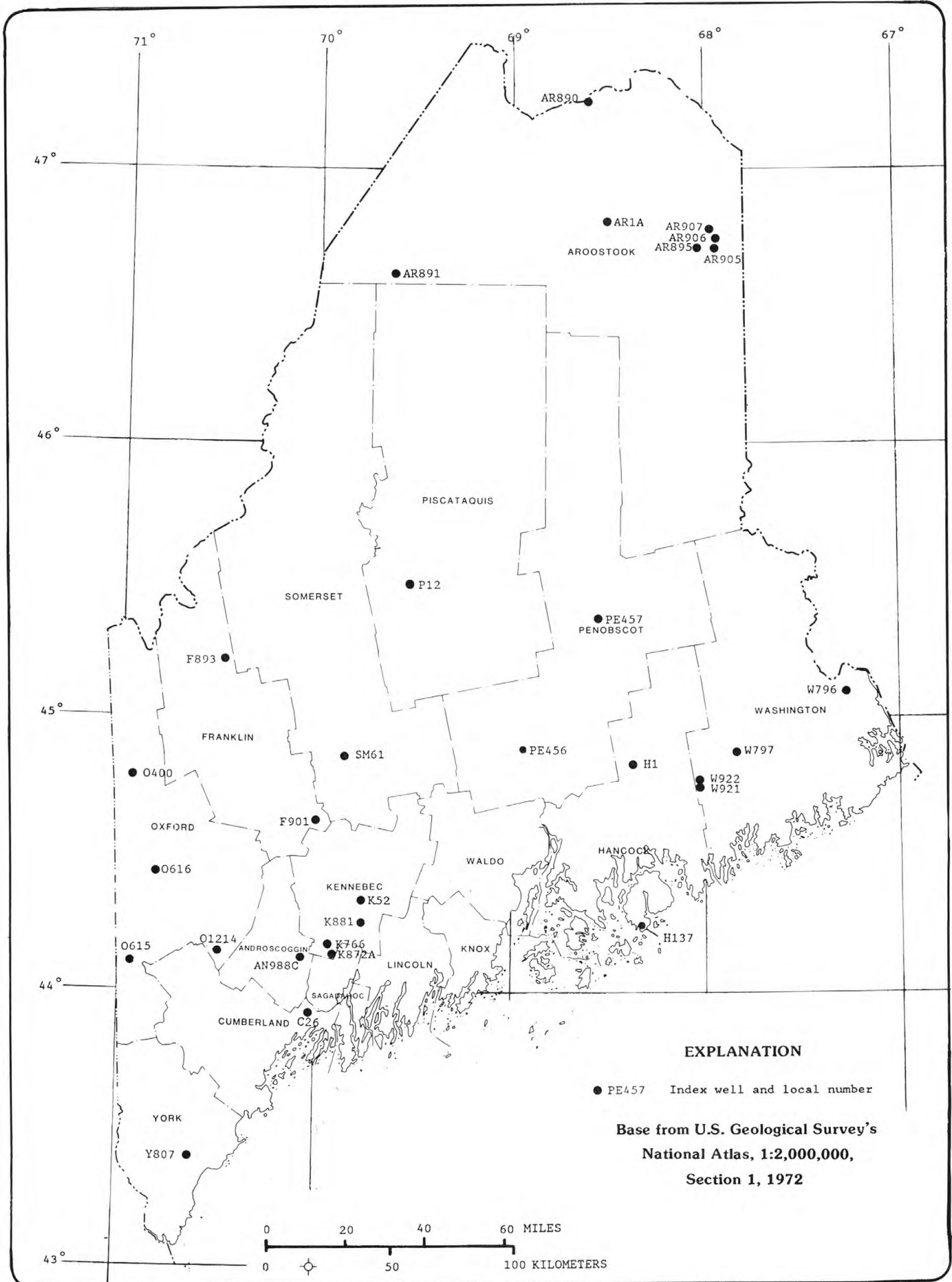


Figure 2.--Location of active ground-water data collection stations.

WATER RESOURCES DATA - MAINE, 1989

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Additional information, including current prices, for ordering specific reports may be obtained from the Office Chief at the address given on the back of the title page or by telephone (207) 622-8208.

COOPERATION

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

Maine Department of Conservation, C. E. Meadows, Jr., Commissioner.
Maine Department of Environmental Protection, D. C. Marriott, Commissioner
Maine Department of Inland Fisheries and Wildlife, W. J. Vail, Commissioner
Maine Department of Transportation, D. F. Conners, Commissioner
Cobboossee Watershed District, T. U. Gordon, Executive Director
Androscoggin Valley Council of Governments, J. J. Jaworski, Executive Director
North Kennebec Regional Planning Commission, E. Keene, Planning Director
Greater Portland Council of Governments, J. D. Bubier, Acting Executive Director
Penobscot Valley Council of Governments, D. Meagher, Director
University of Maine, P.D. Uttormark, Assistant Vice President
Northern Maine Regional Planning Commission, J. Walker, Executive Director

Assistance with funds or services was given by the U.S. Department of State in collecting records for 3 gaging stations and 1 water-quality station; and by the U.S. Veterans Administration in collecting records for 1 gaging station.

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

Bangor Hydro-Electric Company	Great Northern Paper Company
Boise Cascade	Kennebec Water Power Company
Central Maine Power Company	Maine Public Service Company
Cumberland Power Company	S. D. Warren Company
Gardiner Hydro Company	Swift River Company
Georgia-Pacific Corporation	Union Water Power Company

Organizations that provided data are acknowledged in station descriptions.

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

SUMMARY OF HYDROLOGIC CONDITIONS

Runoff for the 1989 water year was characterized by normal flows. Annual runoff was in the normal range at 44 of 48 stream flow-gaging stations. Annual peak flows had less than a 2-year recurrence interval at 11 sites, a 2-year to 5-year recurrence interval at 21 sites, a 5 to 25-year recurrence interval at 14 sites and above a 25-year recurrence interval at 2 sites. Minimum flows at seven sites are equalled or exceeded 98 percent of the time and minimum flows at 20 sites are equalled or exceeded between 90 and 98 percent of the time. The 1989 monthly and annual mean discharges, and median monthly and annual discharges for the 1951-80 reference period, are shown in figure 3 for three long-term index stations.

Streamflow at the beginning of the water year (October) was in the normal range throughout the State. Flows remained normal during October, except in central Maine where flows were above normal. Flows increased to above normal in November, then dropped to normal in northern Maine and below normal elsewhere during December. January, February, and March flows were in the below-normal range throughout Maine. April, May and June flows were normal in northern and central Maine except in May, when flows in central Maine were above normal. In southern Maine, flows were below normal in April and above normal in May and June. July flows were below normal statewide, and remained below normal in northern Maine during August, while flows in southern Maine were normal and above normal in central Maine. In September, flows returned to the normal range statewide.

Usable surface-water storage in seven reservoir systems in Maine totaled 107,445 million ft^3 at the beginning of the water year; this volume is 60 percent of capacity and 102 percent of the long-term average storage at the beginning of water year. Usable storage decreased during October, increased during November, and then began a steady seasonal decline to the 1989 water-year minimum at the end of March, when storage was 53,237 million ft^3 (30 percent of capacity, and 83 percent of the long-term average storage at the end of March). Storage increased during April and May to the 1989 water-year maximum of 165,790 million ft^3 (93 percent of capacity and 103 percent of the long-term average storage at the end of May). Storage then decreased during June, July, August, and September, and at the end of the water year, was 114,474 million ft^3 (64 percent of capacity and 108 percent of long-term end-of-water-year average storage).

Precipitation, as reported by the National Weather Service, ranged from 87.8 to 114.8 percent of median at 13 sites used to provide statewide precipitation data. Table 1 summarizes annual precipitation data at the 13 selected sites during the 1989 water year.

WATER RESOURCES DATA FOR MAINE, 1989

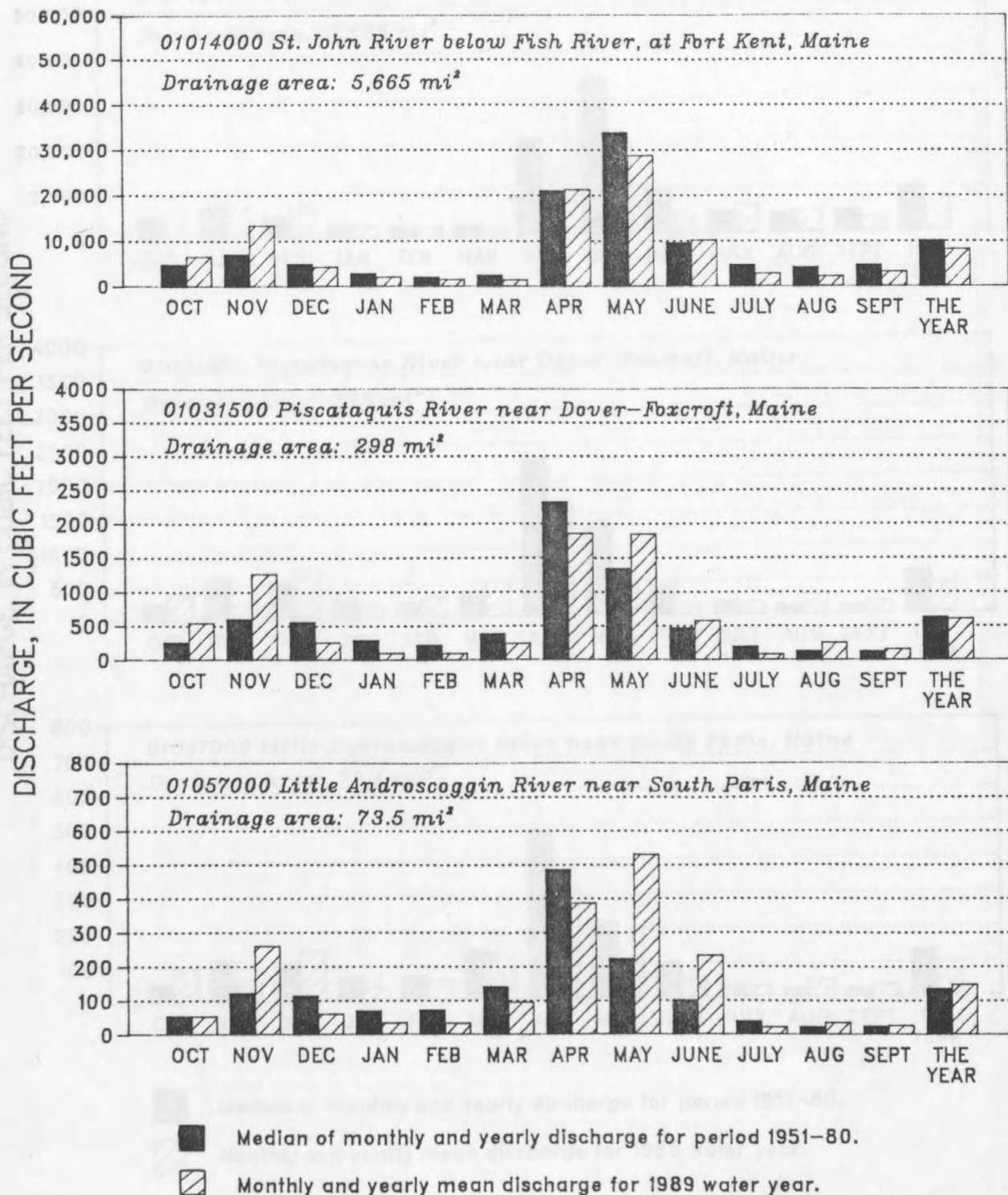


Figure 3.—Comparison of discharge at three long-term index gaging stations during 1989 water year with median discharge for period 1951-80.

Table 1.-- Precipitation at selected locations in Maine
for the 1989 water year

Station Location	Actual Oct-Sept (Inches)	Median Oct-Sept (Inches)	Departure (Inches)	Percentage of median
Fort Kent	31.72	36.12	-4.40	87.8
Caribou	33.12	36.59	-3.47	90.5
Presque Isle	33.85	36.12	-2.27	93.7
Houlton	41.95	37.20	4.75	112.8
Brassau Dam	39.13	39.29	-0.16	99.6
Jackman	38.74	37.08	1.66	104.5
Woodland	45.30	46.07	-0.77	98.3
Eastport	40.50	43.82	-3.32	92.4
Middle Dam	41.40	36.39	5.01	113.8
Ellsworth	47.39	46.41	0.98	102.1
Rumford	50.33	43.84	6.49	114.8
Lewiston	42.36	45.76	-3.40	92.6
Portland	44.06	43.52	0.54	101.2

Water-quality data on specific conductance, dissolved-oxygen concentrations, pH, and water temperature from the seven continuous monitoring stations in Maine were generally within the previous extreme values for the period of daily record for individual stations. Two stations recorded new maximums for the period of daily record. The St. Croix River at Milltown recorded a new maximum specific conductance of 375 microsiemens/cm at 25 degrees Celcius, the previous maximum specific conductance of 334 microsiemens/cm at 25 degrees Celcius, was exceeded several times during the 1989 water year. For the second consecutive year a new maximum pH value of 8.1 units was recorded at the Kennebec River at North Sidney. The previous maximum pH was 7.6 units.

In August 1989, a new four-parameter water-quality monitor station was established on the St. John River near Hamlin, Maine, which increased the continuous monitoring network to 8 sites.

Ground-water levels in Maine were in the normal range at the beginning of the water year except in southwestern and western areas where they were in the below-normal range. Water-levels in October through December were normal for most of the State, except for southwestern and western sections in October and central-coastal to western and northwestern areas in December, which were in the below-normal range. The ground-water level recorded at Oxford for October was a record month-end low. November ground-water levels were in above-normal range in eastern Maine. January through March, water-levels were in the below-normal range for most of the State, except for eastern-coastal section where they were normal. Ground-water wells at Clayton lake and Litchfield recorded new month-end lows during January-February and February-March, respectively. Water levels for April were in the normal range statewide except for an area in northern Maine where they were in the below-normal range. May water levels were in the normal range throughout Maine except for the eastern-coastal area where they were in the above-normal range. Ground-water wells at Acadia, Kenduskeag, and Hadly Lakes recorded new month-end highs for May. Water-levels from June through the end of the water year were in the normal range statewide, except for June, when water levels in southwestern Maine were in the above-normal range.

Two wells were drilled for the observation network during the 1989 water year. The wells are located in Franklin and Oxford counties. The well in Franklin County taps till. The well in Oxford County replaces the Bethel well (0616), which was destroyed earlier this year. The new Bethel well is at the same location as the old well.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

Radiochemical Program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1989 water year that began October 1, 1988, and ended September 30, 1989. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water level data. The locations of the stations and wells where the data were collected are shown in figure 1. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and for surface-water stations where only miscellaneous measurements are made.

Downstream Order System

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 mainstream station are listed before that station. A station on a tributary that enters between two mainstream 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 with respect to the stream to which it is immediately tributary is indicated by an indention in the "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention shows which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 01031500, which appears just to the left of the station name, includes the two-digit Part number "01" plus the six-digit downstream-order number "031500." The Part number designates the major river basins; for example, Part "01" is for the North Atlantic Slope basins.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure 3 below.)

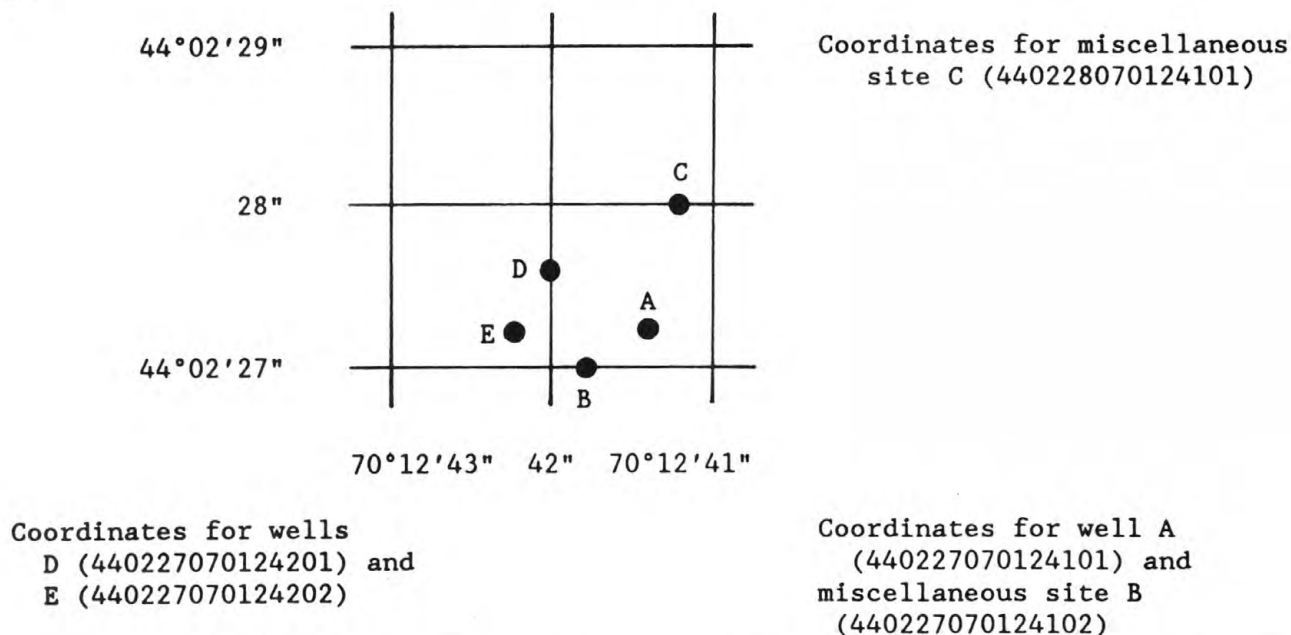


Figure 3.--System for numbering wells and miscellaneous sites (latitude and longitude).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all complete-record stations for which data are given in this report are shown in figure 1.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the stages (gage heights) to the stage-discharge curves or tables. 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 determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

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.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves or tables which define the relationship between stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. Periodic resurveys may be necessary to determine if the stage-content relationship changes because of deposition of sediment in a lake or reservoir. Even when this is done, the contents computed may become increasingly in error as the lapsed time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted 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 most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development. The median of yearly mean discharges also is given under this heading for stations having 10 or more water years of record, if the median differs from the average given by more than 10 percent.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the offices whose addresses are given on the back of the title page of this report to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

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

Data collected at partial-record and miscellaneous sites follow the information for continuous sites. This table summarizes discharge measurements made at sites other than continuous-record sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records 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 measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, 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, unless it is so stated. 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 Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Maine Office of the New England District. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the Maine State office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" , as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 1.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern is to assure that the data obtained represent the in-situ quality of the water. To do this, certain measurements, such as water temperature, pH, alkalinity, dissolved oxygen, and specific conductance need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in-situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory.

Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," (TWRI) Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Maine Office, Geological Survey.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are usually obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

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

For stations equipped with continuous water-quality monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon observations. More detailed records (hourly values) may be obtained from the Maine Office, Geological Survey whose address is given on the back of the title page of this report.

Water temperature

Water temperatures are measured at all water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. Large streams have a small diurnal 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, both mean, maximum, and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are published with the miscellaneous temperature and specific conductance determinations.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers.

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 and in predicting long-term sediment-discharge characteristics of the stream.

Records of the periodic measurements of the particle-size distribution of the suspended sediment and are published in addition to the suspended discharge included for some stations.

Laboratory Measurements

Samples are analyzed locally for specific conductance, dissolved oxygen, pH, temperature, and alkalinity. All other samples were analyzed in the Geological Survey laboratories in Arvada, Colorado and Atlanta, Georgia. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceeding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, and dissolved oxygen follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of daily record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor, or temperature recording device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. Extremes are provided for both the period of daily record and for the current water year. If a value from a miscellaneous measurement from outside the period of daily record has higher maximum or lower minimum, that value is reported in a descriptive heading for extremes outside the period of daily record.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)

Records of Ground-Water Levels

Only water-level data from a national network of observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in Maine are shown in figure 1.

Data Collection and Computation

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

Tables of water-level data are presented by counties arranged in alphabetical order. The primary identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric number, were wells which have been inventoried as numbered consecutively within each county.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum 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).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

REVISIONS.--This entry lists the reports in which revised water-level data have been published, each followed by the water years for which figures were revised.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, water-level mean values are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one or two sets of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration.

Data Collection and Computation

The records of ground-water quality in this report were obtained to describe the quality of water in aquifers where the network wells are located. Consequently, chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed at the end of the introductory text. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The National WATER Data STORAGE and RETRIEVAL System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from the offices whose addresses are given on the back of the title page.

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

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

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

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 and 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 is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while 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.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C plus or minus 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C plus or minus 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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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 or stage of the stream or to prevent the intrusion of salt water.

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

Cubic foot per second-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, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

Cubic feet per second per square mile [$(\text{ft}^3/\text{s})/\text{mi}^2$] 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.

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 μm 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.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified 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 specified.

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 more 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 computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or 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 eight-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 an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

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

National Geodetic Vertical Datum of 1929 (NGVD of 1929) 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.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

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 a particle 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 the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	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 matter 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 the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

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.

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).

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

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 mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

7-day 10-year low flow (7 Q 10) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Solute is any substance that is dissolved in water.

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

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

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

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 planimetered. All areas shown are those for the stage when the planimetered map was made.

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

Temperature is the degree of hotness or coldness measured on a defined scale.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

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

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends, thus, the year ending September 30, 1986, is called the "1986 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

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

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DISCONTINUED GAGING STATIONS

The following continuous-record streamflow stations in Maine have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record shown for each station.

STATION NUMBER	STATION NAME	DRAINAGE AREA (mi ²)	PERIOD OF RECORD
St. John River Basin			
01010100	Shields Brook at the Big Black River near Seven Islands	161	1977-81
01012500	St. John River above Fish River at Fort Kent	4,790	1906-15
01012515	Clayton Stream at outlet of Clayton Lake	13.9	1982-84
01012520	Bald Mountain Brook near Bald Mountain	1.73	1980-84
01012525	Bishop Mountain Brook near Bishop Mountain	1.15	1981-84
01012570	Fish River at inlet of Fish River Lake	70.3	1982-84
01015000	St. John River at Van Buren	8,174	1908-28
01016500	Machias River near Ashland	329	1951-83
01017500	Aroostook River at Fort Fairfield	2,230	1903-10
01017900	Marley Brook near Ludlow	1.47	1964-82
01018000	Meduxnekeag River near Houlton	175	1940-82
St. Croix River Basin			
01020000	St. Croix River near Baileyville	1,315	1919-83
01021500	Machias River at Whitneyville	457	1905-09 1909-21 1929-77
01022000	East Machias River near East Machias	251	1926-26 1927-58
Pleasant River Basin			
01022250	Taylor Brook at the Great Heath	7.06	1980-82
Union River Basin			
01023000	West Branch Union River at Amherst	148	1909-19 1929-79
01024200	Garland Brook near Mariaville	9.79	1964-82
01025000	Green Lake Stream at Lakewood	47.0	1909-12 1912-13
01026000	Branch Lake Stream near Ellsworth	31.0	1909-13
Penobscot River Basin			
01028000	West Branch Penobscot River near Medway	2,115	1916-39
01029500	East Branch Penobscot River at Grindstone	1,086	1902-03 1904-06 1907-79 1979-82
01031000	Mattawamkeag River at Mattawamkeag	1,500	1902-34
01031600	Morrison Brook near Sebec Corners	4.37	1964-78
01033500	Pleasant River near Milo	324	1920-79
01034000	Piscataquis River at Medford	1,162	1924-82
01035000	Passadumkeag River at Lowell	299	1915-79
01035500	Cold Stream at Enfield	28.5	1904-07
01036000	Penobscot River at Passadumkeag	7,000	1938-58
01036500	Kenduskeag Stream near Kenduskeag	178	1941-79
01037000	Kenduskeag Stream near Bangor	195	1908-19
Damariscotta River Basin			
0103770	Tributary A, Little Pond near Damariscotta	0.31	1977-78

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DISCONTINUED GAGING STATIONS--Continued

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STATION NUMBER	STATION NAME	DRAINAGE AREA (mi ²)	PERIOD OF RECORD
Kennebec River Basin			
01039000	Moose River near Rockwood	708	1919-25
01041000	Kennebec River at Moosehead	1,268	1919-82
01043500	Dead River near Dead River	516	1939-82
01045000	Dead River at The Forks	872	1902-07 1910-79
01046000	Austin Stream at Bingham	90.3	1913-69
01047500	Sandy River near Farmington	242	1910-15
01047730	Wilson Stream at East Wilton	45.8	1977-84
01048500	Kennebec River at Waterville	4,270	1894-35
01049218	Cold Brook near North Belgrade	0.85	1978-79
01049221	Hatchery Brook at North Belgrade	8.83	1977-79
01049270	Stony Brook near South Vassalboro	3.00	1979-80
01049300	North Branch Tanning Brook near Manchester	0.93	1963-83
01049396	Jock Stream at South Monmouth	13.7	1977-84
Androscoggin River Basin			
01054300	Ellis River at South Andover	130	1963-82
01057510	Pennesseewassee Lake Outlet at Norway	30.3	1982-83
01058005	Thompson Lake Outlet at Oxford	47.7	1975-75 1976-78 1981-82
01058500	Little Androscoggin River near Auburn	328	1940-82
01059090	Hooper Brook at Sprague Mill	8.30	1978-80
01059500	Cathance River near Topsham	36.4	1952-55
Royal River Basin			
01059800	Collyer Brook near Gray	13.8	1964-82
01066500	Little Ossipee River near South Limington	168	1940-82
0106700	Saco River at West Buxton	1,572	1909-16 1919-40
01067500	Saco River at Salmon Falls	1,595	1938-48
Mousam River Basin			
01068980	Littlefield River at Alfred	21.6	1978-80
01069500	Mousam River near West Kennebunkport	99.0	1939-84
Piscataqua River Basin			
01072500	Salmon Falls River near South Lebanon	147	1928-69

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 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-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.
- 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.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 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.
- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and Warren E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.
- 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.
- 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.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 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.
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- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 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.
- 3-A12. *Fluorometric procedures for dye tracing*, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
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- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programmed test for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction*, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 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.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
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- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 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.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. J. Fishman and L. C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
- 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.
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- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L. J. Britton and P. E. Greeson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.
- 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.
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- 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.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 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.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 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.

SURFACE-WATER RECORDS

REMARK CODES.--The following remark codes may appear with the water-quality data in this section:

PRINTED OUTPUTREMARK

E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony county)

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 downstream from Ninemile Brook, 0.4 mi downstream from site of Ninemile Bridge, and 11 mi northwest of Clayton Lake Post Office.

DRAINAGE AREA.--1,341 mi².

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

Chemical analyses: Water years 1976, 1981.

Specific conductance: April 1975 to September 1980.

Water temperatures: April 1975 to September 1980.

REVISED RECORDS.--WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 931.26 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5 to Apr. 11. Records good except for period of ice-effect, Dec. 5 to Apr. 11, which is fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--39 years, 2,327 ft³/s, 23.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,400 ft³/s, May 1, 1974, gage height, 12.63 ft; maximum gage height, 20.01 ft, Apr. 2, 1976 (backwater from ice); minimum discharge, 59 ft³/s, Sept. 5, 1953; minimum gage height, 0.25 ft, Sept. 5, 1953, Sept. 11, 12, 1960, July 27, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,400 ft³/s, May 3, gage height, 7.20 ft; maximum gage height, 9.77 ft, Apr. 2 (backwater from ice); minimum discharge, 76 ft³/s, July 27, gage height, .25 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	454	1800	2770	e400	e262	e208	e1400	7330	1260	909	172	253
2	448	1840	2280	e385	e260	e205	e1590	9060	1260	721	144	1130
3	932	4500	1990	e380	e253	e203	e1820	13800	1290	798	128	4120
4	2370	6130	1810	e370	e248	e201	e2450	14900	1290	734	124	3630
5	2110	5260	e1180	e355	e244	e200	e4000	12200	1510	580	135	2470
6	1680	4500	e840	e345	e240	e198	e7180	10200	1570	475	151	1650
7	1550	4960	e737	e325	e239	e197	e11000	14300	1300	405	375	1180
8	1560	5310	e685	e315	e237	e196	e13500	12600	1060	339	414	878
9	1450	5370	e655	e310	e234	e195	e13600	9440	863	283	397	687
10	1350	4780	e630	e330	e230	e193	e13000	6760	819	278	374	566
11	1340	4620	e610	e355	e229	e192	e11100	5200	2290	642	324	477
12	1530	4270	e590	e365	e227	e191	8430	6230	3570	848	260	437
13	1690	3490	e580	e360	e225	e190	6800	7340	2870	698	284	415
14	1550	3110	e570	e345	e223	e200	6340	9700	2090	498	556	366
15	1450	4040	e560	e325	e220	e225	6190	11800	1570	359	1380	373
16	1660	4310	e555	e310	e220	e255	6850	9650	1350	281	1520	553
17	1730	3830	e550	e300	e218	e252	7020	6970	1970	226	1150	920
18	1620	4190	e550	e295	e215	e245	9480	5130	2090	201	822	796
19	2150	3870	e545	e290	e213	e235	11000	3970	2600	225	615	680
20	2940	3160	e535	e285	e211	e228	10500	3220	3170	189	476	573
21	2550	2690	e520	e280	e210	e250	9300	2690	2590	159	395	502
22	2090	2280	e500	e275	e210	e275	8210	2550	1910	135	362	512
23	1940	2190	e490	e270	e210	e298	6800	2700	1420	118	608	574
24	2960	1920	e475	e265	e210	e305	5540	2490	1060	106	840	660
25	4250	1450	e470	e255	e210	e311	4630	2270	830	95	674	677
26	4520	1320	e460	e252	e210	e321	4280	2180	675	87	533	579
27	3610	1560	e455	e250	e210	e335	4580	1970	577	80	431	507
28	2880	1680	e445	e248	e210	e390	4850	1930	595	102	363	453
29	2550	2250	e435	e254	---	e495	5070	1840	1160	134	293	416
30	2420	2860	e420	e260	---	e730	6160	1580	1230	178	253	397
31	2120	---	e410	e260	---	e1040	---	1350	---	186	234	---
TOTAL	63454	103540	24302	9614	6328	8959	212670	203350	47839	11069	14787	27431
MEAN	2047	3451	784	310	226	289	7089	6560	1595	357	477	914
MAX	4520	6130	2770	400	262	1040	13600	14900	3570	909	1520	4120
MIN	448	1320	410	248	210	190	1400	1350	577	80	124	253
CFSM	1.53	2.57	.58	.23	.17	.22	5.29	4.89	1.19	.27	.36	.68
IN.	1.76	2.87	.67	.27	.18	.25	5.90	5.64	1.33	.31	.41	.76

CAL YR 1988 TOTAL 678283 MEAN 1853 MAX 14800 MIN 183 CFSM 1.38 IN. 18.82
WTR YR 1989 TOTAL 733343 MEAN 2009 MAX 14900 MIN 80 CFSM 1.50 IN. 20.34

e Estimated

01010070 BIG BLACK RIVER NEAR DEPOT MOUNTAIN, ME

LOCATION.--Lat 46°53'38", long 69°45'08", Aroostook County, Hydrologic Unit 01010001, on left bank at the Six Mile Landing Road Bridge, 4 mi northeast of Depot Mountain, 26.8 mi upstream from mouth.

DRAINAGE AREA.--171 mi².

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 775 ft above National Geodetic Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 4 to Apr. 12. Records good except for period of ice effect, Dec. 4 to Apr. 12, which is fair.

AVERAGE DISCHARGE.--6 years, 296 ft³/s, 23.51 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,420 ft³/s Apr. 1, 1987; gage height, 15.62 ft; minimum daily discharge, 7.4 ft³/s, Sep. 24, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 7	1600	ice jam	* 9.80	Apr. 7	2400	*2320	9.46

Minimum discharge, 14 ft³/sec, Aug. 28 and 29, gage height, 3.04 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	180	522	e59	e47	e41	e240	865	259	92	32	44
2	89	295	390	e57	e44	e40	e265	956	530	99	25	504
3	451	893	354	e54	e43	e39	e315	1460	415	142	24	692
4	646	918	e302	e52	e42	e38	e520	1400	462	109	23	340
5	417	675	e240	e50	e41	e37	e820	974	793	82	32	145
6	275	526	e190	e48	e40	e36	e1400	1200	573	68	34	90
7	285	602	e145	e46	e39	e35	e2100	2290	332	59	34	66
8	292	833	e125	e44	e39	e35	e2260	1780	213	52	33	53
9	252	805	e100	e43	e38	e34	e1940	1090	157	48	41	45
10	213	648	e95	e44	e38	e34	e1460	735	235	54	39	37
11	191	854	e88	e45	e37	e33	e1160	593	848	77	30	36
12	222	786	e84	e46	e37	e32	e839	1080	822	89	24	37
13	245	552	e81	e46	e37	e32	737	1410	496	64	24	35
14	208	493	e78	e45	e40	e34	831	1800	279	58	24	31
15	193	811	e77	e44	e39	e37	922	1630	182	48	24	37
16	190	784	e76	e42	e38	e38	1110	1150	173	40	23	51
17	171	688	e75	e39	e38	e37	1120	780	257	35	22	58
18	159	777	e74	e37	e38	e35	1530	570	242	28	20	54
19	293	642	e74	e37	e37	e34	1610	437	326	27	19	50
20	350	452	e77	e36	e37	e34	1380	357	303	24	18	44
21	260	303	e84	e35	e40	e39	1170	305	205	22	17	43
22	201	342	e86	e35	e47	e43	1010	299	161	21	18	43
23	225	301	e82	e35	e45	e44	785	324	116	20	18	72
24	536	481	e77	e35	e45	e45	622	277	95	19	19	118
25	848	550	e73	e34	e44	e45	531	247	87	18	17	99
26	838	488	e70	e34	e43	e46	537	214	79	18	17	73
27	594	603	e69	e33	e43	e47	646	207	77	18	16	59
28	389	616	e67	e33	e42	e70	667	283	77	31	15	52
29	305	804	e65	e38	---	e98	679	280	110	56	15	47
30	257	660	e63	e38	---	e145	782	206	122	62	15	42
31	216	---	e61	e42	---	e205	---	165	---	44	19	---
TOTAL	9902	18362	4044	1306	1138	1542	29988	25364	9026	1624	731	3097
MEAN	319	612	130	42.1	40.6	49.7	1000	818	301	52.4	23.6	103
MAX	848	918	522	59	47	205	2260	2290	848	142	41	692
MIN	89	180	61	33	37	32	240	165	77	18	15	31
CFSM	1.87	3.58	.76	.25	.24	.29	5.85	4.78	1.76	.31	.14	.60
IN.	2.15	3.99	.88	.28	.25	.34	6.52	5.52	1.96	.35	.16	.67

CAL YR 1988 TOTAL 103153 MEAN 282 MAX 2080 MIN 28 CFSM 1.65 IN. 22.44
WTR YR 1989 TOTAL 106124 MEAN 291 MAX 2290 MIN 15 CFSM 1.70 IN. 23.09

e Estimated

ST. JOHN RIVER BASIN

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 downstream from Little Black River, and 2.8 mi upstream from Allagash River.

DRAINAGE AREA.--2,680 mi².

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

Chemical analyses: Water years 1952, 1975, 1981.

Specific conductance: April 1975 to September 1980.

Water temperature: April 1975 to September 1980.

Suspended sediment discharge: October 1975 to September 1976.

REVISED RECORDS.--WDR ME-82-1: Drainage area.

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

REMARKS.--Estimated daily discharges: Dec. 1 and Dec. 3 to Apr. 8. Records good except for periods of ice effect, Dec. 1 and Dec. 3 to Apr. 8, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--43 years (water years 1947 to current year), 4,747 ft³/s, 24.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 91,700 ft³/s, Apr. 29, 1979, gage height, 19.13 ft; maximum gage height, 29.16 ft, Apr. 30, 1974 (backwater from ice); minimum discharge, 129 ft³/s Sept. 17, 1948.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 27,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 4	1415	ice jam	*17.72	May 4	0430	30,300	11.65
Apr. 8	2400	29,500	11.52	May 7	2030	*33,000	12.08

Minimum discharge, 263 ft³/s, July 27 and 28, gage height 3.66 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1020	3640	e5480	e810	e530	e425	e2700	14500	4070	1900	527	459
2	972	3460	4920	e790	e525	e420	e3100	17700	5290	1640	484	1100
3	1730	5770	e3980	e765	e520	e420	e3800	24000	5200	1400	460	4500
4	4220	11300	e3070	e745	e515	e415	e5000	29600	4730	1370	437	6490
5	5130	10300	e2260	e730	e505	e410	e7600	25300	6270	1360	443	4920
6	4050	8420	e1520	e720	e495	e405	e10500	20500	6370	1150	460	3270
7	3320	8620	e1400	e695	e490	e410	e18400	28700	5150	940	476	2250
8	3110	9850	e1340	e705	e485	e405	e27200	29800	4000	775	573	1690
9	2980	10400	e1280	e710	e480	e400	28000	22500	3230	702	814	1320
10	2690	9250	e1240	e700	e475	e400	24400	15900	2970	667	764	1070
11	2520	8810	e1200	e700	e475	e400	21900	12100	6110	939	694	907
12	2780	9040	e1170	e705	e470	e400	15700	13500	9840	1160	624	786
13	3010	7570	e1160	e695	e465	e400	12600	18100	8520	1650	566	691
14	3000	6540	e1140	e685	e460	e400	11700	20000	6200	1420	574	645
15	2730	6890	e1120	e670	e455	e410	11800	23900	4710	1110	673	649
16	2550	8460	e1120	e650	e450	e410	12700	20700	3870	845	1640	640
17	2740	7900	e1110	e635	e450	e410	13400	15400	4020	675	1870	682
18	2800	8130	e1100	e615	e445	e410	16300	11700	4800	609	1510	1130
19	2890	8220	e1090	e600	e440	e415	20600	9180	4900	553	1150	1120
20	4270	6910	e1070	e590	e440	e420	20400	7530	5450	493	893	983
21	4740	5940	e1060	e575	e435	e430	18300	6520	5400	485	742	875
22	3910	5030	e1030	e565	e430	e440	16000	6100	4440	453	627	783
23	3410	4530	e1000	e555	e430	e460	13500	6820	3400	396	549	780
24	4000	4200	e970	e545	e430	e480	11200	6930	2640	358	518	890
25	7200	3320	e950	e530	e430	e500	9370	6060	2130	326	940	1010
26	9620	2740	e930	e525	e430	e550	8400	5430	1730	292	847	1090
27	8010	2900	e920	e515	e430	e630	8630	5090	1540	268	700	945
28	6260	3400	e900	e520	e430	e750	9360	5310	1370	268	572	816
29	5170	4140	e875	e525	---	e1000	9740	5380	1340	338	500	708
30	4670	4880	e855	e530	---	e1500	11600	4770	1730	481	471	630
31	4210	---	e830	e535	---	e2250	---	4180	---	547	464	---
TOTAL	119712	200560	48090	19835	13015	17175	403900	443200	131420	25570	22562	43829
MEAN	3862	6685	1551	640	465	554	13460	14300	4381	825	728	1461
MAX	9620	11300	5480	810	530	2250	28000	29800	9840	1900	1870	6490
MIN	972	2740	830	515	430	400	2700	4180	1340	268	437	459
CFSM	1.44	2.49	.58	.24	.17	.21	5.02	5.33	1.63	.31	.27	.55
IN.	1.66	2.78	.67	.28	.18	.24	5.61	6.15	1.82	.35	.31	.61

CAL YR 1988 TOTAL 1402092 MEAN 3831 MAX 28400 MIN 600 CFSM 1.43 IN. 19.46
WTR YR 1989 TOTAL 1488868 MEAN 4079 MAX 29800 MIN 268 CFSM 1.52 IN. 20.67

e Estimated

01011000 ALLAGASH RIVER NEAR ALLAGASH, ME

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

DRAINAGE AREA.--1,229 mi², not including 249 mi² drained by Chamberlain Lake through Telos Canal.

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

Chemical analyses: Water years 1952-53, 1975, 1981.

Specific conductance: April 1975 to September 1980.

Water temperatures: April 1975 to September 1980.

Suspended sediment discharge: October 1975 to September 1976.

REVISED RECORDS.--WSP 1231: 1911. WDR ME-82-1: Drainage area.

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

REMARKS.--Estimated daily discharges: Dec. 4 to Apr. 8. Records good except for period of ice effect, Dec. 4 to Apr. 8, which is fair. Some regulation for recreational purposes since May 1969 by Churchill Lake, usable capacity, about 3.4 billion ft³, 58 mi upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--58 years (water years 1932 to current year), 1,927 ft³/s, 21.29 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,900 ft³/s, Apr. 18, 1983, gage height, 13.68 ft; maximum gage height, 19.48 ft, Apr. 18, 1983 (backwater from ice); minimum discharge, 87 ft³/s, Sept. 11, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,590 ft³/s, Apr. 9, gage-height, 6.63 ft.; maximum gage height, 11.05 ft., Apr. 7 (backwater from ice); minimum daily discharge, 245 ft³/s, Mar. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	555	1260	2110	e500	e390	e280	e1300	4540	2450	978	636	542
2	549	1500	1960	e490	e390	e273	e1430	5180	2800	960	603	1980
3	789	3100	1830	e500	e390	e269	e1500	7270	2460	948	581	2550
4	1130	3160	e1620	e505	e382	e267	e1580	7430	2230	929	571	1820
5	949	2800	e1220	e495	e378	e271	e1950	6360	2500	896	729	1440
6	875	2640	e1080	e480	e375	e273	e2800	5880	2170	852	754	1190
7	861	2900	e980	e470	e372	e269	e4000	6570	1880	818	835	1020
8	839	3260	e910	e460	e370	e266	e5570	6360	1660	773	938	900
9	774	3190	e860	e460	e370	e261	5970	6170	1470	751	797	806
10	734	2930	e810	e460	e366	e257	5670	5990	1520	785	683	740
11	756	2930	e770	e460	e360	e254	5360	5720	2980	1030	604	711
12	1070	2680	e740	e455	e355	e250	4750	6610	3070	1040	556	705
13	1110	2420	e705	e452	e350	e246	4320	7290	2650	939	645	706
14	976	2390	e690	e448	e345	e245	4000	7910	2250	899	1180	699
15	946	2580	e670	e443	e335	e247	4010	8370	1930	821	1130	727
16	910	2540	e650	e438	e329	e249	4250	8050	1910	755	1010	824
17	866	2540	e640	e433	e324	e251	4240	7280	2400	712	908	829
18	856	2980	e630	e426	e315	e254	4890	6520	2330	694	794	797
19	1140	2810	e620	e424	e310	e262	5220	5720	2290	662	701	754
20	1340	2570	e620	e422	e307	e268	5250	5080	2170	623	644	715
21	1220	2500	e620	e420	e308	e276	4960	4590	1940	585	632	696
22	1150	2390	e610	e416	e310	e283	4700	4560	1710	560	609	678
23	1220	2200	e580	e410	e310	e292	4260	4600	1520	539	577	712
24	1540	1910	e560	e404	e308	e300	3930	4400	1350	518	553	732
25	1780	1810	e550	e400	e303	e308	3630	4260	1220	508	506	655
26	2060	1720	e560	e395	e298	e320	3400	4040	1120	497	458	597
27	1850	1710	e550	e390	e291	e355	3490	3690	1110	488	427	589
28	1670	1750	e530	e385	e285	e420	3420	3320	1050	598	410	559
29	1610	2150	e520	e383	---	e535	3460	2970	1070	705	413	531
30	1510	2190	e510	e387	---	e740	3920	2650	1060	703	434	494
31	1370	---	e505	e389	---	e1000	---	2420	---	655	489	---
TOTAL	35005	73510	26210	13600	9526	10041	117230	171800	58270	23221	20807	26698
MEAN	1129	2450	845	439	340	324	3908	5542	1942	749	671	890
MAX	2060	3260	2110	505	390	1000	5970	8370	3070	1040	1180	2550
MIN	549	1260	505	383	285	245	1300	2420	1050	488	410	494
CFSM	.92	1.99	.69	.36	.28	.26	3.18	4.51	1.58	.61	.55	.72
IN.	1.06	2.23	.79	.41	.29	.30	3.55	5.20	1.76	.70	.63	.81

CAL YR 1988 TOTAL 581782 MEAN 1590 MAX 8460 MIN 330 CFSM 1.29 IN. 17.61
WTR YR 1989 TOTAL 585918 MEAN 1605 MAX 8370 MIN 245 CFSM 1.31 IN. 17.73

e Estimated

ST. JOHN RIVER BASIN

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 upstream from mouth, and 6.5 mi west of Connors.

DRAINAGE AREA.--524 mi².

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

REVISED RECORDS.--WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 550 ft, from International Boundary Map.

REMARKS.--No estimated daily discharges. Records good.

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

AVERAGE DISCHARGE.--38 years, 889 ft³/s, 23.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s, Apr. 30, 1979, gage height, 15.39 ft; minimum, 58 ft³/s, Oct. 12, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,010 ft³/s, May 9, gage height, 8.68 ft; minimum daily, 73 ft³/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	929	713	342	204	149	351	2400	1230	496	149	92
2	260	918	717	333	200	148	420	2850	1250	471	141	131
3	281	989	703	325	201	146	475	3500	1260	444	145	131
4	328	1150	692	321	200	141	523	4080	1280	426	141	121
5	413	1350	646	314	201	141	571	4370	1370	403	141	115
6	494	1450	607	312	199	143	650	4320	1510	379	139	106
7	533	1480	572	309	198	138	859	4450	1590	365	144	103
8	547	1480	547	299	198	133	1320	4880	1530	342	143	99
9	554	1450	526	289	198	134	1920	4940	1410	322	138	95
10	547	1380	516	281	193	134	2340	4570	1330	316	131	94
11	547	1340	509	281	189	132	2460	4080	1410	331	127	95
12	554	1270	491	280	184	133	2340	3800	1540	318	122	96
13	569	1230	473	277	183	130	2180	3880	1680	303	121	95
14	586	1190	459	263	174	124	2040	4130	1690	294	128	92
15	604	1150	449	256	175	126	2000	4180	1580	281	133	91
16	593	1110	441	251	174	131	2060	3970	1450	268	128	89
17	583	1110	431	243	172	135	2140	3570	1350	254	127	87
18	565	1130	427	244	167	138	2340	3130	1280	245	124	86
19	572	1130	424	240	164	145	2690	2720	1220	234	118	83
20	579	1130	413	239	162	148	3010	2380	1150	222	111	79
21	597	1140	381	243	164	158	3190	2120	1070	212	110	80
22	607	1090	381	229	171	162	3200	1940	982	204	115	81
23	614	1010	371	227	165	161	3050	1860	902	195	114	86
24	618	908	367	224	163	164	2790	1810	823	186	114	88
25	696	823	374	221	158	164	2520	1740	754	179	109	78
26	837	759	371	214	154	172	2280	1620	695	180	100	78
27	1020	724	364	216	153	173	2140	1520	643	174	94	81
28	1110	699	364	212	150	178	2070	1460	601	172	93	74
29	1120	703	364	209	---	202	2070	1390	571	169	89	74
30	1070	703	357	206	---	219	2160	1330	529	159	93	73
31	996	---	349	203	---	269	---	1260	---	154	101	---
TOTAL	19252	32925	14799	8103	5014	4771	58159	94250	35680	8698	3783	2773
MEAN	621	1097	477	261	179	154	1939	3040	1189	281	122	92.4
MAX	1120	1480	717	342	204	269	3200	4940	1690	496	149	131
MIN	258	699	349	203	150	124	351	1260	529	154	89	73
CFSM	1.19	2.09	.91	.50	.34	.29	3.70	5.80	2.27	.54	.23	.18
IN.	1.37	2.34	1.05	.58	.36	.34	4.13	6.69	2.53	.62	.27	.20

CAL YR 1988 TOTAL 300783 MEAN 822 MAX 3880 MIN 141 CFSM 1.57 IN. 21.35
WTR YR 1989 TOTAL 288207 MEAN 790 MAX 4940 MIN 73 CFSM 1.51 IN. 20.46

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 upstream from highway bridge at Fort Kent Mills, 2 mi upstream from mouth, and 2 mi south of Fort Kent.

DRAINAGE AREA.--873 mi².

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

REVISED RECORDS.--WDR ME-82-1: Drainage area.

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

REMARKS.--Estimated daily discharges: Dec. 11 to Apr. 7. Records good except for period of ice effect, Dec. 11 to Apr. 7, which is fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--65 years (water years 1904-08, 1930-current year), 1,409 ft³/s, 21.92 in/yr.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,860 ft³/s, May 15, gage height, 7.73 ft; minimum daily discharge, 202 ft³/s, Mar. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	1370	1710	e550	e330	e238	e450	3640	2630	935	402	311
2	267	1630	1660	e535	e320	e234	e570	3930	2550	912	392	555
3	369	2020	1620	e520	e315	e230	e670	4890	2400	870	397	571
4	365	2260	1550	e520	e305	e231	e760	5280	2320	833	397	600
5	340	2430	1470	e515	e298	e235	e850	5380	2260	796	395	627
6	354	2620	1410	e505	e290	e238	e934	5570	2140	760	405	638
7	371	2790	1370	e490	e280	e233	e1360	5930	2030	710	423	623
8	362	3040	1290	e480	e275	e229	1740	5930	1900	668	435	606
9	358	3110	1230	e480	e265	e223	2000	5740	1790	638	441	590
10	362	3180	1180	e480	e255	e220	2280	5400	1810	650	443	574
11	380	3180	e1140	e460	e250	e217	2520	5160	2210	734	441	542
12	423	3080	e1080	e440	e245	e212	2700	6110	2240	704	441	502
13	416	3010	e1030	e420	e240	e205	2860	6380	2250	683	476	483
14	416	2970	e960	e390	e230	e204	3030	6590	2210	668	523	466
15	424	2890	e910	e370	e225	e202	3150	6820	2150	632	540	464
16	427	2800	e855	e350	e220	e207	3240	6780	2160	609	537	455
17	436	2770	e800	e330	e220	e216	3320	6610	2140	577	536	445
18	447	2700	e780	e320	e220	e223	3580	6380	2060	562	518	431
19	482	2570	e750	e320	e220	e230	3790	6110	1990	537	504	421
20	480	2480	e720	e325	e225	e235	3990	5570	1910	504	491	418
21	488	2450	e700	e335	e235	e242	4080	5140	1810	484	487	420
22	497	2390	e685	e340	e245	e248	4110	4870	1700	463	463	416
23	660	2270	e675	e335	e250	e253	4090	4620	1600	439	447	434
24	733	2130	e655	e325	e250	e257	4010	4300	1500	422	418	401
25	917	2010	e630	e320	e245	e261	3850	3990	1400	411	377	388
26	1030	1920	e610	e325	e245	e263	3710	3710	1300	399	351	377
27	1120	1840	e595	e335	e245	e268	3610	3450	1220	395	336	344
28	1230	1780	e585	e340	e245	e280	3510	3190	1150	438	322	342
29	1320	1800	e580	e338	---	e300	3460	2980	1080	435	316	332
30	1350	1760	e580	e332	---	e330	3500	2780	993	424	314	310
31	1360	---	e565	e326	---	e393	---	2590	---	412	311	---
TOTAL	18451	73250	30375	12451	7188	7557	81724	155820	56903	18704	13279	14086
MEAN	595	2442	980	402	257	244	2724	5026	1897	603	428	470
MAX	1360	3180	1710	550	330	393	4110	6820	2630	935	540	638
MIN	267	1370	565	320	220	202	450	2590	993	395	311	310
CFSM	.68	2.80	1.12	.46	.29	.28	3.12	5.76	2.17	.69	.49	.54
IN.	.79	3.12	1.29	.53	.31	.32	3.48	6.64	2.42	.80	.57	.60

CAL YR 1988 TOTAL 433054 MEAN 1183 MAX 4890 MIN 245 CFSM 1.36 IN. 18.45
WTR YR 1989 TOTAL 489788 MEAN 1342 MAX 6820 MIN 202 CFSM 1.54 IN. 20.87

e Estimated

ST. JOHN RIVER BASIN

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 downstream from Fish River.

DRAINAGE AREA.--5,665 mi², not including 249 mi² drained by Chamberlain Lake through Telos Canal.

PERIOD OF RECORD.--October 1926 to current year. Prior to October 1931, published as "at Fort Kent."

REVISED RECORDS.--WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 488.81 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 10, 1933, nonrecording gage on opposite bank at same datum.

REMARKS.--Estimated daily discharges: Dec. 4 to Apr. 8. Records good except for period of ice effect Dec. 4 to Apr. 8, which is 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.--63 years, 9,671 ft³/s, 23.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 151,000 ft³/s, Apr. 30, 1979, gage height, 27.31 ft; minimum daily, 510 ft³/s, Mar. 13-15, 1948.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 9	2000	*72,700	*18.70	May 8	0430	50,700	15.59
May 4	1030	48,900	15.31				

Minimum daily discharge, 1,030 ft³/s, Mar. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2410	8040	11000	e2420	e1520	e1110	e5200	24600	11100	4870	2050	1600
2	2460	8430	10400	e2380	e1510	e1110	e6200	29200	12200	4660	1960	2810
3	2890	11300	8890	e2310	e1490	e1100	e7300	38100	12300	4260	1880	6180
4	4970	16900	e7400	e2300	e1480	e1100	e8800	47900	11400	3980	1820	9510
5	7140	17800	e6200	e2280	e1460	e1100	e11700	44000	12400	3990	1810	8120
6	6630	16400	e5700	e2250	e1440	e1090	e14800	37700	13200	3720	2010	6230
7	5730	16200	e5200	e2200	e1400	e1090	e20200	43000	11900	3390	2020	4830
8	5320	17800	e4750	e2150	e1360	e1080	e29600	49000	10300	3090	2270	3970
9	5180	18600	e4450	e2100	e1330	e1080	39700	42000	9000	2870	2450	3400
10	4880	17700	e4200	e2080	e1300	e1060	34700	34000	8450	2840	2440	3010
11	4670	16900	e3960	e2020	e1280	e1050	32400	28600	11900	3380	2260	2730
12	5010	16800	e3700	e2000	e1260	e1030	27300	29700	16700	3730	2110	2540
13	5520	15400	e3600	e1970	e1240	e1030	23300	35700	16400	3810	2090	2390
14	5530	14200	e3500	e1920	e1230	e1060	21700	38600	13900	3820	2380	2290
15	5300	14000	e3350	e1890	e1210	e1100	21800	43800	11700	3460	2860	2300
16	5000	15300	e3250	e1830	e1200	e1140	22500	41900	10400	3040	3020	2310
17	4950	15300	e3200	e1810	e1180	e1160	23500	35100	10400	2720	3820	2380
18	5100	15500	e3200	e1800	e1170	e1160	26200	29400	10900	2550	3540	2470
19	5300	15700	e3200	e1780	e1160	e1170	31800	25000	11000	2410	3020	2810
20	6200	14400	e3150	e1740	e1160	e1200	33400	21800	11000	2260	2630	2640
21	7560	13400	e3050	e1710	e1150	e1240	31600	19500	11100	2110	2430	2490
22	6930	12200	e2900	e1690	e1150	e1300	29200	18200	9860	2010	2280	2370
23	6690	10800	e2800	e1670	e1140	e1350	26300	18500	8440	1880	2090	2350
24	6850	10400	e2800	e1660	e1140	e1400	23200	18200	7240	1770	1940	2370
25	9610	8620	e2800	e1630	e1130	e1440	20700	16900	6320	1690	1930	2450
26	13500	7790	e2800	e1610	e1130	e1480	18900	15600	5660	1640	2180	2500
27	13200	7740	e2750	e1590	e1120	e1630	18600	14500	5190	1590	1960	2440
28	11500	8870	e2650	e1570	e1120	e2000	19100	14000	4840	1740	1750	2230
29	10200	9520	e2600	e1550	---	e2500	19400	13500	4640	1860	1600	2070
30	9320	9830	e2600	e1540	---	e3400	21000	12400	4570	1990	1570	1920
31	8760	---	e2500	e1530	---	e4350	---	11300	---	2070	1600	---
TOTAL	204310	401840	132550	58980	35460	44110	670100	891700	304410	89200	69770	97710
MEAN	6591	13390	4276	1903	1266	1423	22340	28760	10150	2877	2251	3257
MAX	13500	18600	11000	2420	1520	4350	39700	49000	16700	4870	3820	9510
MIN	2410	7740	2500	1530	1120	1030	5200	11300	4570	1590	1570	1600
CFSM	1.16	2.36	.75	.34	.22	.25	3.94	5.08	1.79	.51	.40	.57
IN.	1.34	2.64	.87	.39	.23	.29	4.40	5.86	2.00	.59	.46	.64

CAL YR 1988 TOTAL 2861330 MEAN 7818 MAX 43700 MIN 1100 CFSM 1.38 IN. 18.79
WTR YR 1989 TOTAL 3000140 MEAN 8220 MAX 49000 MIN 1030 CFSM 1.45 IN. 19.70

e Estimated

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, at International Bridge between Van Buren, Maine, and St. Leonard, New Brunswick.

DRAINAGE AREA.--8,174 mi².

PERIOD OF RECORD.--Water years 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1978 to September 1981.

WATER TEMPERATURE: November 1978 to September 1981.

REVISED RECORDS.--WDR ME-82-1: Drainage area.

REMARKS.--Water-discharge records for St. John River below Fish River at Ft. Kent (station 01014000) are used for computation of mean daily discharge.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
13...	0800	7960	99	7.2	5.0	7.0	2.4	750	10.4	87	520	72
DEC												
15...	1330	4830	148	7.3	-2.0	0.0	1.8	740	13.1	92	210	K 38
FEB												
09...	1000	2310	147	7.5	-10.0	0.0	2.1	740	10.8	76	870	K 38
APR												
18...	1400	37800	64	7.4	4.0	1.0	5.2	740	13.4	97	100	52
JUN												
20...	1100	15900	86	7.6	23.0	16.5	1.1	750	9.7	100	100	K 16
AUG												
23...	1030	3020	117	7.2	19.0	20.5	1.2	740	7.0	80	K 10	K 20

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT												
13...	46	14	2.7	2.8	0.8	39	0	32	32	34	15	3.7
DEC												
15...	66	22	2.7	2.8	0.6	66	0	54	54	56	15	2.9
FEB												
09...	65	21	3.0	5.2	0.7	59	0	48	49	51	19	5.4
APR												
18...	30	9.8	1.4	1.9	0.6	25	0	21	22	22	6.0	2.1
JUN												
20...	39	13	1.6	2.2	0.4	37	0	30	31	33	7.0	2.3
AUG												
23...	51	16	2.6	4.0	0.6	44	0	36	37	37	11	4.8

K Results based on colony count outside the acceptable range (non-ideal colony count).

ST. JOHN RIVER BASIN

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	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)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT 13...	0.1	3.5	84	62	<0.10	0.05	0.06	0.4	0.02	0.01	<0.01
DEC 15...	0.1	5.3	94	86	0.45	0.02	0.03	0.5	0.01	0.01	0.01
FEB 09...	0.1	4.4	91	90	0.24	<0.01	--	0.9	0.02	0.01	<0.01
APR 18...	0.1	4.0	53	40	0.25	0.03	0.04	0.3	0.03	<0.01	<0.01
JUN 20...	0.1	3.2	61	49	0.11	0.02	0.03	0.4	0.01	0.01	<0.01
AUG 23...	0.1	2.8	77	64	<0.10	0.05	0.06	0.3	0.03	<0.01	<0.01

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 13...	60	<1	8	<0.5	<1	<1	<3	2	110	<5	<4	29
DEC 15...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 09...	30	<1	9	<0.5	<1	<1	<3	1	73	<5	<4	39
APR 18...	70	<1	5	<0.5	<1	<1	<3	5	79	<5	<4	15
JUN 20...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 23...	30	<1	8	<0.5	<1	<1	<3	4	110	1	<4	45

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. X FINER THAN .062 MM
OCT 13...	<0.1	<10	<1	<1	<1.0	92	<6	13	5	107	32
DEC 15...	--	--	--	--	--	--	--	--	2	26	100
FEB 09...	<0.1	<10	3	<1	3.0	140	<6	6	3	19	62
APR 18...	<0.1	<10	1	<1	1.0	66	<6	14	37	3780	74
JUN 20...	--	--	--	--	--	--	--	--	8	343	94
AUG 23...	<0.1	<10	1	<1	<1.0	100	<6	8	2	16	100

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 upstream from new highway bridge, and 1.8 mi downstream from St. Croix Stream and Masardis.

DRAINAGE AREA.--892 mi².

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

REVISED RECORDS.--WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 530.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 21 to Apr. 11. Records good except for period of ice effect, Nov. 21 to Apr. 11, which is fair. Some regulation by Millinocket Lake, capacity 1,110,000,000 ft³, used for power. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--32 years, 1,470 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,100 ft³/s, Apr. 19, 1983, gage height, 17.70 ft; minimum discharge, 41 ft³/s, Sept. 26, 27, 1968, gage height, 1.89 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,400 ft³/s, May 15, gage height, 14.06 ft; minimum discharge 92 ft³/s, July 27, gage height, 2.63 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	1030	e1950	e380	e255	e200	e1200	3520	1110	286	379	300
2	114	1240	e1800	e375	e250	e195	e1150	3990	1050	244	297	699
3	123	3350	e1700	e375	e250	e190	e1250	6810	981	234	269	1760
4	131	4200	e1400	e375	e245	e185	e1450	8140	906	222	278	1720
5	142	3800	e1000	e370	e240	e180	e1700	6760	831	209	325	1310
6	152	3220	e840	e360	e240	e180	e2300	5530	753	201	856	1000
7	166	3020	e770	e355	e235	e175	e3800	5610	689	188	1370	794
8	175	3270	e730	e350	e235	e170	e5200	5700	634	176	1510	659
9	191	3660	e700	e340	e235	e165	e7000	5140	590	165	1920	564
10	229	3500	e660	e335	e235	e160	e6600	4380	601	176	1520	497
11	291	3200	e640	e330	e230	e155	e5700	3910	1320	263	1030	455
12	363	2880	e600	e325	e230	e145	5040	5600	1850	356	741	439
13	450	2520	e580	e320	e225	e140	4230	8830	1590	332	1020	404
14	436	2310	e560	e315	e225	e140	4000	10800	1220	279	2310	369
15	406	2220	e540	e310	e220	e145	3760	13200	955	259	2650	359
16	386	2110	e520	e305	e215	e170	3740	11900	840	247	2010	375
17	361	1940	e510	e300	e215	e220	3640	9010	953	219	1470	391
18	342	1900	e500	e290	e210	e230	4060	6780	1010	196	1120	451
19	393	1810	e500	e290	e210	e220	4500	5330	1060	175	887	480
20	538	1630	e490	e285	e210	e210	4510	4340	997	162	713	456
21	569	e1450	e490	e275	e210	e215	4320	3690	844	149	629	450
22	526	e1400	e470	e270	e205	e220	4080	3330	702	135	610	444
23	677	e1250	e460	e270	e205	e210	3580	3140	599	124	572	549
24	1240	e1100	e440	e265	e205	e205	3290	2870	523	116	529	914
25	1790	e870	e440	e260	e205	e190	3050	2620	464	107	471	907
26	2490	e1000	e430	e260	e200	e190	2870	2400	422	101	408	724
27	2350	e1350	e420	e260	e200	e210	2960	2120	384	98	359	452
28	1930	e1600	e410	e260	e200	e400	2990	1820	354	133	321	498
29	1610	e1900	e400	e260	---	e900	3020	1580	336	360	291	489
30	1400	e2050	e400	e260	---	e1200	3250	1360	316	577	271	444
31	1200	---	e390	e260	---	e1300	---	1210	---	490	271	---
TOTAL	21288	66780	21740	9585	6240	8815	108240	161420	24884	6979	27407	19353
MEAN	687	2226	701	309	223	284	3608	5207	829	225	884	645
MAX	2490	4200	1950	380	255	1300	7000	13200	1850	577	2650	1760
MIN	114	870	390	260	200	140	1150	1210	316	98	269	300

CAL YR 1988 TOTAL 400166 MEAN 1093 MAX 7100 MIN 114
WTR YR 1989 TOTAL 482731 MEAN 1323 MAX 13200 MIN 98

e Estimated

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 upstream from Bangor and Aroostook Railroad bridge, 0.1 mi downstream from Salmon Brook, and 1.0 mi south of railroad station at Washburn.

DRAINAGE AREA.--1,654 mi².

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

Chemical analyses: Water years 1952-53.

REVISED RECORDS.--WSP 951: 1935. WSP 1301: 1933-50 (adjusted monthly runoff). WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 436.40 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1948, at datum 2.0 ft higher.

REMARKS.--Estimated daily discharges: Nov. 23-28 and Dec. 6 to June 13. Records, good except for period of ice effect, Dec. 6 to approximately Apr. 10, period of doubtful gage-height record Nov. 23-28, and periods of no gage-height record, Feb. 12 to Mar. 14, and Mar. 29 to June 13, which are fair. Considerable regulation by Squa Pan Lake, capacity 2,893,000,000 ft³, used for power. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--59 years, 2,643 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43,400 ft³/s, Apr. 19, 1983, gage height, 13.73 ft, present datum; maximum gage height, 20.91 ft, Dec. 24, 1973, (backwater from ice); minimum daily discharge, 75 ft³/s, Feb. 13-15, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 24,500 ft³/s (estimated), May 15; minimum daily discharge, 189 ft³/s, July 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	2230	3780	e605	e555	e490	e2280	e6800	e2000	549	661	520
2	291	2680	3420	e630	e550	e460	e2120	e10000	e1900	512	543	1440
3	316	5640	2960	e580	e550	e440	e2330	e13000	e1800	469	477	3040
4	390	7810	2660	e765	e580	e400	e2740	e15000	e1700	441	456	3050
5	407	7440	2280	e830	e570	e270	e3510	e12000	e1550	430	473	2460
6	427	6380	e1630	e820	e400	e265	e5500	e10500	e1400	416	634	1920
7	566	5700	e1300	e745	e590	e420	e8650	e10500	e1300	394	1300	1540
8	640	6150	e1200	e755	e605	e420	e11600	e10500	e1200	366	1670	1300
9	668	6750	e1150	e740	e605	e415	e13800	e9000	e1100	346	2110	1110
10	770	6620	e1120	e710	e600	e400	e12900	e7800	e1200	360	2080	964
11	853	6090	e1010	e700	e590	e390	e10800	e8200	e2500	570	1560	964
12	971	5270	e1030	e725	e370	e225	e9070	e10000	e3300	665	1150	905
13	1110	4530	e1250	e675	e360	e222	e7870	e17000	e3000	665	1260	824
14	1160	4160	e1220	e680	e585	e221	e7100	e20000	2600	584	3210	742
15	1150	4010	e1070	e680	e585	e219	e6940	e24500	2250	499	3910	715
16	1120	3790	e1060	e675	e570	e220	e7380	e21000	2010	457	3030	776
17	1070	3520	e810	e670	e560	e300	e7030	e17000	2130	432	2230	787
18	1040	3360	e825	e670	e550	e420	e7590	e14000	2040	399	1730	791
19	1110	3240	e775	e655	e540	e430	e8370	e10000	1930	358	1390	826
20	1280	3010	e990	e630	e520	e390	e8580	e8000	1840	315	1140	833
21	1340	2770	e985	e610	e505	e340	e8400	e6800	1620	297	1020	814
22	1270	2600	e970	e455	e475	e325	e8300	e6200	1400	281	958	824
23	1530	e2400	e740	e480	e520	e350	e7700	e5800	1200	253	916	1370
24	2210	e2000	e710	e575	e545	e310	e6600	e5200	1040	238	825	989
25	3110	e1700	e690	e575	e535	e280	e5700	e4600	904	233	757	1170
26	4340	e1850	e685	e570	e340	e290	e5500	e4400	813	209	678	1160
27	4410	e2200	e670	e565	e315	e320	e5600	e4100	747	189	611	946
28	3760	e2450	e655	e565	e480	e600	e5700	e3500	681	246	548	807
29	3200	2810	e640	e430	---	e1700	e5900	e2800	620	422	500	834
30	2830	3700	e660	e430	---	e2140	e6400	e2400	580	752	467	786
31	2500	---	e620	e560	---	e2410	---	e2200	---	794	477	---
TOTAL	46134	122860	39565	19755	14550	16082	211960	302800	48355	13141	38771	35207
MEAN	1488	4095	1276	637	520	519	7065	9768	1612	424	1251	1174
MAX	4410	7810	3780	830	605	2410	13800	24500	3300	794	3910	3050
MIN	291	1700	620	430	315	219	2120	2200	580	189	456	520

CAL YR 1988 TOTAL 793866 MEAN 2169 MAX 15000 MIN 286

WTR YR 1989 TOTAL 909180 MEAN 2491 MAX 24500 MIN 189

e Estimated

ST. CROIX RIVER BASIN

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 downstream from outlet of Spednik Lake.
DRAINAGE AREA.--413 mi².

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

Chemical analyses: Water year 1955.

REVISED RECORDS.--WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 367.75 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Sept. 4-27. Records good except for period of no gage height record, Sept. 4-27, which is fair. Flow regulated by Chiputneticook Lakes, combined usable capacity, about 13,200,000,000 ft³. Final regulation is at Spednik Lake Dam about 400 ft 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.--61 years, 718 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,730 ft³/s, June 3, 1984, gage height, 11.28 ft; minimum daily, 1.9 ft³/s, Oct. 22 and Nov. 4, 1936, when flow was held back by cofferdam during repairs to dam just upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,790 ft³/s, May 12, gage height, 10.31 ft; minimum daily, 203 ft³/s, Apr 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	635	241	238	1060	729	541	233	208	304	1260	1510	1540
2	633	244	242	1060	724	540	234	212	451	1260	1500	1540
3	634	249	243	1040	633	537	234	216	671	1250	1470	1530
4	628	250	243	1030	589	533	236	218	564	1250	1250	e1560
5	625	250	243	1010	585	533	242	218	292	925	1140	e1540
6	626	254	243	998	581	529	242	218	289	459	982	e1530
7	728	243	243	992	577	529	241	220	289	344	820	e1520
8	844	234	243	979	577	525	237	222	289	256	667	e1660
9	844	234	243	976	577	525	222	229	778	256	604	e1740
10	840	234	243	976	569	521	226	229	1530	257	602	e1740
11	836	235	243	976	569	521	229	493	1660	258	605	e1740
12	836	236	243	948	569	521	230	3520	1650	258	606	e1740
13	832	236	383	943	565	516	233	5280	1120	258	468	e1740
14	826	239	466	937	565	514	234	2840	466	291	274	e1740
15	820	231	503	931	561	408	229	3620	465	1020	267	e1740
16	819	227	510	923	560	245	211	4470	506	1470	267	e1740
17	815	227	571	914	561	227	211	4220	694	1560	267	e1740
18	877	227	569	906	557	227	219	3520	649	1550	267	e1520
19	907	227	565	832	557	227	218	2270	470	1570	267	e1360
20	902	227	709	794	553	227	218	1790	471	1570	267	e1360
21	694	229	844	794	370	227	218	1110	472	1560	267	e1360
22	464	229	837	791	253	227	218	416	477	1550	267	e1360
23	332	229	834	845	253	227	220	391	495	1530	498	e1360
24	306	234	835	882	285	227	222	351	651	1520	661	e1360
25	255	276	833	877	323	227	222	292	609	1510	1080	e1360
26	238	265	826	863	323	227	227	515	741	1490	1390	e1360
27	238	238	897	812	323	227	215	898	892	1520	1370	e1360
28	238	238	948	744	466	227	207	1430	893	1600	1360	1360
29	241	238	939	740	---	231	209	1130	941	1580	1350	1370
30	241	238	995	737	---	231	203	367	1270	1550	1490	1340
31	241	---	1060	734	---	231	---	304	---	1540	1570	---
TOTAL	18995	7159	17034	28044	14354	11455	6740	41417	21049	34272	25403	45910
MEAN	613	239	549	905	513	370	225	1336	702	1106	819	1530
MAX	907	276	1060	1060	729	541	242	5280	1660	1600	1570	1740
MIN	238	227	238	734	253	227	203	208	289	256	267	1340

CAL YR 1988 TOTAL 205107 MEAN 560 MAX 1380 MIN 205
WTR YR 1989 TOTAL 271832 MEAN 745 MAX 5280 MIN 203

e Estimated

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 southeast of village of Grand Lake Stream, and 0.8 mi downstream from outlet dam of Grand Lake.

DRAINAGE AREA.--227 mi².

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

Chemical analyses: Water year 1954.

REVISED RECORDS.--WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 273.96 ft above National Geodetic Vertical Datum of 1929.

REMARKS. No estimated daily discharges. Records excellent. Flow completely regulated by Grand Lake, 0.8 mi upstream, and other lakes, combined usable capacity about 8,250,000,000 ft³. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--61 years, 392 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,840 ft³/s, June 12, 1952, gage height, 6.35 ft; minimum daily, 5 ft³/s, Dec. 3-6, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,290 ft³/s, May 14, gage height, 6.17 ft; minimum daily discharge, 111 ft³/s, Oct. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	398	116	137	418	454	204	127	152	432	901	1040	717
2	397	128	137	417	452	204	127	157	432	719	1020	721
3	395	125	137	418	368	228	128	160	432	712	1010	714
4	391	125	137	415	307	245	131	159	432	706	993	705
5	389	125	137	413	305	245	133	157	432	702	927	697
6	388	125	137	548	303	245	142	160	433	697	672	739
7	385	127	137	674	302	245	144	164	432	696	465	770
8	494	127	137	668	301	245	140	164	435	690	359	762
9	563	128	137	662	283	244	141	164	635	683	359	754
10	567	128	137	655	271	242	143	164	1160	677	359	747
11	565	130	137	651	271	241	144	170	1330	684	359	767
12	563	130	137	645	270	241	144	634	1320	672	353	813
13	559	128	209	643	268	198	144	1580	1090	662	276	799
14	552	130	258	635	270	165	144	2120	611	659	186	785
15	445	131	258	634	271	153	145	2280	432	619	186	782
16	303	130	259	628	271	130	147	2260	432	541	186	769
17	260	132	258	622	269	120	149	2240	432	495	186	758
18	202	134	258	617	268	121	149	2210	432	416	186	517
19	173	133	296	569	267	120	149	1930	433	303	186	380
20	172	132	323	535	267	120	150	1420	435	274	186	381
21	133	139	323	526	204	122	150	863	435	274	186	381
22	111	136	323	529	157	122	150	428	433	273	186	378
23	112	134	323	524	154	122	151	342	434	273	186	374
24	113	134	323	521	185	122	151	341	435	273	284	377
25	116	134	323	517	207	123	151	315	432	273	588	518
26	116	132	323	514	207	124	151	295	554	273	767	698
27	116	132	323	491	206	124	151	295	624	256	756	682
28	116	135	386	469	204	127	151	292	624	200	746	658
29	116	138	425	465	---	129	151	375	799	201	738	648
30	116	137	423	461	---	127	151	722	1260	536	733	643
31	116	---	420	459	---	127	---	569	---	1060	730	---
TOTAL	9442	3915	7678	16943	7562	5325	4329	23282	18232	16400	15394	19434
MEAN	305	130	248	547	270	172	144	751	608	529	497	648
MAX	567	139	425	674	454	245	151	2280	1330	1060	1040	813
MIN	111	116	137	413	154	120	127	152	432	200	186	374

CAL YR 1988 TOTAL 98945 MEAN 270 MAX 567 MIN 111
WTR YR 1989 TOTAL 147936 MEAN 405 MAX 2280 MIN 111

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.--1,374 mi².

PERIOD OF RECORD.--Discharge: October 1958 to current year.

Chemical analyses: Water year 1971.

Water temperatures: October 1959 to September 1976.

REVISED RECORDS.--WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 66.23 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 30, Jan. 1, 5-14, Feb. 5-7, 10-11, and 18-19. Records good except for periods of ice effect, Dec. 30, Jan. 1, 5-14, Feb. 5-7, 10-11, and 18-19, which are fair. Flow regulated by Chiputneticook Lakes, Grand, and other lakes, combined capacity about 25,000,000,000 ft³. Final regulation is at Woodland, 5.6 mi 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.--30 years (water years 1960-current year), 2,658 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,000 ft³/s, May 15, gage height, 11.76 ft; minimum daily, 853 ft³/s, Mar. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2030	2190	3320	e1750	2200	954	3020	2800	3010	1480	2320	2690
2	1430	3800	3190	1790	1710	942	2810	3250	3020	1630	2060	2660
3	1380	4840	3150	1760	1210	e1370	3000	4330	2640	1970	1850	2660
4	2200	5340	2990	1360	1010	e1340	3200	5210	2620	2070	1620	2660
5	1760	5050	2770	e2410	e1190	989	3510	5460	2210	1730	1650	2660
6	1790	4510	2690	e3140	e1250	1020	3650	6450	1270	1820	2020	2640
7	1450	3770	2520	e3390	e1050	1060	7190	6740	1740	1780	1960	2660
8	1820	3280	2100	e1740	1040	1050	10400	7370	1820	2010	1910	2650
9	1350	3220	2040	e1010	1040	871	9420	7010	2740	1690	2390	2640
10	1640	2970	2040	e959	e1550	978	7080	6460	2940	1630	2690	2580
11	2090	3220	2000	e920	e1090	957	5730	7010	4420	1980	2680	2620
12	2060	3270	2260	e992	929	915	4590	9240	4700	1950	2580	2630
13	1840	3160	1660	e894	1300	900	4080	10800	4560	1830	2800	2640
14	2070	2210	1930	e927	1540	887	3760	15100	4190	2050	1560	2650
15	1730	3250	2090	958	1020	976	3310	17400	3130	2320	1060	2350
16	1340	3120	2090	1210	1230	1010	3230	17800	3140	1970	1040	2160
17	1580	3200	2130	2280	1460	1650	3300	16300	3140	1890	1030	2490
18	1880	3260	1890	1910	e1460	2400	3220	14700	2960	1540	1020	1570
19	1880	3220	1890	2010	e1010	1710	3200	12700	2770	1810	1020	1130
20	2060	3240	1890	1630	916	1100	3180	11000	2970	1880	1010	1080
21	2010	3520	1700	2380	1170	1300	3170	7690	2930	1890	1010	1190
22	2000	3290	1810	2470	1260	853	3170	5490	2710	1850	1010	1010
23	1830	3110	2180	1970	1210	877	3160	4790	2650	1750	1250	1170
24	1720	3120	1930	1020	1000	1770	3160	3320	2290	2110	1700	1780
25	2810	3120	2040	999	998	1690	3010	2790	2250	2190	1700	2370
26	2490	3250	1940	1670	1020	1070	3000	2890	2240	2210	2180	2700
27	2430	3080	1900	1920	970	1470	3060	3090	1810	1610	2520	2840
28	2140	3110	1910	2380	964	1860	2960	3140	2320	1810	2660	2810
29	2210	3470	1910	2380	---	2500	2610	3110	2190	1470	2660	2780
30	2200	3310	e1820	2220	---	3150	2520	3060	1310	1960	2670	2730
31	2190	---	1780	2110	---	3040	---	2990	---	2580	2670	---
TOTAL	59410	102500	67560	54559	33797	42659	120700	229490	82690	58460	58300	69200
MEAN	1916	3417	2179	1760	1207	1376	4023	7403	2756	1886	1881	2307
MAX	2810	5340	3320	3390	2200	3150	10400	17800	4700	2580	2800	2840
MIN	1340	2190	1660	894	916	853	2520	2790	1270	1470	1010	1010

CAL YR 1988 TOTAL 767749 MEAN 2098 MAX 8290 MIN 835
WTR YR 1989 TOTAL 979325 MEAN 2683 MAX 17800 MIN 853

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 downstream from international highway bridge at Milltown.

DRAINAGE AREA.--1,460 mi².

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 TEMPERATURE: September 1969 to current year.

DISSOLVED OXYGEN: September 1969 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1969. Continuous flow through system. Submersible pump located 50 ft. streamward from right bank.

REMARKS.--Monitor not operated during winter periods, water years 1970 to 1975. Other interruptions in the record were due to malfunctions of the monitor or pumping system. Water discharge records from the St. Croix River at Baring (station 01021000) are used for computation of instantaneous discharge.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 375 microsiemens, Mar. 6, 1989; minimum, 23 microsiemens, May 2-4, 6, 1979.

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

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

DISSOLVED OXYGEN: Maximum, 14.4 mg/L, Nov. 16, 1976; minimum, 0.5 mg/L, Aug. 19, 1975, Aug. 28, 1980.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 375 microsiemens, Mar. 6; minimum, 39 microsiemens, Apr. 9, Aug. 1, Sept. 24.

pH: Maximum, 8.7 units, Mar. 21; minimum, 6.3 units, Aug. 2.

WATER TEMPERATURE: Maximum, 26.5°C, July 26-28; minimum, 0.0°C, on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 13.8 mg/L, Dec. 16, 17, Jan. 22; minimum, 5.6 mg/L, July 31.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
13...	1300	1550	76	6.7	7.5	8.5	2.5	760	10.3	90	34	K 15
FEB												
08...	1300	928	148	7.2	0.5	0.0	2.8	760	12.8	88	67	30
APR												
19...	0900	3200	61	6.7	3.5	3.5	1.3	750	12.2	93	110	45
AUG												
22...	1130	1010	143	7.0	22.0	23.5	--	750	6.5	77	36	500

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT												
13...	16	4.8	0.9	8.7	0.9	12	0	10	12	13	14	10
FEB												
08...	21	7.0	1.0	21	1.4	23	0	19	20	21	20	19
APR												
19...	13	3.7	0.8	7.1	0.9	11	0	9	10	10	6.0	7.4
AUG												
22...	--	--	--	--	--	26	0	21	22	--	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DIS-SOLVED (MG/L AS P)	PHOSPHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT 13...	0.1	2.0	57	49	<0.10	0.02	0.03	0.4	0.02	0.02	<0.01
FEB 08...	0.1	2.7	87	85	<0.10	0.02	0.03	0.6	0.04	0.01	<0.01
APR 19...	0.1	2.8	51	35	<0.10	0.05	0.06	0.4	0.03	0.01	<0.01
AUG 22...	--	--	--	--	0.18	0.05	0.06	0.5	0.04	0.02	0.02

[illegible]

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 13...	<0.1	<10	<1	<1	1.0	23	<6	13	9	38	50
FEB 08...	<0.1	<10	4	<1	<1.0	31	9	18	1	2.5	100
APR 19...	<0.1	<10	<1	<1	<1.0	17	<6	17	2	17	100
AUG 22...	--	--	--	--	--	--	--	--	10	27	95

ST. CROIX RIVER BASIN

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

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	89	86	87	88	84	85	67	66	66	108	103	105
2	87	85	86	83	64	77	68	66	67	105	102	104
3	136	81	109	65	55	62	68	65	66	104	100	102
4	130	91	103	59	57	58	70	64	67	116	101	104
5	92	79	86	60	57	59	71	67	68	139	101	120
6	96	85	90	63	60	61	74	68	72	122	96	103
7	93	88	90	67	62	64	74	69	71	102	81	90
8	108	84	97	71	67	69	80	74	76	363	89	118
9	92	78	82	72	70	71	87	81	84	140	98	114
10	108	93	101	74	70	72	87	82	84	146	128	135
11	97	79	84	74	70	72	93	85	89	147	124	133
12	79	78	79	72	70	71	93	87	90	197	135	141
13	---	---	---	72	70	71	97	88	91	169	133	141
14	85	81	83	97	65	77	113	98	106	147	137	143
15	91	82	84	81	69	72	103	89	92	206	133	143
16	98	89	91	72	68	70	97	91	94	148	136	143
17	117	99	107	70	68	69	99	96	97	148	86	108
18	108	88	93	71	70	71	101	96	99	99	87	94
19	94	89	90	70	69	70	106	100	103	100	90	97
20	95	89	92	71	70	70	109	101	104	161	88	116
21	93	89	90	71	67	69	106	99	101	114	94	100
22	96	91	93	69	65	67	117	100	108	102	89	95
23	96	86	90	73	66	69	107	93	99	94	85	91
24	114	88	102	70	69	69	115	93	97	131	85	107
25	98	78	89	76	68	73	114	94	99	149	129	142
26	82	77	79	68	67	68	101	99	100	162	110	143
27	82	79	80	69	67	68	117	94	103	137	106	116
28	85	81	83	69	68	69	124	98	103	107	91	98
29	89	85	87	70	67	69	107	101	105	124	88	93
30	89	87	88	66	65	65	116	99	107	118	91	95
31	88	86	87	---	---	---	106	99	103	116	90	101
MONTH	136	77	90	97	55	69	124	64	91	363	81	114

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	99	87	92	168	154	157	82	77	79	78	75	77
2	113	92	101	157	153	156	84	76	79	74	72	73
3	116	98	107	170	157	162	81	77	78	74	60	70
4	154	117	135	169	111	127	78	72	75	59	57	58
5	163	150	155	168	128	138	72	65	68	59	58	59
6	155	122	137	375	152	192	66	64	65	---	---	---
7	156	104	123	168	153	161	64	48	58	---	---	---
8	153	115	138	213	147	156	47	40	43	---	---	---
9	154	136	146	178	145	154	41	39	40	---	---	---
10	162	124	147	179	159	166	47	41	43	---	---	---
11	138	101	115	162	148	154	51	47	48	---	---	---
12	147	139	142	158	145	151	54	52	53	---	---	---
13	164	148	155	162	154	158	60	55	57	---	---	---
14	179	116	135	169	157	161	64	60	61	---	---	---
15	144	117	127	171	146	162	68	65	67	---	---	---
16	333	145	176	146	128	140	69	67	68	---	---	---
17	155	127	141	146	129	134	69	68	69	---	---	---
18	146	120	133	127	89	99	71	67	69	---	---	---
19	139	115	126	110	87	91	70	68	69	---	---	---
20	168	140	154	147	87	110	70	69	69	---	---	---
21	210	148	171	161	86	129	70	69	69	---	---	---
22	156	127	134	117	81	95	70	68	69	---	---	---
23	136	120	126	149	119	137	70	69	70	---	---	---
24	143	122	128	158	122	151	71	70	70	---	---	---
25	151	141	146	146	94	104	72	69	70	76	68	71
26	155	143	151	135	93	115	72	70	71	78	68	72
27	156	144	151	134	111	125	71	69	70	75	71	72
28	159	153	155	118	91	99	71	69	69	72	69	71
29	---	---	---	97	79	85	75	70	73	71	68	70
30	---	---	---	82	74	77	77	75	76	71	69	70
31	---	---	---	77	74	75	---	---	---	70	68	69
MONTH	333	87	137	375	74	133	84	39	65	78	57	69

ST. CROIX RIVER BASIN

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

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	68	66	67	125	110	120	44	39	41	80	77	78
2	69	66	68	120	94	101	60	41	45	79	76	77
3	73	67	70	110	94	102	94	63	80	79	77	78
4	77	73	74	94	89	91	117	96	112	79	78	78
5	85	76	79	90	87	88	116	113	114	81	78	80
6	106	79	85	106	89	96	116	111	114	82	66	80
7	117	104	113	100	87	92	112	86	95	84	45	67
8	104	84	94	100	88	93	111	99	106	85	82	84
9	93	74	86	95	86	90	107	95	101	86	83	85
10	77	71	74	101	95	98	93	87	88	91	84	88
11	74	60	69	100	89	94	88	85	87	89	82	86
12	62	59	60	91	88	89	93	84	88	78	61	67
13	63	61	62	101	85	89	87	82	85	91	80	88
14	62	60	61	99	88	91	88	79	81	91	89	90
15	72	62	69	94	84	88	132	90	115	90	75	83
16	72	71	71	92	82	86	---	---	---	104	88	99
17	72	71	72	92	88	90	---	---	---	104	93	100
18	72	70	71	99	90	95	---	---	---	99	92	95
19	77	73	75	113	91	100	---	---	---	95	54	79
20	76	73	75	101	92	96	---	---	---	54	43	47
21	74	72	73	94	89	93	---	---	---	43	41	42
22	76	74	75	91	78	85	---	---	---	41	40	41
23	79	75	77	92	81	85	142	138	140	44	41	42
24	83	77	78	94	83	89	141	100	117	44	39	41
25	88	85	86	92	78	84	104	98	101	53	40	48
26	88	84	86	85	79	82	104	92	100	55	51	52
27	96	86	88	95	80	85	88	82	84	75	56	65
28	100	86	92	109	99	102	83	80	81	88	77	86
29	87	82	84	117	96	107	81	79	80	84	72	78
30	106	87	91	124	116	119	80	77	79	71	55	60
31	---	---	---	123	41	66	79	78	78	---	---	---
MONTH	117	59	77	125	41	93	142	39	92	104	39	73
YEAR	375	39	93									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.9	6.8	6.9	6.8	6.6	6.7	6.9	6.8	6.9	7.1	7.1	7.1
2	7.0	6.9	6.9	6.8	6.6	6.8	6.9	6.7	6.8	7.1	7.1	7.1
3	7.0	6.9	7.0	6.6	6.4	6.6	6.9	6.7	6.8	7.2	7.1	7.1
4	7.0	6.8	6.9	6.6	6.4	6.5	6.9	6.8	6.9	7.2	7.1	7.1
5	6.8	6.7	6.8	6.6	6.5	6.6	6.9	6.7	6.8	7.3	7.1	7.2
6	6.9	6.8	6.8	6.6	6.6	6.6	7.0	6.7	6.8	7.2	7.0	7.1
7	6.9	6.8	6.8	6.6	6.5	6.6	7.0	7.0	7.0	7.1	7.0	7.0
8	7.0	6.9	6.9	6.5	6.5	6.5	6.9	6.8	6.9	7.2	7.0	7.1
9	6.9	6.8	6.9	6.5	6.5	6.5	6.9	6.8	6.8	7.3	7.2	7.2
10	7.0	6.8	6.9	6.7	6.5	6.6	6.9	6.8	6.8	7.3	7.2	7.2
11	7.0	6.9	6.9	6.7	6.6	6.6	7.1	6.8	6.9	7.3	7.2	7.2
12	6.9	6.8	6.8	6.6	6.5	6.6	7.0	6.8	6.9	7.2	7.2	7.2
13	---	---	---	6.7	6.5	6.7	7.0	6.8	6.9	7.2	7.2	7.2
14	6.8	6.7	6.7	6.9	6.6	6.7	7.1	7.0	7.1	7.3	7.2	7.3
15	6.8	6.7	6.7	6.9	6.7	6.7	7.1	7.1	7.1	7.4	7.2	7.3
16	6.8	6.7	6.7	6.8	6.6	6.7	7.1	6.9	7.1	7.3	7.2	7.3
17	7.0	6.8	6.9	6.8	6.7	6.8	7.1	7.1	7.1	7.4	7.1	7.2
18	7.0	6.9	6.9	6.7	6.7	6.7	7.1	7.1	7.1	7.1	7.1	7.1
19	6.9	6.9	6.9	6.7	6.7	6.7	7.1	7.1	7.1	7.2	7.0	7.1
20	6.9	6.7	6.8	6.9	6.7	6.8	7.1	7.1	7.1	7.3	7.0	7.1
21	6.9	6.6	6.8	6.9	6.7	6.8	7.1	7.1	7.1	7.2	7.1	7.2
22	6.9	6.8	6.8	6.9	6.7	6.8	7.2	7.1	7.2	7.2	6.9	7.1
23	6.8	6.6	6.7	6.9	6.7	6.8	7.2	7.0	7.1	7.1	6.9	7.0
24	6.9	6.5	6.6	7.0	6.8	6.9	7.2	7.0	7.1	7.1	6.9	7.0
25	6.8	6.7	6.8	7.0	6.8	6.9	7.2	7.1	7.2	7.2	7.1	7.2
26	6.7	6.5	6.6	6.8	6.7	6.8	7.3	7.2	7.2	7.3	7.1	7.2
27	6.6	6.5	6.5	6.9	6.7	6.8	7.3	7.0	7.1	7.2	7.1	7.1
28	6.8	6.5	6.6	6.9	6.9	6.9	7.1	7.1	7.1	7.1	7.1	7.1
29	6.8	6.6	6.7	6.9	6.7	6.8	7.2	7.1	7.2	7.1	7.1	7.1
30	6.7	6.6	6.6	6.9	6.6	6.7	7.3	7.0	7.1	7.1	7.0	7.1
31	6.8	6.6	6.7	---	---	---	7.1	7.0	7.1	7.2	7.0	7.1
MONTH	7.0	6.5	6.8	7.0	6.4	6.7	7.3	6.7	7.0	7.4	6.9	7.1

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

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.0	14.0	14.5	6.5	5.5	6.0	1.5	1.0	1.5	.5	.0	.0
2	16.0	15.0	15.5	7.5	6.5	7.0	1.5	1.5	1.0	.0	.0	.0
3	16.5	15.5	16.0	7.0	6.0	6.5	1.5	1.0	1.0	.5	.0	.5
4	15.5	14.0	14.5	6.5	6.0	6.5	1.5	.0	1.0	.5	.0	.0
5	14.0	12.5	13.0	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0
6	12.5	12.0	12.5	8.5	7.0	8.0	.0	.0	.0	.0	.0	.0
7	12.5	11.5	12.0	8.5	8.0	8.0	1.0	.0	.0	.0	.0	.0
8	12.0	10.5	11.5	8.0	8.0	8.0	1.0	.0	.5	.0	.0	.0
9	10.5	9.5	9.5	8.0	7.5	8.0	.0	.0	.0	.0	.0	.0
10	10.5	9.0	9.5	8.0	7.5	8.0	.0	.0	.0	.5	.0	.0
11	10.5	10.0	10.5	8.5	7.0	8.0	.5	.0	.0	.5	.0	.0
12	10.5	9.5	10.0	7.0	6.0	6.5	.5	.0	.0	.5	.0	.0
13	---	---	---	6.0	5.5	6.0	.5	.0	.0	.5	.0	.5
14	8.5	7.5	8.0	6.5	6.0	6.5	.0	.0	.0	.5	.0	.5
15	8.5	8.0	8.5	6.0	5.5	6.0	.0	.0	.0	.5	.0	.5
16	9.0	8.0	8.5	6.0	5.0	5.5	.0	.0	.0	.5	.5	.5
17	9.5	9.0	9.0	6.5	5.5	6.0	.0	.0	.0	.5	.5	.5
18	10.0	8.5	9.0	5.5	4.5	5.0	.0	.0	.0	.5	.5	.5
19	10.0	9.0	9.5	4.5	4.0	4.5	.0	.0	.0	.5	.5	.5
20	9.0	8.5	8.5	4.0	3.5	4.0	.5	.0	.0	.5	.5	.5
21	8.5	7.5	8.0	4.0	3.5	3.5	.5	.5	.5	.5	.0	.5
22	8.5	7.5	8.0	3.5	3.0	3.0	.5	.5	.5	.5	.0	.5
23	8.5	8.0	8.0	3.0	2.0	2.5	.0	.0	.0	.5	.0	.5
24	8.5	7.5	8.0	2.0	1.0	1.5	.5	.0	.5	.5	.0	.5
25	10.0	9.0	9.0	1.0	.0	.5	1.0	.5	1.0	.5	.0	.5
26	9.0	8.0	8.5	1.0	.5	.5	1.0	.0	.0	.0	.0	.0
27	8.5	8.0	8.5	1.5	.5	.5	1.0	.0	.0	.0	.0	.0
28	8.5	7.5	8.0	2.0	1.5	1.5	1.0	.0	.5	.5	.0	.5
29	8.5	7.5	8.0	2.0	1.0	1.5	1.0	.0	.5	.5	.0	.5
30	7.5	7.0	7.0	1.5	.5	1.0	.5	.0	.0	1.5	.5	1.5
31	6.5	6.0	6.5	---	---	---	.5	.0	.0	1.5	.5	1.0
MONTH	16.5	6.0	10.0	8.5	.0	5.0	1.5	.0	.5	1.5	.0	.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL				MAY	
1	2.0	1.0	1.5	1.0	.5	1.0	2.0	1.5	2.0	9.5	7.0	8.0
2	1.5	.0	.5	1.0	.5	1.0	3.5	1.0	2.0	9.0	8.0	8.0
3	.5	.0	.0	.5	.0	.5	3.0	1.5	2.5	9.5	7.5	8.5
4	.5	.0	.0	.5	.0	.5	2.5	2.0	2.0	10.5	8.0	9.0
5	.5	.0	.0	.5	.5	.5	3.0	2.0	2.5	11.5	9.0	10.5
6	.0	.0	.0	1.0	.5	.5	3.0	2.0	2.5	---	---	---
7	.0	.0	.0	.5	.0	.5	3.5	2.5	3.0	---	---	---
8	.5	.0	.0	.5	.0	.5	2.5	1.0	1.5	---	---	---
9	.5	.0	.5	.5	.0	.5	2.5	1.5	1.5	---	---	---
10	.0	.0	.0	1.0	.5	.5	3.5	1.0	2.0	---	---	---
11	.0	.0	.0	1.0	.5	1.0	3.5	1.5	2.5	---	---	---
12	.5	.0	.5	2.0	1.0	1.5	4.0	1.5	3.0	---	---	---
13	.5	.0	.5	1.5	1.0	1.0	4.5	2.0	3.5	---	---	---
14	.5	.5	.5	2.5	1.0	2.0	4.5	3.0	3.5	---	---	---
15	.5	.5	.5	3.5	2.5	3.0	5.0	3.5	4.0	---	---	---
16	1.0	.5	.5	3.0	2.5	2.5	4.5	3.5	4.0	---	---	---
17	.5	.0	.5	2.5	2.0	2.5	5.0	3.5	4.0	---	---	---
18	.5	.0	.0	2.5	1.0	1.0	4.5	3.5	4.0	---	---	---
19	.5	.0	.5	2.0	.5	1.0	4.0	3.5	4.0	---	---	---
20	.5	.0	.5	2.0	1.0	1.5	6.0	3.0	4.5	---	---	---
21	.5	.5	.5	2.5	1.0	2.0	6.5	4.0	5.0	---	---	---
22	1.0	.5	1.0	2.0	.5	1.5	5.5	4.0	4.5	---	---	---
23	1.0	.0	.5	2.5	1.0	2.0	5.0	3.5	4.0	---	---	---
24	.5	.0	.5	3.0	2.0	2.5	5.5	3.5	4.5	---	---	---
25	.0	.0	.0	3.0	1.5	2.0	5.5	3.5	4.5	17.5	16.5	17.0
26	.0	.0	.0	2.5	1.5	2.0	6.5	4.0	5.0	19.0	16.5	18.0
27	.5	.0	.5	3.5	2.0	2.5	7.0	4.5	6.0	19.5	17.0	18.0
28	.5	.0	.5	3.5	2.5	3.0	6.5	5.5	6.0	18.5	17.0	17.5
29	---	---	---	3.5	2.5	3.0	8.5	5.5	7.0	19.0	16.5	17.5
30	---	---	---	2.5	1.5	2.0	8.0	7.0	7.5	18.0	17.0	17.5
31	---	---	---	2.0	1.0	1.5	---	---	---	18.5	17.0	17.5
MONTH	2.0	.0	.5	3.5	.0	1.5	8.5	.5	3.5	19.5	7.0	14.0

ST. CROIX RIVER BASIN

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

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.0	17.5	18.0	23.5	22.5	23.0	24.5	22.5	23.5	19.0	18.0	18.5
2	19.5	17.5	18.5	23.0	21.5	22.5	23.5	22.0	22.5	20.0	18.0	18.5
3	21.0	18.5	19.5	22.5	21.5	22.0	23.0	21.5	22.0	19.5	18.0	19.0
4	20.0	18.0	18.5	22.0	21.0	21.5	22.0	21.5	21.5	19.5	17.5	18.5
5	21.0	18.0	19.0	22.0	21.0	21.5	21.5	21.0	21.0	19.5	17.5	18.5
6	20.5	18.5	19.5	23.0	21.0	22.0	21.5	21.0	21.5	19.0	17.0	18.5
7	19.5	18.0	18.5	23.5	21.5	23.0	21.5	21.0	21.5	19.5	17.5	18.5
8	19.5	18.5	18.5	23.5	22.0	23.0	21.5	21.0	21.5	20.0	18.0	19.0
9	20.0	18.0	19.0	24.0	22.0	23.0	22.5	20.5	21.5	20.5	18.5	19.5
10	19.0	17.0	18.0	23.5	21.0	22.0	23.0	20.5	22.0	21.5	19.0	20.0
11	18.0	16.5	17.0	21.5	20.5	21.0	23.0	21.0	22.0	21.5	20.0	21.0
12	18.0	16.5	17.0	23.0	20.0	21.5	22.5	21.0	21.5	21.5	20.5	21.0
13	17.5	16.0	17.0	23.5	21.0	22.5	23.0	21.5	22.0	21.0	20.0	20.5
14	18.5	16.0	17.5	23.0	22.0	22.5	23.0	22.0	22.5	21.0	19.5	20.0
15	18.0	17.0	17.5	24.0	21.5	22.5	24.0	23.0	23.5	19.5	18.5	19.0
16	17.5	16.5	16.5	23.5	22.0	22.5	---	---	---	20.0	18.0	18.5
17	17.0	16.5	16.5	23.5	21.5	22.0	---	---	---	20.0	18.0	19.0
18	17.5	16.5	17.0	23.5	21.0	22.0	---	---	---	19.0	17.5	18.0
19	19.5	17.0	18.0	24.0	21.5	22.5	---	---	---	19.0	18.0	18.5
20	20.5	18.0	19.0	23.5	22.0	22.5	---	---	---	18.5	18.0	18.0
21	22.0	18.5	20.0	24.5	22.0	23.0	---	---	---	19.0	18.0	18.5
22	22.5	20.0	21.0	25.0	22.5	23.5	---	---	---	19.0	18.5	19.0
23	22.5	21.0	21.5	25.0	23.5	24.5	23.0	22.0	22.5	19.5	18.5	19.0
24	22.5	20.5	21.5	25.0	23.5	24.5	22.0	21.0	22.0	19.5	16.5	17.5
25	22.5	21.0	22.0	25.5	23.0	24.5	22.0	20.0	20.5	17.0	15.5	16.5
26	23.5	21.0	22.5	26.5	24.0	25.0	20.0	19.0	19.5	17.0	16.0	16.0
27	25.0	22.0	23.5	26.5	24.5	25.5	20.5	18.5	19.5	16.0	14.5	15.0
28	25.0	23.0	23.5	26.5	24.5	25.0	20.5	18.5	19.5	14.5	13.5	14.0
29	24.0	22.0	23.0	24.5	23.5	24.0	20.5	19.0	20.0	15.0	13.5	14.0
30	23.5	22.5	23.0	24.0	23.0	23.5	20.5	19.0	19.5	14.5	13.0	13.5
31	---	---	---	25.0	22.5	24.0	19.5	18.5	19.0	---	---	---
MONTH	25.0	16.0	19.5	26.5	20.0	23.0	24.5	18.5	21.5	21.5	13.0	18.0
YEAR	26.5	.0	9.5									

OXYGEN DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10.0	9.5	9.7	10.6	10.4	10.5	12.9	12.9	12.9	13.5	12.9	13.2
2	10.0	9.5	9.6	10.6	10.3	10.5	13.0	12.8	12.9	13.5	13.3	13.4
3	9.6	8.9	9.3	10.7	10.2	10.4	13.0	12.8	12.9	13.5	13.1	13.3
4	9.6	9.1	9.3	10.8	10.5	10.6	13.2	12.9	13.0	13.3	12.6	13.0
5	9.9	9.4	9.6	10.9	10.6	10.8	13.2	13.0	13.1	13.5	12.7	13.0
6	10.0	9.7	9.8	10.9	10.6	10.8	13.2	13.0	13.1	13.5	13.3	13.4
7	10.0	9.9	9.9	10.8	10.2	10.5	13.1	13.0	13.0	13.4	13.1	13.3
8	10.2	9.8	10.0	10.4	10.2	10.3	13.1	12.9	13.0	13.5	12.8	13.1
9	10.2	9.9	10.0	10.3	10.1	10.2	13.1	12.9	13.0	12.8	12.6	12.7
10	10.3	10.1	10.2	10.3	9.9	10.1	13.1	13.0	13.0	13.1	12.7	12.9
11	10.4	10.1	10.2	10.4	10.1	10.2	13.3	13.0	13.2	13.1	12.9	13.0
12	10.4	10.1	10.3	10.6	10.1	10.4	13.4	13.3	13.4	13.4	12.9	13.2
13	---	---	---	10.7	10.4	10.6	13.4	13.3	13.4	13.2	12.5	12.9
14	10.6	10.3	10.4	10.7	10.5	10.6	13.3	13.2	13.3	13.3	12.5	13.0
15	10.7	10.4	10.5	10.8	10.5	10.7	13.6	13.3	13.4	13.2	12.8	13.1
16	10.6	10.4	10.5	10.9	10.7	10.8	13.8	13.3	13.5	12.9	12.6	12.7
17	10.7	10.4	10.5	10.9	10.7	10.8	13.8	13.6	13.7	13.2	12.8	13.0
18	10.7	10.4	10.5	11.0	10.7	10.8	13.6	13.5	13.5	13.3	13.0	13.1
19	10.6	10.3	10.4	11.3	11.0	11.2	13.6	13.5	13.6	13.4	13.1	13.3
20	10.5	10.2	10.4	11.3	11.2	11.3	13.6	13.1	13.4	13.3	13.1	13.2
21	10.5	10.2	10.4	11.9	11.3	11.5	13.1	12.8	12.9	13.7	13.1	13.4
22	10.5	10.2	10.4	12.3	11.9	12.1	13.4	12.8	13.1	13.8	13.0	13.4
23	10.4	9.9	10.1	12.4	12.2	12.3	13.4	12.9	13.3	13.3	13.0	13.2
24	10.1	9.8	10.0	12.6	12.3	12.4	13.1	12.6	12.8	13.3	13.1	13.1
25	10.1	9.7	9.9	12.8	12.5	12.7	12.7	12.5	12.6	13.3	13.0	13.1
26	9.9	9.4	9.6	12.9	12.8	12.8	13.0	12.5	12.7	13.6	13.1	13.4
27	10.0	9.6	9.8	13.0	12.8	12.9	13.0	12.3	12.7	13.1	12.8	12.9
28	10.1	9.7	9.9	12.9	12.8	12.9	12.5	12.2	12.3	13.4	13.0	13.2
29	10.1	9.8	10.0	12.9	12.7	12.8	13.0	12.5	12.8	13.4	13.3	13.3
30	10.2	9.9	10.1	13.0	12.9	12.9	13.3	12.6	13.0	13.3	13.1	13.2
31	10.6	10.2	10.4	---	---	---	13.0	12.8	12.9	13.1	12.9	13.0
MONTH	10.7	8.9	10.1	13.0	9.9	11.2	13.8	12.2	13.1	13.8	12.5	13.1

01021200 DENNYS RIVER AT DENNYSVILLE, ME

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

DRAINAGE AREA.--92.9 mi².

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

Water temperatures: October 1958 to September 1972.

REVISED RECORDS.--WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 54.78 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5 to Feb. 21, Feb. 24 to Mar. 14. Records good except for periods of ice effect, Dec. 5 to Feb. 21, Feb. 24 to Mar. 14, and for period of no gage-height record, Jan. 1-5, which are fair. Flow slightly regulated by dam at outlet of Meddybumps Lake, 14 mi upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--34 years, 192 ft³/s, 28.07 in/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 25	1100	814	4.11	Apr. 7	1000	917	4.39
Nov. 2	1800	1470	5.70	May 14	1500	*1540	*5.86

Minimum daily discharge, 38 ft³/s, Feb. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	175	270	e76	e58	e77	162	162	226	112	95	95
2	106	924	219	e70	e54	e73	184	240	217	112	92	107
3	105	1050	188	e65	e50	e70	211	674	234	111	90	105
4	103	660	171	e60	e48	e69	388	508	223	109	85	101
5	104	413	e150	e56	e46	e67	573	359	220	108	113	99
6	104	309	e140	e53	e44	e65	570	327	207	107	129	97
7	101	267	e130	e51	e43	e64	864	629	259	108	119	96
8	101	212	e120	e56	e42	e63	560	667	296	108	117	94
9	114	177	e102	e59	e41	e62	261	551	565	103	119	85
10	137	161	e98	e51	e40	e61	287	413	446	103	105	58
11	159	207	e89	e49	e39	e60	346	569	419	109	94	48
12	178	210	e83	e49	e39	e60	314	973	364	108	100	45
13	162	178	e84	e56	e38	e60	251	903	292	106	135	43
14	145	259	e87	e50	e49	e59	229	1400	239	104	266	43
15	132	253	e92	e60	e68	114	214	1300	206	113	219	91
16	125	208	e87	e73	e60	256	228	1020	211	111	155	135
17	120	207	e83	e64	e55	181	347	833	236	108	122	144
18	116	346	e79	e58	e50	134	309	723	227	106	102	141
19	131	284	e77	e53	e46	101	237	654	221	102	91	123
20	167	220	e78	e58	e43	87	216	530	200	101	85	125
21	171	402	e88	e86	e80	87	199	397	186	99	83	142
22	194	428	e82	e70	426	85	195	365	175	97	82	131
23	532	302	e85	e60	415	80	192	347	175	95	79	121
24	442	223	e98	e54	e150	79	193	335	172	93	78	127
25	735	184	e110	e52	e107	108	189	331	168	92	74	123
26	587	177	e110	e54	e86	241	174	286	164	96	72	118
27	395	153	e86	e63	e80	278	166	426	160	96	70	132
28	277	184	e105	e56	e75	351	163	388	143	103	68	123
29	238	407	e120	e53	---	472	160	309	122	122	67	115
30	214	355	e100	e52	---	319	160	251	116	106	67	109
31	193	---	e83	e53	---	174	---	240	---	99	77	---
TOTAL	6495	9535	3494	1820	2372	4057	8542	17110	7089	3247	3250	3116
MEAN	210	318	113	58.7	84.7	131	285	552	236	105	105	104
MAX	735	1050	270	86	426	472	864	1400	565	122	266	144
MIN	101	153	77	49	38	59	160	162	116	92	67	43
CFSM	2.26	3.42	1.21	.63	.91	1.41	3.06	5.94	2.54	1.13	1.13	1.12
IN.	2.60	3.82	1.40	.73	.95	1.62	3.42	6.85	2.84	1.30	1.30	1.25

CAL YR 1988 TOTAL 65801 MEAN 180 MAX 1720 MIN 52 CFSM 1.94 IN. 26.35
WTR YR 1989 TOTAL 70127 MEAN 192 MAX 1400 MIN 38 CFSM 2.07 IN. 28.08

e Estimated

PLEASANT RIVER BASIN

01022260 PLEASANT RIVER NEAR EPPING, ME

LOCATION.--Lat. 44°41'52", long. 67°47'16", Washington County, Hydrologic Unit 01050002, on right bank at Saco Falls, 100 ft upstream from East Base Road bridge in Columbia, 0.6 mi upstream from the junction of North Branch Pleasant River, and 1.6 mi northeast of the village of Epping.

DRAINAGE AREA.--60.6 mi².

PERIOD OF RECORD.--July 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 127.02 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 6 to Mar. 14 and Mar. 19-24. Records good except for periods of ice-effect, Dec. 6 to Mar. 14 and Mar. 19-24, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--9 years, 140 ft³/s, 31.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,240 ft³/s, May 13, 1989, gage height, 10.77 ft; minimum, 17 ft³/s, Sept. 10, 1980, gage height, 4.99 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 440 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 4	1400	567	8.41	May 13	1015	*1240	*10.77
Apr. 8	1000	621	8.64				

Minimum discharge 31 ft³/s, Sept. 14, gage height 5.28 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	122	290	e65	e44	e85	157	133	206	75	46	36
2	43	222	278	e60	e52	e83	143	155	187	71	42	43
3	42	336	244	e56	e45	e77	170	276	189	70	40	51
4	39	532	210	e52	e40	e69	231	371	198	67	41	46
5	37	489	179	e48	e38	e64	296	405	200	66	54	42
6	39	404	e150	e45	e37	e64	355	369	192	67	86	40
7	39	346	e140	e42	e37	e63	457	378	201	67	84	38
8	38	305	e130	e42	e36	e61	602	450	230	63	87	38
9	42	267	e120	e46	e36	e59	507	470	266	60	91	37
10	76	230	e110	e43	e35	e58	421	416	288	59	77	36
11	88	216	e100	e41	e36	e56	382	393	310	71	63	35
12	85	212	e96	e41	e36	e55	348	683	308	72	61	34
13	76	214	e90	e43	e35	e55	303	1210	295	64	89	33
14	64	233	e84	e45	e38	e58	252	1160	258	59	112	32
15	57	241	e80	e43	e45	104	212	1100	213	59	129	50
16	53	245	e76	e49	e49	175	192	917	192	59	109	89
17	50	234	e73	e55	e42	212	210	722	203	54	89	86
18	50	231	e71	e47	e38	149	233	591	217	53	78	85
19	55	238	e68	e45	e36	e91	232	502	210	51	68	71
20	67	241	e68	e45	e35	e78	215	426	194	49	60	68
21	69	259	e70	e48	e59	e76	194	369	171	49	57	91
22	72	273	e72	e46	e125	e76	177	325	150	47	59	91
23	146	303	e63	e44	e252	e72	173	284	133	45	58	81
24	194	297	e64	e45	e280	e70	175	252	121	44	55	76
25	234	254	e72	e49	e210	125	170	237	112	42	51	68
26	250	213	e82	e45	e150	270	161	230	105	42	47	57
27	263	189	e68	e43	e115	294	149	268	97	45	42	63
28	245	188	e62	e41	e94	269	142	298	91	46	39	62
29	204	227	e74	e40	---	250	138	318	88	57	37	54
30	167	260	e90	e40	---	249	133	284	82	58	36	49
31	141	---	e72	e40	---	209	---	239	---	51	37	---
TOTAL	3071	8021	3446	1434	2075	3676	7530	14231	5707	1782	2024	1682
MEAN	99.1	267	111	46.3	74.1	119	251	459	190	57.5	65.3	56.1
MAX	263	532	290	65	280	294	602	1210	310	75	129	91
MIN	37	122	62	40	35	55	133	133	82	42	36	32
CFSM	1.63	4.41	1.83	.76	1.22	1.96	4.14	7.58	3.14	.95	1.08	.93
IN.	1.89	4.92	2.12	.88	1.27	2.26	4.62	8.74	3.50	1.09	1.24	1.03

CAL YR 1988 TOTAL 47531 MEAN 130 MAX 851 MIN 29 CFSM 2.14 IN. 29.18
WTR YR 1989 TOTAL 54679 MEAN 150 MAX 1210 MIN 32 CFSM 2.47 IN. 33.57

e Estimated

01022340 EAST BRANCH BEAR BROOK NEAR BEDDINGTON, ME

LOCATION.--Lat 44°51'35", long 68°06'20", Hancock County, Hydrologic Unit 01050002, on left bank 600 ft upstream from confluence with the West Branch Bear Brook and 0.7 mi upstream from the mouth of Bear Brook at Bear Pond.

DRAINAGE AREA.--0.042 mi², revised. Furnished by U.S. Environmental Protection Agency.

PERIOD OF RECORD.--March 1988 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 906.55 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-10, Dec. 7-19, Jan. 1-10, Jan. 25 to Feb. 17, July 28-29, Aug. 3-5, 12, Aug. 31 to Sept. 4, and Sept. 15-20. Records excellent except for flows between 0.10 ft³/s and 0.010 ft³/s which are good, and for flows below 0.010 ft³/s, periods of missing gage-height record, Oct. 1-10, Dec. 7-19, Jan. 25 to Feb. 17, and periods of doubtful stage-discharge relationship, July 28-29, Aug. 3-5, 12, Aug. 31 to Sept. 4, and Sept. 15-20, which are poor. The University of Maine at Orono operates a mini-monitor at the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9.91 ft³/s, Mar. 27, 1988, gage height, 6.39 ft; no flow for several days in 1988-89.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2.2 ft³/s and maximum (*)

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0845	6.04	6.14	May 6	1700	3.93	5.96
Apr. 6	1855	2.26	5.77	May 11	1755	*8.71	*6.32
May 2	1750	2.90	5.85				

No flow for several days in July, August, and September.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.061	.16	e.018	e.022	.032	.076	.11	.049	.003	.00	e.002
2	e.00	1.99	.12	e.016	e.017	.027	.077	.87	.060	.004	.00	e.005
3	e.006	.40	.094	e.015	e.014	.026	.10	.69	.075	.003	.00	e.001
4	e.007	.19	.083	e.014	e.010	.022	.35	.27	.062	.002	e.004	e.001
5	e.011	.14	.066	e.013	e.009	.022	.83	.18	.051	.004	e.005	.00
6	e.008	.17	.060	e.012	e.008	.021	1.26	1.18	.080	.004	e.001	.00
7	e.006	.15	e.052	e.016	e.008	.017	.93	.90	.12	.001	.00	.00
8	e.013	.11	e.045	e.018	e.007	.014	.26	.43	.19	.001	.00	.00
9	e.018	.11	e.037	e.016	e.007	.014	.17	.25	.29	.00	.00	.00
10	e.020	.11	e.031	e.014	e.007	.014	.18	.17	.31	.006	.00	.00
11	.068	.32	e.027	.013	e.006	.014	.19	3.04	.34	.011	.00	.00
12	.039	.16	e.019	.008	e.006	.014	.16	2.88	.17	.004	e.017	.00
13	.021	.14	e.014	.013	e.006	.011	.15	1.03	.098	.002	.015	.00
14	.017	.36	e.011	.009	e.022	.012	.13	1.19	.069	.001	.012	.00
15	.014	.18	e.022	.058	e.014	.33	.11	.43	.055	.001	.004	e.007
16	.016	.13	e.018	.038	e.013	.31	.11	.23	.20	.00	.002	e.003
17	.011	.27	e.016	.023	e.011	.16	.22	.16	.15	.00	.002	e.004
18	.020	.32	e.015	.022	.010	.087	.24	.12	.16	.00	.001	e.001
19	.10	.17	e.014	.019	.008	.060	.18	.094	.16	.00	.00	e.00
20	.058	.13	.019	.024	.008	.049	.16	.075	.088	.00	.00	e.009
21	.037	.55	.024	.042	.20	.043	.13	.064	.057	.00	.00	.007
22	.33	.24	.021	.027	.69	.035	.12	.057	.039	.00	.001	.003
23	.48	.16	.016	.025	.20	.030	.095	.049	.029	.00	.00	.004
24	.45	.12	.018	.022	.085	.034	.094	.055	.023	.00	.00	.009
25	.65	.096	.043	e.018	.060	.040	.12	.060	.022	.00	.00	.006
26	.22	.083	.030	e.014	.049	.054	.16	.077	.017	.00	.00	.017
27	.13	.074	.021	e.011	.040	.15	.18	.21	.012	.00	.00	.019
28	.10	.44	.042	e.008	.034	.61	.14	.12	.010	e.003	.00	.013
29	.12	.50	.049	e.014	---	.89	.11	.074	.007	e.001	.00	.009
30	.085	.22	.028	e.012	---	.20	.11	.058	.005	.00	.00	.006
31	.068	---	.022	e.011	---	.11	---	.057	---	.00	e.002	---
TOTAL	3.123	8.094	1.237	0.583	1.571	3.452	7.142	15.180	2.998	0.051	0.066	0.126
MEAN	.10	.27	.040	.019	.056	.11	.24	.49	.10	.002	.002	.004
MAX	.65	1.99	.16	.058	.69	.89	1.26	3.04	.34	.011	.017	.019
MIN	.00	.061	.011	.008	.006	.011	.076	.049	.005	.00	.00	.00

WTR YR 1989 TOTAL 43.623 MEAN .12 MAX 3.04 MIN .00

e Estimated

NARRAGUAGUS RIVER BASIN

01022350 WEST BRANCH BEAR BROOK NEAR BEDDINGTON, ME

LOCATION.--Lat 44°51'34", long 68°06'23", Hancock County, Hydrologic Unit 01050002, on left bank 600 ft upstream from confluence with the East Branch Bear Brook and 0.7 mi upstream from the mouth of Bear Brook at Bear Pond.

DRAINAGE AREA.--0.040 mi², revised. Furnished by U.S. Environmental Protection Agency.

PERIOD OF RECORD.--March 1988 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 912.72 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-2, Dec. 7 to Feb. 17, and Aug. 24-30. Records excellent except for flows between 0.10 ft³/s and 0.010 ft³/s which are good, and for flows below 0.010 ft³/s, periods of missing gage-height record, Oct. 1-2 and Dec. 7 to Feb. 17, and period of doubtful stage-discharge relationship, Aug. 24-30, which are poor. The University of Maine at Orono operates a mini-monitor at the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8.71 ft³/s, Mar. 27, 1988, gage height, 6.47 ft, (backwater from log on control); minimum discharge, 0.002 ft³/s for several days in 1988-89, but may have been less during period of missing record Aug. 28-29, 1989, gage height, 5.05 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2.2 ft³/s and maximum (*)

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0850	5.15	6.07	May 6	1700	4.24	5.99
Apr. 6	1905	2.41	5.79	May 11	1525	*8.22	*6.29
May 2	1755	3.34	5.90				

Minimum discharge 0.002 ft³/s, July 24-25, 27, 31, Aug. 1-2, 11, Sept. 5-9, and, 11-13, but may have been less during period of missing record Aug. 28-29, gage height, 5.05 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.004	.062	.15	e.023	e.022	.038	.084	.13	.066	.020	.004	.006
2	e.004	1.78	.12	e.021	e.017	.038	.074	.89	.077	.023	.004	.019
3	.012	.38	.10	e.020	e.013	.032	.098	.68	.096	.021	.006	.008
4	.014	.18	.091	e.019	e.011	.032	.31	.28	.084	.021	.012	.009
5	.021	.13	.077	e.018	e.011	.034	.75	.19	.071	.022	.017	.006
6	.012	.17	.069	e.017	e.010	.030	1.32	1.21	.099	.020	.012	.004
7	.010	.13	e.061	e.019	e.010	.025	1.08	.93	.13	.018	.009	.004
8	.016	.11	e.054	e.022	e.009	.022	.31	.45	.20	.016	.010	.004
9	.021	.10	e.047	e.020	e.009	.022	.18	.27	.26	.013	.007	.004
10	.025	.11	e.040	e.018	e.009	.022	.18	.20	.31	.029	.005	.005
11	.084	.26	e.032	e.014	e.008	.024	.18	2.93	.33	.032	.004	.005
12	.054	.15	e.025	e.011	e.008	.022	.16	2.92	.18	.019	.036	.004
13	.031	.13	e.018	e.015	e.008	.022	.15	1.09	.12	.012	.031	.004
14	.022	.31	e.014	e.011	e.027	.026	.15	1.17	.089	.012	.023	.005
15	.021	.17	e.032	e.058	e.022	.25	.13	.46	.076	.012	.013	.027
16	.018	.12	e.026	e.038	e.018	.26	.13	.26	.22	.010	.011	.008
17	.018	.23	e.022	e.022	e.014	.13	.24	.19	.17	.012	.009	.009
18	.026	.29	e.019	e.020	.014	.076	.25	.15	.16	.009	.007	.007
19	.094	.16	e.017	e.018	.014	.049	.20	.13	.16	.009	.005	.007
20	.062	.14	e.019	e.024	.014	.036	.19	.11	.10	.009	.006	.031
21	.041	.50	e.024	e.042	.12	.034	.17	.095	.079	.007	.006	.024
22	.31	.22	e.021	e.027	.89	.032	.15	.093	.061	.006	.007	.015
23	.43	.15	e.016	e.023	.21	.036	.12	.079	.051	.005	.006	.032
24	.39	.12	e.018	e.019	.075	.038	.11	.081	.049	.005	e.006	.035
25	.61	.098	e.043	e.016	.057	.045	.12	.088	.041	.006	e.004	.023
26	.22	.086	e.032	e.014	.049	.053	.17	.10	.040	.005	e.003	.028
27	.13	.082	e.022	e.012	.045	.10	.18	.22	.033	.005	e.003	.029
28	.097	.36	e.042	e.011	.038	.37	.16	.13	.031	.011	e.002	.019
29	.11	.46	e.050	e.016	---	.77	.14	.094	.028	.008	e.002	.015
30	.081	.21	e.035	e.014	---	.20	.14	.079	.023	.005	e.005	.013
31	.068	---	e.026	e.012	---	.11	---	.076	---	.004	.006	---
TOTAL	3.056	7.398	1.362	0.634	1.752	2.978	7.626	15.775	3.434	0.406	0.281	0.409
MEAN	.099	.25	.044	.020	.063	.096	.25	.51	.11	.013	.009	.014
MAX	.61	1.78	.15	.058	.89	.77	1.32	2.93	.33	.032	.036	.035
MIN	.004	.062	.014	.011	.008	.022	.074	.076	.023	.004	.002	.004

WTR YR 1989 TOTAL 45.111 MEAN .12 MAX 2.93 MIN .002

e Estimated

NARRAGUAGUS RIVER BASIN

65

01022500 NARRAGUAGUS RIVER AT CHERRYFIELD, ME

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

DRAINAGE AREA.--227 mi².

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

Chemical analyses: Water years 1954, 1978 to 1986.

Specific conductance: January 1978 to September 1981.

Water temperatures: January 1978 to September 1981.

REVISED RECORDS.--WSP 1301: 1948(M). WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 44.21 ft above National Geodetic Vertical Datum of 1929. Prior to July 1, 1948, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 5 to Feb. 21, Feb. 24 to Mar. 14, and Mar. 19-24. Records good except for periods of ice effect, Dec. 5 to Feb. 21, Feb. 24 to Mar. 14, and Mar. 19-24, which are fair.

AVERAGE DISCHARGE.--41 years, 498 ft³/s, 29.79 in/yr.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0100	3040	12.64	May 8	1300	2310	11.90
Apr. 7	1700	3140	12.73	May 12	2100	*7250	*15.70
May 3	1200	2240	11.82				

Minimum discharge, 60 ft³/s, Sept. 14, gage height, 7.35 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	357	1010	e170	e105	e230	566	519	582	197	113	77
2	82	1920	828	e160	e130	e210	505	838	539	188	106	102
3	80	2790	684	e145	e115	e190	584	2130	650	183	102	114
4	77	2160	597	e135	e105	e170	1090	1920	633	175	102	110
5	74	1530	e470	e125	e98	e165	1340	1480	621	171	152	104
6	76	1130	e395	e115	e94	e165	1790	1360	555	170	232	96
7	75	956	e370	e110	e92	e150	2980	2040	774	167	198	91
8	78	790	e335	e105	e88	e135	2710	2290	821	160	191	91
9	116	675	e295	e115	e87	e130	1830	2040	1160	148	175	86
10	171	595	e270	e110	e86	e130	1450	1520	1090	144	153	82
11	177	764	e240	e105	e84	e125	1280	2320	1260	169	136	78
12	188	771	e225	e100	e83	e120	1090	6470	1120	167	148	74
13	187	670	e210	e110	e82	e115	900	6790	881	155	214	68
14	171	946	e200	e105	e100	e130	771	5430	688	148	305	61
15	154	884	e195	e115	e160	303	688	4260	568	152	297	124
16	137	743	e210	e130	e140	541	705	3310	609	140	239	199
17	125	699	e195	e125	e120	462	962	2430	745	133	214	188
18	119	964	e190	e110	e110	402	958	1820	711	129	194	180
19	136	879	e180	e105	e100	e320	859	1440	660	124	171	155
20	154	749	e185	e105	e95	e260	767	1160	568	123	149	154
21	156	1240	e205	e120	e200	e237	678	973	489	118	139	228
22	206	1260	e195	e110	1220	e232	642	852	423	113	161	248
23	802	1040	e180	e105	1020	e210	637	755	375	107	168	234
24	787	842	e170	e98	e550	e205	605	688	340	103	147	220
25	1260	678	e200	e94	e410	433	583	722	309	98	125	192
26	1100	578	e230	e89	e345	963	566	679	284	97	106	175
27	846	523	e190	e110	e295	873	560	1190	264	105	94	200
28	637	614	e230	e100	e260	911	557	1110	246	113	86	198
29	554	1240	e265	e96	---	1100	541	910	234	137	81	185
30	473	1190	e220	e94	---	1090	527	735	214	129	79	169
31	404	---	e190	e95	---	790	---	649	---	120	78	---
TOTAL	9687	30177	9559	3511	6374	11497	29721	60830	18413	4383	4855	4283
MEAN	312	1006	308	113	228	371	991	1962	614	141	157	143
MAX	1260	2790	1010	170	1220	1100	2980	6790	1260	197	305	248
MIN	74	357	170	89	82	115	505	519	214	97	78	61
CFSM	1.38	4.43	1.36	.50	1.00	1.63	4.36	8.64	2.70	.62	.69	.63
IN.	1.59	4.95	1.57	.58	1.04	1.88	4.87	9.97	3.02	.72	.80	.70

CAL YR 1988 TOTAL 158207 MEAN 432 MAX 4990 MIN 67 CFSM 1.90 IN. 25.93
WTR YR 1989 TOTAL 193290 MEAN 530 MAX 6790 MIN 61 CFSM 2.33 IN. 31.68

e Estimated

PENOBSCOT RIVER BASIN

01030000 PENOBSCOT RIVER NEAR MATTAWAMKEAG, ME

LOCATION.--Lat 45°34'01", long 68°24'10", Penobscot County, Hydrologic Unit 01020005, on left bank 1800 ft downstream from Mattaseunk Dam and powerhouse, 1.3 mi upstream from Mattaseunk Brook, and 4.5 mi upstream from Mattawamkeag.

DRAINAGE AREA.--3,356 mi², including 249 mi² drained by Chamberlain Lake through Telos Canal.

PERIOD OF RECORD.--Discharge: June 1940 to current year.
Chemical analyses: Water year 1954.

REVISED RECORDS.--WSP 2101: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 191.72 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 1, 3-18, 21, 22, 30, 31, Feb. 5-11, 17-21, and Mar. 6-28. Records fair, including period of ice effect, Jan. 1, 3-18, 21, 22, 30, 31, Feb. 5-11, 17-21, and Mar. 6-28. Flow regulated by many reservoirs above station (Reservoirs in Penobscot River basin). Considerable diurnal fluctuation caused by powerplant just upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--49 years, 5,762 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36,200 ft³/s, May 15, gage height, 10.43 ft.; minimum daily, 2,470 ft³/s, Oct. 4 and July 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2750	5460	6360	e4490	3650	4260	5140	6220	5310	4030	3270	4150
2	3630	5990	6050	4410	4110	3900	4900	6340	5330	4070	3380	5710
3	3770	8950	6330	e3350	4160	4010	5040	10900	5030	3920	3590	6230
4	2470	8100	6120	e3200	4230	3840	5160	11400	5120	4050	3610	4610
5	2770	7310	4790	e3550	e4300	3900	5900	11500	4880	3750	5630	4650
6	3870	5930	3960	e4150	e4000	e3900	7540	9240	4450	3910	5860	3820
7	2770	7780	4900	e4400	e3850	e3400	13700	14000	4390	3990	5560	4380
8	3620	7510	5290	e4700	e3750	e3500	17400	12400	4060	3860	5290	5200
9	3370	7630	4530	e4500	e3680	e3500	12900	10100	4600	3350	5210	4970
10	3360	7150	4630	e4510	e3600	e3550	11400	9510	5090	3240	4550	4950
11	3720	6560	4440	e4390	e3850	e3800	9560	10800	5740	4780	4090	4690
12	3510	6370	4540	e4280	4040	e3810	7260	22000	5680	3730	4280	3890
13	3680	5890	4260	e4200	3920	e3510	6660	32600	5290	3690	5180	3420
14	3210	6930	4170	e4500	3930	e3520	6240	33800	4630	3640	5510	4110
15	3270	6690	4730	e4450	3970	e3180	6190	34200	4880	3620	5080	4780
16	3090	6220	4420	e4300	4360	e3500	6420	26300	4840	3590	4550	5260
17	3250	7010	4830	e4230	e4050	e3550	7510	20200	4500	3570	4480	5600
18	3030	6350	4710	e4300	e4150	e3410	8220	15600	5300	3670	4340	5710
19	3680	6280	4820	4530	e3950	e3410	6030	12300	5140	3640	4560	5540
20	3720	6080	4770	4380	e3800	e3300	6880	9770	4700	3400	4080	6110
21	3390	6380	4850	e4000	e4350	e3150	6940	7730	4670	3740	3940	6000
22	3380	5910	4730	e3480	3920	e3250	6810	6770	4430	3290	4160	7720
23	4250	5730	4870	4130	3850	e3200	6450	6180	4050	3770	4240	5140
24	5530	5080	3290	4410	4110	e3400	5210	6540	3980	3130	4070	5390
25	6660	4890	3630	4150	4080	e3500	4920	5770	3790	3100	4340	4640
26	7430	5200	3840	4330	4020	e3400	4750	5410	3960	2470	4230	4310
27	5990	5380	4490	4250	4190	e3700	6020	5730	3790	2710	4250	4890
28	5140	6640	4430	4510	3870	e3350	6230	6170	3990	3920	4330	4390
29	5100	6490	4580	4410	---	5080	6210	6180	3830	3890	4240	4370
30	4250	6600	4650	e4280	---	5670	6020	5250	3910	3790	4190	4150
31	3880	---	4620	e4050	---	5440	---	5030	---	3730	4510	---
TOTAL	121540	194490	146630	130820	111740	115890	219610	385940	139360	113040	138600	148780
MEAN	3921	6483	4730	4220	3991	3738	7320	12450	4645	3646	4471	4959
MAX	7430	8950	6360	4700	4360	5670	17400	34200	5740	4780	5860	7720
MIN	2470	4890	3290	3200	3600	3150	4750	5030	3790	2470	3270	3420

CAL YR 1988 TOTAL 1617560 MEAN 4420 MAX 11000 MIN 2380
WTR YR 1989 TOTAL 1966440 MEAN 5388 MAX 34200 MIN 2470

e Estimated

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 upstream from Mattakeunk Stream, 3.7 mi upstream from Mattawamkeag, and 4.6 mi upstream from mouth.

DRAINAGE AREA.--1,418 mi².

PERIOD OF RECORD.--Discharge: October 1934 to current year.
Chemical analyses: Water year 1954.

REVISED RECORDS.--WSP 1501: Drainage area.

GAGE--Water-stage recorder. Elevation of gage is 230 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 9 to Feb. 8, Mar. 16-28, and Apr. 3-6. Records good except for periods of ice effect, Dec. 9 to Feb. 8, Mar. 16-28, and Apr. 3-6, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--55 years, 2,494 ft³/s, 23.88 in./yr.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,200 ft³/s, May 16, gage height, 12.67 ft; minimum discharge, 220 ft³/s, July 27, 28, gage height, 0.31 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	304	2330	4680	e500	e365	366	2910	5260	2190	642	616	501
2	293	2500	4550	e490	e380	354	3040	5510	2000	598	511	543
3	314	4030	4140	e475	e400	347	e3190	7750	1820	567	446	706
4	332	5380	3720	e470	e395	337	e3420	10900	1680	523	413	903
5	323	5900	3020	e460	e385	334	e3990	11900	1560	496	603	958
6	323	5690	2550	e450	e370	334	e6450	11600	1450	462	1810	893
7	326	5160	2430	e440	e360	336	11700	11400	1400	429	3360	791
8	330	4620	2360	e435	e345	340	16000	11500	1400	399	3760	704
9	358	4360	e2040	e430	341	352	17100	11400	1470	369	3690	632
10	453	4360	e1740	e425	331	347	16900	10800	1520	354	3340	568
11	659	4360	e1460	e420	318	338	16300	9970	2190	430	2860	517
12	871	4220	e1260	e415	307	326	14900	11000	2890	566	2450	466
13	981	3940	e1230	e410	318	313	13000	14400	2900	680	2540	419
14	951	3690	e1170	e410	307	307	11100	17900	2540	661	2930	392
15	875	3610	e1060	e410	304	316	9430	20900	2130	660	3270	378
16	791	3490	e950	e405	308	e355	8370	22000	1940	669	3370	364
17	711	3350	e900	e400	308	e405	7770	21600	2170	619	3110	353
18	663	3470	e845	e400	303	e440	7720	20300	2330	541	2660	363
19	736	3600	e780	e395	299	e430	7950	18100	2320	472	2230	387
20	906	3470	e750	e390	291	e420	7940	15200	2180	443	1850	474
21	1040	3640	e700	e390	296	e400	7700	12200	1940	400	1590	664
22	1070	4280	e670	e385	331	e395	7370	9310	1680	358	1420	923
23	1120	4410	e640	e385	339	e385	6880	7050	1460	320	1290	1030
24	1330	4020	e620	e380	350	e375	6230	5460	1300	283	1190	1070
25	1870	3390	e595	e380	353	e370	5720	4370	1160	253	1080	1090
26	2760	2850	e575	e375	355	e370	5410	3750	1020	231	954	1090
27	3260	2770	e560	e370	358	e435	5360	3440	925	223	843	1180
28	3300	2780	e540	e370	358	e600	5440	3240	849	247	743	1300
29	3100	3450	e530	e365	---	1570	5410	2930	790	381	660	1310
30	2830	4260	e520	e360	---	2540	5310	2610	716	584	598	1240
31	2590	---	e510	e360	---	2780	---	2370	---	659	544	---
TOTAL	35770	117380	48095	12750	9475	17317	250010	326120	51920	14519	56731	22209
MEAN	1154	3913	1551	411	338	559	8334	10520	1731	468	1830	740
MAX	3300	5900	4680	500	400	2780	17100	22000	2900	680	3760	1310
MIN	293	2330	510	360	291	307	2910	2370	716	223	413	353
CFSM	.81	2.76	1.09	.29	.24	.39	5.88	7.42	1.22	.33	1.29	.52
IN.	.94	3.08	1.26	.33	.25	.45	6.56	8.56	1.36	.38	1.49	.58

CAL YR 1988 TOTAL 684883 MEAN 1871 MAX 12100 MIN 151 CFSM 1.32 IN. 17.97
WTR YR 1989 TOTAL 962296 MEAN 2636 MAX 22000 MIN 223 CFSM 1.86 IN. 25.24

e Estimated

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 downstream from Lows Bridge, 1.0 mi upstream from Black Stream, and 4.7 mi upstream from Dover-Foxcroft.

DRAINAGE AREA.--298 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 279: 1902. WSP 1201: 1903-17, 1918-30(M), 1934-35.

WSP 1301: 1909(M). WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 358.47 ft above National Geodetic Vertical Datum of 1929. Prior to July 20, 1930, nonrecording gage at same site and datum. July 20, 1930 to Oct. 1, 1981, at datum 0.37 ft lower.

REMARKS.--Estimated daily discharges: Dec. 5 to Mar. 29, and Apr. 2-6. Records good except for periods of ice effect, Dec. 5 to Mar. 29, and Apr. 2-6, 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.--87 years, 603 ft³/s, 27.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,300 ft³/s, Apr. 1, 1987, gage height, 22.62 ft, from rating curve extended above 20,000 ft³/s on basis of slope-area measurement; minimum, 5 ft³/s, Aug. 6, 1905, Nov. 22, 1908.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	2045	6180	8.22	May 7	0115	6160	8.21
Apr. 7	2145	*7990	*9.40	May 13	2045	7380	8.99
May 3	0545	4490	6.99				

Minimum discharge, 31 ft³/s, Aug. 2, gage height, 1.58 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	455	871	e119	e93	e102	1160	890	325	150	37	62
2	72	3160	692	e116	e92	e100	e907	1490	307	137	35	97
3	71	4440	588	e115	e91	e97	e840	3900	381	127	46	122
4	83	2320	516	e113	e89	e96	e942	2320	375	116	47	94
5	88	1500	e390	e109	e88	e95	e1430	1550	340	107	175	79
6	131	1930	e351	e107	e87	e94	e3060	2840	301	99	632	70
7	154	2310	e310	e105	e87	e93	6990	5060	430	93	416	64
8	133	2090	e285	e103	e86	e93	6280	3160	418	84	607	58
9	134	1680	e262	e101	e86	e92	3490	1940	492	76	641	55
10	186	1290	e245	e100	e85	e92	2430	1400	692	76	395	51
11	241	1040	e230	e98	e84	e92	2020	1460	1450	105	264	47
12	466	847	e215	e97	e84	e93	1670	3970	974	111	378	43
13	356	708	e204	e96	e84	e92	1420	5620	638	91	800	41
14	273	1050	e193	e96	e83	e93	1340	5440	465	79	662	42
15	221	990	e184	e96	e86	e96	1280	3670	370	74	449	60
16	194	801	e175	e95	e85	e105	1480	2250	731	73	317	104
17	173	774	e167	e95	e84	e118	1870	1570	1170	67	249	119
18	177	1020	e160	e94	e84	e133	2410	1180	1090	62	193	161
19	495	834	e154	e94	e83	e126	2120	937	1780	62	154	140
20	489	683	e149	e93	e86	e117	1950	774	1090	63	131	162
21	364	991	e147	e92	e94	e111	1650	651	760	61	141	257
22	361	954	e146	e91	e105	e107	1530	771	547	54	192	217
23	2260	740	e144	e89	e125	e104	1240	717	422	47	158	190
24	1930	616	e139	e88	e127	e100	1050	583	345	41	142	259
25	2240	651	e136	e88	e120	e101	905	518	292	37	123	257
26	1620	467	e135	e87	e115	e105	839	462	255	36	101	223
27	1110	442	e133	e87	e110	e145	840	559	226	35	87	521
28	845	561	e130	e86	e105	e244	864	518	221	41	72	445
29	743	1470	e128	e86	---	e930	844	418	217	42	66	324
30	624	1130	e126	e86	---	1980	858	347	182	45	64	253
31	521	---	e123	e88	---	1510	---	336	---	42	65	---
TOTAL	16830	37944	7828	3010	2628	7456	55709	57301	17286	2333	7839	4617
MEAN	543	1265	253	97.1	93.9	241	1857	1848	576	75.3	253	154
MAX	2260	4440	871	119	127	1980	6990	5620	1780	150	800	521
MIN	71	442	123	86	83	92	839	336	182	35	35	41
CFSM	1.82	4.24	.85	.33	.31	.81	6.23	6.20	1.93	.25	.85	.52
IN.	2.10	4.74	.98	.38	.33	.93	6.95	7.15	2.16	.29	.98	.58

CAL YR 1988 TOTAL 177941 MEAN 486 MAX 4440 MIN 71 CFSM 1.63 IN. 22.21
WTR YR 1989 TOTAL 220781 MEAN 605 MAX 6990 MIN 35 CFSM 2.03 IN. 27.56

e Estimated

01031500 PISCATAQUIS RIVER NEAR DOVER-FOXCROFT, ME--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

Chemical analyses: Water year 1955.

Water temperatures: May 1987 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1987. Temperature probe located 10 ft. streamward from left bank.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

Water temperature: Maximum, 31.0°C, Aug. 6, 1988; minimum, 0.0°C, many days during winter periods.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.0	12.0	14.0	3.0	2.0	2.5	1.0	.5	.5	.0	.0	.0
2	16.5	14.5	15.5	5.0	2.5	4.0	.5	.5	.5	.0	.0	.0
3	16.0	14.0	15.0	5.0	5.0	5.0	.5	.5	.5	.0	.0	.0
4	14.0	12.0	13.0	5.0	4.0	4.5	.5	.0	.5	.0	.0	.0
5	12.0	10.0	10.5	5.5	5.0	5.0	.0	.0	.0	.0	.0	.0
6	12.0	10.0	10.5	8.5	6.0	7.0	.0	.0	.0	.0	.0	.0
7	11.5	9.0	10.0	8.0	7.5	8.0	.0	.0	.0	.0	.0	.0
8	8.5	7.5	7.5	7.5	6.5	6.5	.5	.0	.0	.0	.0	.0
9	7.5	6.5	7.0	6.5	6.0	6.0	.0	.0	.0	.0	.0	.0
10	7.5	6.0	6.5	6.0	5.5	5.5	.5	.0	.0	.0	.0	.0
11	8.0	6.0	7.0	6.5	5.0	6.0	.5	.0	.0	.0	.0	.0
12	8.0	6.0	7.0	5.0	3.0	4.0	.5	.0	.0	.0	.0	.0
13	7.5	6.0	7.0	3.0	2.0	2.5	.5	.0	.0	.0	.0	.0
14	7.0	5.5	6.0	4.0	2.0	3.0	.0	.0	.0	.0	.0	.0
15	7.0	5.5	6.0	4.0	3.5	3.5	.0	.0	.0	.0	.0	.0
16	7.5	6.0	6.5	3.5	3.0	3.5	.0	.0	.0	.0	.0	.0
17	8.0	6.5	7.5	4.0	3.0	4.0	.0	.0	.0	.0	.0	.0
18	9.0	7.5	8.0	4.0	3.5	4.0	.0	.0	.0	.0	.0	.0
19	9.5	7.5	8.5	3.5	1.5	2.5	.0	.0	.0	.0	.0	.0
20	8.0	6.5	7.5	1.5	1.0	1.5	.0	.0	.0	.0	.0	.0
21	7.5	5.0	6.0	1.5	1.0	1.0	.0	.0	.0	.0	.0	.0
22	5.0	4.5	5.0	1.5	.5	1.5	.0	.0	.0	.0	.0	.0
23	6.0	4.5	5.5	1.0	.0	.5	.0	.0	.0	.0	.0	.0
24	6.5	5.5	6.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
25	7.5	6.5	7.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
26	7.5	6.5	6.5	1.0	.0	.0	.0	.0	.0	.0	.0	.0
27	6.5	5.5	6.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
28	6.5	5.0	5.5	.5	.5	.5	.0	.0	.0	.0	.0	.0
29	6.5	5.0	5.5	1.0	.5	.5	.0	.0	.0	.0	.0	.0
30	5.0	3.5	4.5	.5	.5	.5	.0	.0	.0	.0	.0	.0
31	4.5	2.5	3.5	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	16.5	2.5	7.8	8.5	.0	3.1	1.0	.0	.1	.0	.0	.0

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 downstream from highway bridge and dam at outlet of Sebec Lake at Sebec.

DRAINAGE AREA.--326 mi².

PERIOD OF RECORD.--Discharge: October 1924 to September 1982, October 1984 to current year.
Chemical analyses: Water year 1954.

REVISED RECORDS.--WSP 1171: 1936(M). WSP 1301: 1925. WDR ME-81-1: Drainage Area.

GAGE.--Water-stage recorder. Datum of gage is 296.29 ft above National Geodetic Vertical Datum of 1929. Prior to June 22, 1942, at site on opposite bank, 60 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Considerable regulation by Sebec Lake on Sebec River, 1,000 feet upstream, capacity 2,511,000,000 ft³/s. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--63 years, 627 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft³/s, Apr. 2, 1987, gage height, 12.89 ft; maximum gage height, 14.46 ft, Mar. 20, 1936; minimum, about 2 ft³/s, Oct. 14-17, 1930, gage height, 0.87 ft, when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,880 ft³/s, May 15, gage height, 7.22 ft, minimum daily, 47 ft³/s, Sept. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	780	457	325	345	256	776	805	385	92	67	71
2	415	797	456	325	308	253	770	1080	431	70	66	73
3	422	1000	475	330	347	253	778	948	632	70	66	71
4	311	1060	506	330	344	254	807	999	624	70	67	71
5	301	1060	542	330	343	249	898	1290	565	72	319	71
6	298	1070	543	330	340	249	1000	2220	544	71	834	70
7	296	1080	539	330	339	248	1270	3060	563	253	766	70
8	278	1070	536	330	336	245	2290	3250	747	148	875	69
9	247	1080	542	330	335	243	3170	3040	976	66	757	69
10	252	1080	543	330	332	241	3290	2620	1040	68	503	437
11	269	1080	540	330	330	237	2940	2520	719	152	334	581
12	260	864	479	330	330	236	2390	2640	596	180	509	569
13	282	724	333	325	325	145	1970	2980	449	104	960	559
14	298	978	279	324	325	102	1820	3620	398	66	1060	565
15	291	907	274	320	280	102	1770	3830	412	61	769	564
16	287	1080	247	318	347	102	1750	3510	730	66	633	846
17	195	1070	324	315	347	102	1700	3050	984	67	430	999
18	200	1080	322	314	347	102	1770	2480	1030	70	345	595
19	227	1080	318	310	294	102	1830	2030	1040	69	341	47
20	257	1070	319	298	345	102	1880	1720	1050	73	339	48
21	336	971	325	285	343	102	1830	1590	1040	79	263	385
22	291	880	323	341	269	102	1770	1500	806	78	406	1050
23	380	855	390	338	236	102	1700	782	596	77	349	939
24	416	850	647	333	232	108	1540	338	589	71	346	704
25	508	841	600	330	282	121	1510	346	468	66	341	1020
26	557	831	409	326	264	121	1430	358	412	64	109	990
27	593	819	325	323	261	89	1360	487	493	65	71	900
28	592	879	325	325	257	142	1300	562	497	69	71	750
29	722	590	325	330	---	216	1250	389	337	69	71	735
30	825	453	325	330	---	669	791	384	144	68	71	715
31	856	---	325	243	---	815	---	384	---	68	71	---
TOTAL	11749	27979	12893	9978	8783	6410	49350	54812	19297	2662	12209	14633
MEAN	379	933	416	322	314	207	1645	1768	643	85.9	394	488
MAX	856	1080	647	341	347	815	3290	3830	1050	253	1060	1050
MIN	195	453	247	243	232	89	770	338	144	61	66	47
CAL YR 1988	TOTAL 162815	MEAN 445	MAX 1930	MIN 51								
WTR YR 1989	TOTAL 230755	MEAN 632	MAX 3830	MIN 47								

PENOBSCOT RIVER BASIN

01034500 PENOBSCOT RIVER AT WEST ENFIELD, ME

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

DRAINAGE AREA.--6,671 mi², including 249 mi² drained by Chamberlain Lake through Telos Canal.

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

Chemical analyses: Water years 1966 to 1978.

Specific conductance: October 1973 to September 1978.

Water temperatures: July 1966 to September 1978.

REVISED RECORDS.--WSP 279: 1902-10. WSP 1171: 1940. WSP 1231: 1902-13. WDR ME-81-1: Drainage area.

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

REMARKS.--Estimated daily discharges: Dec. 14 to Apr. 5. Records good except for period of ice effect, Dec. 14 to Apr. 5, which is 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.

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

AVERAGE DISCHARGE.--87 years (water years 1903 to current year), 11,887 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 153,000 ft³/s, May 1, 1923, gage height, 25.15 ft; minimum, 1,630 ft³/s, Oct. 29, 1905, gage height, 1.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 79,000 ft³/s, May 15, gage height, 16.44 ft; minimum daily discharge, 3,510 ft³/s, July 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4480	9650	17400	e6000	e4950	e5050	e15500	16600	10800	5920	5040	5680
2	3930	13300	16300	e5800	e4700	e5450	e13700	18300	10500	5870	4650	5750
3	5280	25000	15300	e5750	e5200	e5000	e13300	31500	10200	5690	4800	7500
4	4870	26600	14200	e4650	e5250	e5100	e14400	37600	10100	5660	5020	7330
5	3890	22400	11900	e4450	e5400	e4900	e17000	34800	9730	5550	6380	6950
6	3910	19500	10100	e4900	e5400	e4900	32900	32900	9140	5290	13500	6170
7	5300	20700	10300	e5450	e5200	e4850	50100	46100	8420	5180	15700	5730
8	4270	20400	10900	e5600	e4900	e4500	63700	46600	9080	5480	15200	5840
9	5000	19700	9770	e5800	e4850	e4500	55400	38900	9710	4750	15500	5840
10	5310	18500	7890	e5650	e4750	e4500	47700	33200	11200	4830	13500	6160
11	5450	17200	8320	e5600	e4700	e4600	42700	32000	13900	5090	11300	6260
12	6290	16100	8100	e4800	e4900	e4850	36800	47700	15200	5780	9890	5830
13	7100	14800	8020	e4600	e5000	e4800	31900	67200	13600	5270	11200	5590
14	6570	15100	e6800	e4350	e4850	e4400	28800	75000	11900	5320	13700	5190
15	6030	16500	e6750	e4600	e4950	e4350	25500	77800	10000	5410	14400	5840
16	5790	15100	e6850	e4550	e4850	e4150	25000	69400	10300	5160	13000	6400
17	5540	15100	e6350	e5400	e5400	e4600	25600	58100	12300	4920	11800	6860
18	5450	16000	e6800	e5350	e5100	e4700	29100	49300	12900	4970	10300	7340
19	5260	15800	e6600	e5400	e5200	e4550	26700	42200	13500	4920	9560	7390
20	6750	15100	e6550	e5600	e4900	e4450	26000	35600	13300	4950	8360	6850
21	6750	16300	e6500	e5400	e4950	e4300	25500	30000	11600	4610	7700	7090
22	6430	18000	e6450	e5000	e5600	e4200	23900	24800	10200	4800	7650	8260
23	8160	17100	e6400	e4600	e5050	e4300	22700	21300	9110	4490	7520	9840
24	12700	15200	e6500	e5400	e5000	e4200	20400	18500	7890	4700	7390	8200
25	14700	12800	e5150	e5500	e5250	e4350	18500	16200	7490	4030	6890	8900
26	17400	12200	e5400	e5200	e5200	e4500	16300	14400	6880	3770	6790	8140
27	15700	12000	e5350	e5400	e5180	e4600	17300	13800	6870	3510	6420	8670
28	13000	12700	e6000	e5200	e5220	e5400	17800	14200	6540	3750	6210	9620
29	12400	17000	e5750	e5600	---	e8600	17800	13700	6400	5070	5980	8750
30	11300	18500	e6000	e5400	---	e16300	17300	12700	6250	5450	5730	8400
31	10100	---	e5950	e5250	---	e17000	---	11200	---	5130	5890	---
TOTAL	235110	504350	260650	162250	141900	171950	819300	1081600	305010	155320	286970	212370
MEAN	7584	16810	8408	5234	5068	5547	27310	34890	10170	5010	9257	7079
MAX	17400	26600	17400	6000	5600	17000	63700	77800	15200	5920	15700	9840
MIN	3890	9650	5150	4350	4700	4150	13300	11200	6250	3510	4650	5190

CAL YR 1988 TOTAL 3297460 MEAN 9009 MAX 36000 MIN 3060
WTR YR 1989 TOTAL 4336780 MEAN 11880 MAX 77800 MIN 3510

e Estimated

01036390 PENOBSCOT RIVER AT EDDINGTON, ME
(National stream-quality accounting network station)

LOCATION.--Lat 44°49'33", long 68°41'48", Penobscot County, Hydrologic Unit 01020005, on left bank 0.4 mi downstream from Veazie Dam at Eddington, on Monument Drive, 750 ft north of intersection with State Highway 178.

DRAINAGE AREA.--7,764 mi², including 249 mi² drained by Chamberlain Lake through Telos Canal.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1979 to current year.

REVISED RECORDS.--WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7.20 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 11 to Mar. 16. Records good except for period of ice effect, Dec. 11 to Mar. 16, and period of no gage-height record, Jan. 7-12 and Jan. 18 to Feb. 9, which are fair. Flow regulated by many reservoirs above station (Reservoirs in Penobscot River Basin).

AVERAGE DISCHARGE.--10 years, 13,880 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 159,000 ft³/s, Apr. 3, 1987, gage height, 23.53 ft; minimum daily discharge, 2,780 ft³/s, Sept. 5, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 83,100 ft³/s, May 15, gage height, 16.79 ft; minimum daily discharge, 3,540 ft³/s, July 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4720	11000	20500	e7300	e6200	e5750	19000	19300	13600	7690	5320	6180
2	4660	13200	19200	e6950	e6000	e6050	17400	20200	12900	6790	5220	6540
3	4600	23800	17800	e6800	e6100	e5650	17600	28500	13300	6850	4770	7500
4	5820	30500	16700	e6550	e6150	e6000	18800	40500	12600	6420	5110	8600
5	4860	27800	14000	e5500	e6200	e5950	20700	39900	12300	6410	5840	8170
6	4120	24400	11000	e4850	e6100	e5700	28100	38200	11800	6330	10600	7500
7	4470	22400	10000	e6300	e5900	e5650	43400	43900	11600	6210	16400	6540
8	5460	23700	12900	e6700	e5500	e5400	64200	51600	10600	5970	17400	6290
9	5020	22600	11100	e6300	e5700	e5350	68100	47300	12800	6170	16800	6860
10	5500	21300	9630	e6400	e5450	e5150	60800	40900	14100	5030	15900	6990
11	6110	19800	e8700	e6250	e5400	e5200	52900	37800	16300	5660	13700	7020
12	6070	18400	e8400	e6050	e5600	e5500	46200	45900	18600	6160	12000	7010
13	7150	17300	e8200	e6000	e5750	e5700	40100	64200	17700	5950	11500	6290
14	7660	16300	e8300	e6900	e5950	e5550	35600	75000	15500	5990	13900	5950
15	6910	17700	e8000	e6000	e5600	e5300	32600	81100	13700	5870	15100	6530
16	6500	17500	e7900	e5800	e5650	e5900	29700	79700	12400	5740	14700	7050
17	6300	16500	e7950	e6050	e5700	6480	30200	71300	13700	5740	13500	7830
18	6010	17500	e8100	e6000	e5800	6950	32000	61000	15300	5390	12000	8320
19	6460	18100	e8450	e6200	e5800	7140	32700	52100	16000	5330	11000	8550
20	6440	17500	e8400	e6150	e5850	6920	30300	44500	16800	5510	10200	8540
21	7690	18100	e8350	e6200	e5250	6720	29900	37900	15200	5470	8500	8800
22	7680	20900	e8200	e5950	e6100	6490	28800	31600	13400	4780	8620	9650
23	7820	20900	e7900	e5750	e5750	6230	27700	28200	11800	5190	8400	11400
24	11500	19000	e7700	e5800	e5600	6250	25600	23300	10800	5080	8330	10800
25	15100	16600	e7300	e6200	e5900	6240	22700	20600	9570	4730	8070	10100
26	18100	14900	e5800	e6000	e6100	6760	20800	18100	9060	4400	7620	10100
27	18500	14300	e5500	e5950	e5900	7440	18900	17500	7380	4150	7260	10100
28	16300	14300	e6150	e6200	e5800	8380	20100	17500	7800	3540	6740	10700
29	14600	17000	e7050	e5850	---	11000	20200	17400	7430	4740	6560	10700
30	13500	20800	e7000	e6100	---	14900	20100	16300	7470	5440	6250	10100
31	12100	---	e7050	e6400	---	17900	---	14200	---	5860	6600	---
TOTAL	257730	574100	303230	191450	162800	215600	955200	1225500	381510	174590	313910	246710
MEAN	8314	19140	9782	6176	5814	6955	31840	39530	12720	5632	10130	8224
MAX	18500	30500	20500	7300	6200	17900	68100	81100	18600	7690	17400	11400
MIN	4120	11000	5500	4850	5250	5150	17400	14200	7380	3540	4770	5950

CAL YR 1988 TOTAL 3723750 MEAN 10170 MAX 39000 MIN 3650
WTR YR 1989 TOTAL 5002330 MEAN 13710 MAX 81100 MIN 3540

e Estimated

PENOBSCOT RIVER BASIN

01036390 PENOBSCOT RIVER AT EDDINGTON, ME--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1979 to current year.

pH: April 1979 to current year.

WATER TEMPERATURE: April 1979 to current year.

DISSOLVED OXYGEN: April 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1979. Continuous flow through system. Submersible pump located 150 ft streamward from left bank.

REMARKS.--Beginning in water year 1985, monitor not operated during winter periods. Other interruptions in the record were due to malfunctions of the monitor or pumping system.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 132 microsiemens, Sept. 20, 1986; minimum, 25 microsiemens, Apr. 19, 1983.

pH: Maximum, 9.3 units, Sept. 6, 1979; minimum, 5.3 units, Sept. 6, 7, 1979.

WATER TEMPERATURE: Maximum, 28.0°C, July 30, 1979, Aug. 6, 7, 1988; minimum, 0.0°C, on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.6 mg/L, Feb. 28, 1984; minimum, 6.5 mg/L, July 17, 18, 1980.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
12...	1300	5850	63	7.0	14.0	9.0	1.9	750	11.5	100	150	K 24
FEB												
10...	1230	E 5450	68	7.0	-4.0	0.0	2.2	760	14.6	100	260	39
APR												
10...	1300	59700	35	6.5	9.0	3.0	3.2	760	13.1	98	50	K 26
AUG												
24...	1030	8360	57	7.0	20.0	21.0	0.6	760	8.4	95	100	97

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT												
12...	20	5.7	1.3	4.9	0.9	16	0	13	14	15	12	5.0
FEB												
10...	21	6.2	1.4	4.5	0.7	16	0	13	14	14	7.7	5.6
APR												
10...	12	3.5	0.8	1.8	0.8	6	0	5	7	7	5.1	2.4
AUG												
24...	19	5.7	1.1	4.0	0.6	14	0	11	13	13	5.0	5.0

E Estimated discharge.

K Results based on colony count outside acceptable range (non-ideal colony count).

01036390 - PENOBSCOT RIVER AT EDDINGTON, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	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)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT 12...	0.1	2.4	48	41	<0.10	0.02	0.03	0.4	0.02	0.01	<0.01
FEB 10...	0.1	4.6	48	40	0.15	0.08	0.10	0.6	0.05	0.02	0.01
APR 10...	0.1	3.5	38	23	0.16	0.04	0.05	0.6	0.04	0.01	<0.01
AUG 24...	0.1	3.6	43	33	<0.10	0.03	0.04	0.9	0.02	0.01	0.01

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 12...	20	<1	4	<0.5	<1	<1	<3	3	67	<5	<4	11
FEB 10...	60	<1	7	<0.5	2	<1	<3	1	91	<5	<4	18
APR 10...	100	<1	3	<0.5	<1	<1	<3	3	94	<5	<4	43
AUG 24...	60	<1	4	<0.5	<1	<1	<3	3	150	1	<4	19

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 12...	<0.1	<10	<1	<1	<1.0	27	<6	19	7	111	54
FEB 10...	<0.1	<10	<1	<1	<1.0	30	<6	9	14	206	60
APR 10...	<0.1	<10	3	<1	<1.0	22	<6	19	16	2580	85
AUG 24...	<0.1	<10	1	<1	<1.0	29	<6	6	1	23	50

DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
OCT 12...	--	--	--	--	--	--	--	--
FEB 10...	--	--	--	--	--	--	--	--
APR 10...	<0.4	<0.4	1.1	0.8	1.1	0.8	0.05	0.02
AUG 24...	--	--	--	--	--	--	--	--

01036390 - PENOBSCOT RIVER AT EDDINGTON, ME--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

[illegible][illegible]

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

PH (STANDARD UNITS), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989[illegible]

PH (STANDARD UNITS), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

[illegible][illegible]

PENOBSCOT RIVER BASIN

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01036390 - PENOBSCOT RIVER AT EDDINGTON, ME

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.5	14.5	15.0	---	---	---	---	---	---	---	---	---
2	16.5	15.5	16.0	---	---	---	---	---	---	---	---	---
3	17.0	16.0	16.5	---	---	---	---	---	---	---	---	---
4	16.5	15.5	16.0	---	---	---	---	---	---	---	---	---
5	15.5	14.0	15.0	---	---	---	---	---	---	---	---	---
6	14.0	12.5	13.5	---	---	---	---	---	---	---	---	---
7	12.5	11.5	12.0	---	---	---	---	---	---	---	---	---
8	11.5	10.0	11.0	---	---	---	---	---	---	---	---	---
9	10.0	9.0	9.5	---	---	---	---	---	---	---	---	---
10	9.5	8.5	9.0	---	---	---	---	---	---	---	---	---
11	9.5	9.0	9.0	---	---	---	---	---	---	---	---	---
12	9.5	9.0	9.0	---	---	---	---	---	---	---	---	---
13	9.5	9.0	9.0	---	---	---	---	---	---	---	---	---
14	8.5	8.0	8.5	---	---	---	---	---	---	---	---	---
15	8.0	8.0	8.0	---	---	---	---	---	---	---	---	---
16	8.5	8.0	8.0	---	---	---	---	---	---	---	---	---
17	9.0	8.5	8.5	---	---	---	---	---	---	---	---	---
18	10.0	9.0	9.5	---	---	---	---	---	---	---	---	---
19	10.0	10.0	10.0	---	---	---	---	---	---	---	---	---
20	10.0	9.0	9.5	---	---	---	---	---	---	---	---	---
21	9.0	8.5	9.0	---	---	---	---	---	---	---	---	---
22	9.0	8.0	8.5	---	---	---	---	---	---	---	---	---
23	8.0	8.0	8.0	---	---	---	---	---	---	---	---	---
24	8.0	7.5	7.5	---	---	---	---	---	---	---	---	---
25	9.0	8.0	8.5	---	---	---	---	---	---	---	---	---
26	8.5	8.0	8.5	---	---	---	---	---	---	---	---	---
27	8.0	7.5	8.0	---	---	---	---	---	---	---	---	---
28	8.0	7.5	7.5	---	---	---	---	---	---	---	---	---
29	7.5	7.0	7.5	---	---	---	---	---	---	---	---	---
30	7.0	6.0	6.5	---	---	---	---	---	---	---	---	---
31	6.0	5.0	5.5	---	---	---	---	---	---	---	---	---
MONTH	17.0	5.0	10.0	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	9.0	7.5	8.0
2	---	---	---	---	---	---	---	---	---	8.5	8.5	8.5
3	---	---	---	---	---	---	---	---	---	9.0	8.5	8.5
4	---	---	---	---	---	---	---	---	---	9.0	8.0	8.5
5	---	---	---	---	---	---	---	---	---	9.5	8.5	9.0
6	---	---	---	---	---	---	---	---	---	9.5	9.0	9.0
7	---	---	---	---	---	---	---	---	---	10.0	9.0	9.5
8	---	---	---	---	---	---	---	---	---	10.5	9.5	10.0
9	---	---	---	---	---	---	---	---	---	10.5	9.5	10.0
10	---	---	---	---	---	---	---	---	---	11.0	10.0	10.5
11	---	---	---	---	---	---	---	---	---	11.0	10.5	10.5
12	---	---	---	---	---	---	---	---	---	10.5	10.5	10.5
13	---	---	---	---	---	---	---	---	---	10.5	10.0	10.5
14	---	---	---	---	---	---	---	---	---	10.0	10.0	10.0
15	---	---	---	---	---	---	---	---	---	11.0	9.5	10.0
16	---	---	---	---	---	---	---	---	---	12.5	10.5	11.0
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	17.0	17.0	17.0
23	---	---	---	---	---	---	---	---	---	17.0	16.0	16.5
24	---	---	---	---	---	---	---	---	---	17.0	16.5	17.0
25	---	---	---	---	---	---	---	---	---	17.5	16.5	17.0
26	---	---	---	---	---	---	---	---	---	18.0	17.0	17.5
27	---	---	---	---	---	---	---	---	---	18.5	17.5	18.0
28	---	---	---	---	---	---	---	---	---	18.0	16.5	17.5
29	---	---	---	---	---	---	---	---	---	17.5	16.0	16.5
30	---	---	---	---	---	---	---	---	---	17.0	16.5	17.0
31	---	---	---	---	---	---	---	---	---	17.0	16.5	16.5
MONTH	---	---	---	---	---	---	---	---	---	18.5	7.5	12.5

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.5	16.5	17.0	24.0	22.5	23.0	24.5	23.0	24.0	20.0	19.0	19.5
2	19.0	17.0	18.0	23.0	22.0	22.5	24.5	23.0	23.5	19.5	19.0	19.0
3	19.5	18.0	18.5	23.0	21.5	22.5	24.0	23.0	23.5	19.5	18.5	19.0
4	19.0	18.5	19.0	23.0	21.5	22.0	23.5	23.0	23.0	19.0	17.5	18.5
5	19.5	17.5	18.5	22.0	21.0	21.5	23.0	22.0	22.5	19.0	17.5	18.5
6	19.0	18.0	19.0	22.5	21.0	21.5	22.0	21.5	22.0	19.0	17.5	18.5
7	18.5	17.5	18.0	23.5	22.0	22.5	22.5	22.0	22.0	19.5	18.0	18.5
8	18.0	17.5	18.0	24.0	22.5	23.5	---	---	---	20.0	19.0	19.5
9	18.5	17.0	17.5	24.5	23.0	23.5	---	---	---	20.5	19.5	20.0
10	17.5	16.5	17.0	24.0	23.0	23.5	---	---	---	22.0	20.0	21.0
11	17.0	16.0	16.5	23.0	22.5	23.0	---	---	---	22.5	21.5	22.0
12	17.0	15.5	16.5	23.5	21.5	22.5	22.5	22.0	22.5	22.0	21.5	21.5
13	17.0	16.5	16.5	23.5	22.0	23.0	22.5	21.5	22.0	21.5	21.0	21.5
14	18.5	16.5	17.5	23.5	23.0	23.5	23.0	22.0	22.5	21.5	19.5	20.5
15	18.0	17.5	18.0	24.0	23.0	23.5	24.0	22.5	23.0	19.5	18.5	19.0
16	17.5	16.5	17.0	23.5	23.0	23.5	24.0	23.0	23.5	18.5	17.5	18.0
17	16.5	16.0	16.5	23.5	22.0	23.0	24.0	23.0	23.5	18.5	17.5	18.0
18	17.0	16.0	16.5	23.0	21.5	22.5	24.0	22.5	23.0	18.5	17.5	18.0
19	18.5	16.5	17.5	23.5	22.0	23.0	24.0	22.5	23.0	18.5	17.5	18.0
20	19.5	18.0	19.0	23.5	22.5	23.0	23.0	22.0	22.5	18.5	18.0	18.0
21	21.5	19.5	20.0	24.5	22.5	23.5	23.0	21.5	22.5	19.0	18.0	18.5
22	23.0	21.0	22.0	---	---	---	23.0	22.0	22.5	19.5	18.5	19.0
23	23.0	22.0	22.5	25.5	24.0	25.0	23.0	21.5	22.0	20.0	19.0	19.5
24	22.5	21.0	22.0	25.5	24.5	25.0	22.0	20.5	21.5	19.5	17.0	18.0
25	22.5	21.5	22.0	26.0	24.5	25.5	21.0	19.5	20.0	17.0	15.5	16.0
26	24.0	21.5	22.5	26.5	25.5	26.0	19.5	18.5	19.0	15.5	15.0	15.0
27	25.5	23.0	24.5	27.0	26.0	27.0	20.0	18.0	19.0	15.0	13.5	14.0
28	25.0	24.5	25.0	27.5	26.0	27.0	20.5	19.0	19.5	13.0	12.5	12.5
29	---	---	---	26.5	25.5	26.0	20.5	19.5	20.0	13.5	12.0	12.5
30	24.0	23.0	23.5	26.0	24.0	24.5	20.5	20.0	20.5	13.5	12.5	13.0
31	---	---	---	25.0	23.5	24.0	20.5	20.0	20.0	---	---	---
MONTH	25.5	15.5	19.0	27.5	21.0	23.5	24.5	18.0	22.0	22.5	12.0	18.0
PERIOD	27.5	5.0	17.5									

OXYGEN DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

[illegible]

PENOBSCOT RIVER BASIN

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 upstream from Millinocket and 42 mi northeast of Greenville, present dam completed in 1917, used for power; usable capacity of reservoir, 30,000,000,000 ft³. 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 upstream from Millinocket, Maine, used for power; usable capacity of reservoir, 15,000,000,000 ft³. 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 between gage height 2.0 ft and 11.0 ft. Records furnished by Bangor Hydroelectric 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 between elevations 643.0 ft and 655.0 ft. Records furnished by Bangor Hydroelectric Co.
- 01032500 SEBEC LAKE on Sebec River, Piscataquis County, at Sebec, Maine, used for power; usable capacity, 2,511,000,000 ft³ between elevations 316.1 ft and 325.1 ft. Records furnished by Bangor Hydroelectric Co.

MONTHEND CONTENTS IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

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, 1988.....	25,879	2,223	1,039
Oct. 31.....	25,677	2,059	1,202
Nov. 30.....	33,658	3,930	1,749
Dec. 31.....	28,880	3,551	1,638
Jan. 31, 1989.....	21,774	2,409	1,311
Feb. 28.....	14,389	1,723	930
Mar. 31.....	7,668	1,354	1,066
Apr. 30.....	28,992	4,762	1,638
May 31.....	49,832	5,929	1,984
June 30.....	48,618	5,951	1,984
July 31.....	42,091	5,184	1,925
Aug. 31.....	40,153	5,138	1,925
Sept. 30.....	37,420	3,284	1,148

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

01038000 SHEEPSCOT RIVER AT NORTH WHITEFIELD, ME

LOCATION.--Lat 44°13'23", long 69°35'38", Lincoln County, Hydrologic Unit 01050003, on left bank 50 ft upstream from highway bridge on State Route 126 at North Whitefield, at mouth of Finn Brook, and 0.3 mi east of North Whitefield village.

DRAINAGE AREA.--145 mi².

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

Chemical analyses: Water years 1954-56.

Specific conductance: July 1974 to September 1976.

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

REVISED RECORDS.--WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 101.05 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 17, 23, 27, Jan. 4-7, 21-22, Feb. 3-11, 17-26, and Mar. 7-9. Records good including the periods of ice effect, Dec. 17, 23, 27, Jan. 4-7, 21-22, Feb. 3-11, 17-26, and Mar. 7-9.

Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--51 years, 248 ft³/s, 23.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,350 ft³/s, Apr. 1, 1987, gage height, 13.71 ft; minimum, 5.0 ft³/s, Oct. 24, 1941, gage height, 1.70 ft.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 29	2100	1,240	5.30	May 6	2200	1,790	6.23
Apr. 7	0400	*2,580	*7.48	May 13	0200	1,810	6.26
May 3	0300	1,110	5.05				

Minimum discharge, 15 ft³/s, Oct. 2, 3, gage height, 1.79 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	80	404	78	60	137	741	254	228	109	29	19
2	15	595	387	75	69	125	627	524	213	102	28	23
3	15	568	368	75	e62	115	667	1040	267	95	27	25
4	15	484	340	e75	e57	98	813	881	286	86	25	24
5	18	497	296	e72	e52	89	964	743	301	81	26	21
6	22	545	268	e69	e51	85	2070	1330	307	78	27	20
7	25	530	248	e66	e51	e78	2520	1700	438	74	29	18
8	26	433	227	62	e51	e72	2260	1510	431	70	30	18
9	29	389	203	65	e51	e66	1820	1280	514	63	30	18
10	33	355	182	65	e50	64	1440	1120	693	60	28	18
11	32	343	161	60	e49	64	1220	1070	839	59	26	18
12	29	310	143	60	47	62	1010	1530	670	56	28	17
13	28	285	127	59	46	57	848	1620	600	52	36	16
14	29	383	119	57	52	62	745	1330	538	49	43	16
15	28	344	110	69	61	159	643	1170	475	47	40	24
16	26	308	104	79	63	250	719	997	597	44	34	28
17	24	330	e98	70	e57	205	749	821	553	42	34	30
18	25	413	88	63	e56	186	661	662	501	40	33	27
19	33	364	83	63	e52	157	668	557	476	39	29	25
20	32	363	77	66	e50	154	629	476	419	38	27	33
21	30	732	78	e70	e59	151	563	416	370	37	27	45
22	57	664	78	e63	e175	153	524	366	324	35	28	43
23	146	586	e75	60	e220	148	456	322	284	33	27	37
24	111	543	72	57	e179	145	413	288	244	32	25	37
25	125	467	82	56	e169	271	378	263	209	31	24	36
26	142	386	85	54	e164	458	346	250	184	37	21	36
27	120	345	e83	55	157	563	321	390	166	40	20	42
28	100	377	83	54	148	685	300	336	150	37	19	43
29	93	519	93	53	---	1020	279	289	137	35	19	38
30	87	437	89	52	---	1050	263	263	118	32	18	34
31	84	---	82	52	---	857	---	245	---	31	18	---
TOTAL	1595	12975	4933	1974	2358	7786	25657	24043	11532	1664	855	829
MEAN	51.5	432	159	63.7	84.2	251	855	776	384	53.7	27.6	27.6
MAX	146	732	404	79	220	1050	2520	1700	839	109	43	45
MIN	15	80	72	52	46	57	263	245	118	31	18	16
CFSM	.35	2.98	1.10	.44	.58	1.73	5.90	5.35	2.65	.37	.19	.19
IN.	.41	3.33	1.27	.51	.60	2.00	6.58	6.17	2.96	.43	.22	.21

CAL YR 1988 TOTAL 64753 MEAN 177 MAX 963 MIN 15 CFSM 1.22 IN. 16.61
WTR YR 1989 TOTAL 96201 MEAN 264 MAX 2520 MIN 15 CFSM 1.82 IN. 24.68

e Estimated

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 right bank wingwall of dam at East Outlet of Moosehead Lake.

DRAINAGE AREA.--1,266 mi².

PERIOD OF RECORD.--Gage height: March 1895 to current year.

Chemical analyses: Water year 1958.

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

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 gage height 7.0 ft. Remaining wooden section rebuilt of concrete in 1955-56. Lake outlet dredged in 1948 to permit drawing level down to gage height 10.0 ft at a faster rate than formerly. Usuable capacity, 23,730,000,000 ft³ between gage heights 10.0 ft and 17.5 ft. Water is used primarily for power.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum gage height observed, 17.64 ft, May 22; minimum observed, 13.29 ft, Mar. 17.

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

10.0	0	15.0	15,700
11.0	3,100	16.0	18,900
12.0	6,230	17.0	22,110
13.0	9,370	18.0	25,380
14.0	12,530		

GAGE HEIGHT, IN FEET, AT 0700, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.78	17.27	17.27	16.25	14.68	13.58	13.59	15.69	17.45	17.07	16.40	16.44
2	16.78	17.42	17.30	16.20	14.62	13.54	13.64	15.73	17.45	17.03	16.38	16.47
3	16.83	17.46	17.30	16.17	14.60	13.52	13.70	15.90	17.47	17.04	16.38	16.41
4	16.81	17.51	17.30	16.15	14.54	13.49	13.77	16.03	17.47	17.00	16.36	16.37
5	16.79	17.48	17.29	16.04	14.51	13.47	13.86	16.10	17.48	17.07	16.44	16.31
6	16.80	17.53	17.29	15.97	14.48	13.47	13.98	16.17	17.47	17.04	16.54	16.23
7	16.80	17.62	17.26	15.94	14.42	13.46	14.18	16.40	17.46	17.01	16.60	16.18
8	16.78	17.57	17.25	15.85	14.38	13.41	14.40	16.58	17.45	16.99	16.69	16.12
9	16.79	17.54	17.24	15.80	14.36	13.41	14.48	16.68	17.47	16.97	16.70	16.04
10	16.83	17.47	17.20	15.77	14.30	13.38	14.58	16.86	17.32	16.93	16.73	15.96
11	16.80	17.45	17.18	15.72	14.22	13.36	14.64	17.02	17.35	16.95	16.73	15.91
12	16.89	17.44	17.13	15.65	14.18	13.36	14.71	17.26	17.32	16.91	16.77	15.79
13	16.90	17.32	17.10	15.60	14.16	13.35	14.76	17.34	17.25	16.87	16.82	15.69
14	16.93	17.35	17.05	15.54	14.10	13.34	14.81	17.52	17.19	16.83	16.87	15.60
15	17.00	17.29	17.04	15.53	14.07	13.36	14.85	17.59	17.16	16.82	16.92	15.56
16	17.03	17.26	17.00	15.43	14.04	13.31	14.88	17.55	17.19	16.78	16.94	15.52
17	17.07	17.22	16.92	15.40	14.00	13.29	14.94	17.60	17.21	16.74	16.96	15.50
18	17.03	17.21	16.90	15.37	13.97	13.34	14.98	17.57	17.23	16.70	16.96	15.47
19	17.08	17.24	16.85	15.29	13.90	13.32	15.10	17.50	17.30	16.67	16.96	15.41
20	17.08	17.21	16.80	15.26	13.86	13.35	15.20	17.55	17.30	16.63	16.94	15.39
21	17.06	17.30	16.78	15.25	13.80	13.37	15.27	17.58	17.27	16.60	16.93	15.38
22	17.03	17.32	16.75	15.19	13.82	13.36	15.35	17.64	17.26	16.57	16.92	15.37
23	17.03	17.26	16.73	15.11	13.78	13.36	15.40	17.51	17.26	16.54	16.87	15.30
24	17.02	17.24	16.67	15.07	13.74	13.34	15.45	17.50	17.26	16.49	16.83	15.40
25	17.08	17.20	16.61	15.04	13.71	13.34	15.47	17.46	17.24	16.46	16.80	15.35
26	17.15	17.16	16.58	14.95	13.66	13.32	15.50	17.43	17.19	16.44	16.74	15.30
27	17.18	17.15	16.52	14.95	13.65	13.34	15.54	17.43	17.17	16.43	16.71	15.27
28	17.21	17.18	16.48	14.90	13.61	13.34	15.58	17.46	17.14	16.46	16.67	15.17
29	17.25	17.20	16.47	14.85	---	13.37	15.61	17.43	17.14	16.48	16.63	15.10
30	17.27	17.24	16.38	14.82	---	13.42	15.64	17.43	17.11	16.45	16.55	15.06
31	17.30	---	16.32	14.73	---	13.50	---	17.45	---	16.42	16.50	---
MAX	17.30	17.62	17.30	16.25	14.68	13.58	15.64	17.64	17.48	17.07	16.96	16.47
MIN	16.78	17.15	16.32	14.73	13.61	13.29	13.59	15.69	17.11	16.42	16.36	15.06
* 22984	22984	19700	14686	11206	11238	17908	23565	22334	20180	20308	15638	
# +1578	0	-3284	-5014	-3480	+32	+6670	+5657	-1231	-2154	+128	-4670	
+ 80	80	75	70	60	55	65	75	80	80	75	70	

CAL YR 1988 # -800

WTR YR 1989 # -5768

* Contents, in millions of cubic feet, at end of month

Change in contents, in millions of cubic feet

+ Diversion, in cubic feet per second, through gates at West Outlet

KENNEBEC RIVER BASIN

85

01042500 KENNEBEC RIVER AT THE FORKS, ME

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

DRAINAGE AREA.--1,590 mi².

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

Chemical analyses: Water years 1952-53.

REVISED RECORDS.--WSP 1231: 1902-04, 1906-08, 1912, 1914, 1919-20(M), 1923(M), 1926(M), 1928-29(M), 1936(M), 1938(M). WSP 1301: 1928-35 (adjusted monthly runoff). WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 569.03 ft above 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 downstream at different datum.

REMARKS.--No estimated daily discharges. Records excellent. 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.--88 years, 2,608 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,300 ft³/s, June 1, 1984, gage height, 13.78 ft; minimum, 85 ft³/s, Sept. 3, 1953, gage height, 1.02 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,700 ft³/s, May 16, gage height, 8.11 ft; minimum daily, 245 ft³/s, Mar. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4120	2600	2670	1090	2760	1630	619	1100	2790	1410	1280	3340
2	1490	2630	2930	3390	2220	1600	569	1620	3040	1410	1320	2530
3	4090	1750	2820	3490	2680	1110	915	2000	3050	1590	1300	1720
4	4350	3350	2890	3610	2250	583	933	2870	529	1760	1990	1800
5	4550	3800	3590	3690	1590	337	1070	2730	2720	2370	847	3600
6	4040	3130	3320	3950	2840	1580	1780	3110	3210	2700	2090	3730
7	4360	3850	3590	1780	2320	1680	4070	2280	3540	2790	2050	3560
8	3280	7180	3020	987	1790	1620	3750	2460	3680	1650	1110	4010
9	774	7110	2990	2950	2300	1010	2580	2680	4390	314	958	3690
10	3090	6070	1990	3050	3480	1070	2170	2270	7020	1170	900	2360
11	2610	5430	882	3820	1640	277	1870	2440	3780	2280	1480	4470
12	2450	4200	4510	2790	749	245	1740	4130	4540	1450	948	4810
13	2360	4550	3990	2800	2170	894	1460	7040	3310	1610	1080	5130
14	2280	4740	3320	2250	2270	724	1550	7640	3790	1640	1520	4820
15	837	4660	2650	1710	2490	759	1060	11200	3460	1120	1450	4030
16	407	4130	2520	2860	3090	355	847	12100	3530	462	1390	3500
17	3660	4990	2400	3100	2800	548	1600	8970	3110	1560	1770	2200
18	3890	4940	2270	2950	653	601	2160	8940	1680	1600	1650	3800
19	3330	4130	3420	2980	900	493	1630	7030	3430	1520	813	3300
20	3420	4000	2800	2960	1950	709	1750	5340	3050	1670	1130	3550
21	3610	3240	2330	1840	2300	953	1700	5780	3550	1780	3210	3340
22	3630	4450	2900	1690	2160	786	1600	8630	3140	693	3540	2390
23	3150	3740	3070	2940	2690	1010	1170	7500	2960	672	3670	1780
24	3190	4090	2310	2840	2160	1080	1460	5800	1700	1600	3760	448
25	1600	3570	1810	3010	760	276	1360	5730	636	2050	3470	2710
26	1040	3950	3160	2710	731	263	1360	4830	2320	2010	2660	3420
27	1460	3250	3440	2750	2260	644	1260	4490	2290	1700	683	3670
28	1840	3380	4090	1840	2060	796	1330	4660	2320	1600	2720	4180
29	1720	2960	4080	1520	---	1010	1130	3220	2190	718	3660	4020
30	1740	2740	3400	2670	---	1160	782	2820	2220	656	4120	3410
31	2130	---	2540	2150	---	1250	---	3340	---	1330	4740	---
TOTAL	84498	122610	91702	82167	58063	27053	47275	154750	90975	46885	63309	99318
MEAN	2726	4087	2958	2651	2074	873	1576	4992	3032	1512	2042	3311
MAX	4550	7180	4510	3950	3480	1680	4070	12100	7020	2790	4740	5130
MIN	407	1750	882	987	653	245	569	1100	529	314	683	448

CAL YR 1988 TOTAL 771139 MEAN 2107 MAX 7180 MIN 239
WTR YR 1989 TOTAL 968605 MEAN 2654 MAX 12100 MIN 245

01046500 KENNEBEC RIVER AT BINGHAM, ME

LOCATION.--Lat 45°03'06", long 69°53'12", Somerset County, Hydrologic Unit 01030003, on right bank at Bingham, 200 ft downstream from highway bridge, 0.4 mi downstream from Austin Stream, and 1.6 mi downstream from Wyman Dam.

DRAINAGE AREA.--2,715 mi².

PERIOD OF RECORD.--June 1907 to June 1910, October 1930 to current year.

Chemical analyses: Water years 1966 to 1978.

Specific conductance: October 1975 to September 1978.

Water temperatures: October 1975 to September 1978.

REVISED RECORDS.--WSP 1271: 1951(M). WSP 1301: 1936(M). WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 330.20 ft above National Geodetic Vertical Datum of 1929. June 1907 to June 1910, nonrecording gage on highway bridge at different datum.

REMARKS.--Estimated daily discharge: Nov. 6-18, Jan. 21, 25, Feb. 2, 17-18, 20, Feb. 24 to Mar. 4, Mar. 6-10, 13, 19-20, 22-24, and Mar. 29-30. Records good except for periods of no gage-height record, Nov. 6-18 and Mar. 29-30, and periods of ice effect, Jan. 21, 25, Feb. 2, 17-18, 20, Feb. 24 to Mar. 4, Mar. 6-10, 13, 19-20, and 22-24, which are fair. 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. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--61 years (water years 1908-09, 1931 to current year), 4,436 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65,200 ft³/s, June 1, 1984, gage height, 15.61 ft; minimum daily, 110 ft³/s, Dec. 25, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,100 ft³/s, May 14, gage height, 12.01 ft; minimum daily, 1,180 ft³/s, Mar. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4020	4060	5060	4000	3720	e2750	4400	2670	3740	4160	2120	3400
2	4230	4890	4870	3580	e3700	e2850	3530	4520	3300	2840	2150	3900
3	3890	6790	4900	3810	3660	e2760	2180	9880	4350	1850	2100	4230
4	3780	6410	5020	4160	4020	e2930	1300	8440	4520	2700	2090	3940
5	3790	6390	4190	4850	4010	2820	1760	7850	4520	3270	2520	3400
6	4060	e4900	4120	4400	3870	e2750	4750	12400	4440	2830	5120	2840
7	4170	e11500	3780	4450	3730	e2360	14800	16000	4630	2890	3450	3370
8	4050	e19000	3530	4060	3750	e2360	11600	13500	4640	3050	3130	3900
9	3950	e12500	3800	3990	3860	e2410	6880	11100	5840	3060	2830	4710
10	4140	e11400	3560	4120	3510	e2320	5850	10000	10400	2980	2160	4300
11	3950	e9000	3420	4050	3610	2430	4970	6940	8810	3040	1890	4440
12	3990	e7500	3730	4030	3590	1990	4450	12700	7950	3020	1720	4330
13	4150	e8100	3920	4260	3730	e2120	4320	24900	6070	2880	1880	4580
14	3690	e8600	3560	4060	3430	2290	3780	27600	5480	2690	2260	4280
15	3580	e7800	3760	4170	3290	1820	3090	24100	4970	2720	2500	3900
16	3590	e7400	3630	4130	3580	1720	2430	21700	4840	2540	2590	3770
17	3570	e7600	3670	4230	e3500	1680	2920	14400	4930	2730	2990	3810
18	3490	e6960	3860	4170	e3510	1490	4080	11300	4900	2660	3120	4050
19	3540	6510	3850	4150	3570	e1540	5160	9840	4830	2630	3030	3660
20	3500	6040	3830	4020	e3520	e1650	4900	7420	4930	2800	3200	4110
21	3380	5910	3820	e3740	3560	1490	4910	6560	5050	2730	3070	4630
22	2850	6040	3840	3520	3230	e1700	4750	12600	4370	2690	3200	4170
23	2680	5890	3890	3670	3220	e1800	4090	9700	3740	2630	3120	4180
24	1890	6020	3920	3830	e3040	e1800	3160	7130	3130	2520	3440	4150
25	2790	5740	3770	e3940	e2990	1560	2840	7300	2790	2140	3200	4260
26	2820	5610	3840	4000	e2780	1350	2670	6930	3960	2150	3120	3830
27	3160	5210	3810	3930	e2680	1260	2110	7080	3420	1990	3110	3470
28	3140	5070	3830	4070	e2650	1330	1730	7790	3820	2060	3200	3500
29	3270	5000	3570	3860	---	e1180	2070	6380	4040	2070	3230	3550
30	3160	4910	3870	3710	---	e3200	2170	5120	4160	2060	3310	3480
31	3110	---	3820	3640	---	4400	---	4320	---	1950	3270	---
TOTAL	109380	218750	122040	124600	97310	66110	127650	338170	146570	82330	88120	118140
MEAN	3528	7292	3937	4019	3475	2133	4255	10910	4886	2656	2843	3938
MAX	4230	19000	5060	4850	4020	4400	14800	27600	10400	4160	5120	4710
MIN	1890	4060	3420	3520	2650	1180	1300	2670	2790	1850	1720	2840

CAL YR 1988 TOTAL 1288950 MEAN 3522 MAX 19000 MIN 1190
WTR YR 1989 TOTAL 1639170 MEAN 4491 MAX 27600 MIN 1180

e Estimated

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 upstream from Mill Stream and North Anson.

DRAINAGE AREA.--353 mi².

PERIOD OF RECORD.--Discharge: November and December 1901, June 1902 to May 1907, August 1925 to current year. Monthly discharge only for some periods, published in WSP 1301.

Chemical analyses: Water years 1953-54, 1961.

REVISED RECORDS.--WSP 1231: 1904-07, 1928(M), 1932(M), 1936(M), 1938(M), 1944(M), 1950(M). WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 303.3 ft above National Geodetic Vertical Datum of 1929. Nov. 1, 1901, to May 5, 1907, nonrecording gage 1 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 6-7, Dec. 4 to Apr. 6. Records good except for period of ice effect, Dec. 4 to Apr. 6, and period of no gage height record Nov. 6-7, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--68 years (water years 1903-06, 1926-current year), 720 ft³/s, 27.70 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,700 ft³/s, Apr. 1, 1987, gage height, 26.66 ft; maximum gage height, 27.78 ft, Feb. 21, 1978 (ice jam); minimum discharge, 18 ft³/s, Oct. 29, 1929, gage height, 2.02 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1630	11,100	11.96	May 2	2330	8,420	10.39
Nov. 6	Unknown	(a) 6,120	Unknown	May 6	2030	11,900	12.36
Apr. 6	1830	Ice Jam	*14.72	May 13	1000	*13,300	13.10
Apr. 7	1000	8,840	10.65				

Minimum discharge, 86 ft³/s, Aug. 2, 3, gage height, 2.75 ft.

(a) Estimated daily discharge

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	401	874	e190	e200	e187	e1560	923	565	282	93	155
2	112	5760	622	e190	e208	e175	e1310	3240	703	267	88	364
3	128	5010	575	e191	e207	e170	e1150	5450	2230	243	92	308
4	156	2460	e515	e193	e204	e165	e1100	2860	1500	192	104	187
5	160	1650	e470	e192	e198	e160	e2460	2000	964	182	341	148
6	186	e6160	e430	e191	e196	e158	e6680	5200	694	175	867	130
7	201	e4020	e395	e190	e195	e155	8260	6430	1000	169	714	121
8	185	2850	e360	e194	e193	e153	5460	3680	915	162	703	115
9	167	2110	e340	e200	e192	e151	3000	2230	1020	154	611	111
10	157	1560	e325	e218	e190	e148	2430	1580	2340	153	415	107
11	214	1290	e310	e202	e188	e147	2020	2330	2990	169	285	102
12	343	1030	e300	e194	e185	e146	1670	9630	1910	166	552	97
13	284	798	e290	e190	e183	e145	1450	10800	1160	149	1000	110
14	235	1060	e280	e188	e180	e144	1300	5610	761	140	681	159
15	212	1110	e270	e187	e178	e145	1170	3650	629	146	464	248
16	200	905	e260	e187	e176	e152	1400	2410	1180	139	359	352
17	196	1020	e250	e186	e175	e173	1930	1800	1610	143	316	269
18	202	1420	e242	e186	e174	e197	2650	1360	1720	176	269	337
19	722	1030	e235	e185	e173	e181	2480	1040	2210	175	240	264
20	488	779	e230	e185	e173	e168	2240	896	1520	170	221	343
21	345	1030	e225	e183	e190	e159	1830	790	1060	162	215	675
22	397	931	e218	e178	e230	e153	1700	1130	784	152	211	391
23	2300	741	e214	e176	e250	e148	1400	1030	504	133	198	315
24	1630	664	e210	e175	e247	e146	1100	1040	441	94	189	429
25	2140	587	e205	e174	e235	e146	792	884	399	90	179	340
26	1460	570	e201	e170	e221	e158	771	586	373	90	169	339
27	974	548	e198	e169	e208	e210	795	1070	348	92	160	672
28	634	727	e197	e168	e200	e620	853	824	348	109	155	469
29	516	1660	e196	e167	---	e1300	812	631	383	133	151	345
30	485	1240	e194	e177	---	e2300	871	541	322	125	158	302
31	431	---	e190	e192	---	e1980	---	574	---	103	178	---
TOTAL	15972	51121	9821	5768	5549	10540	62644	82219	32583	4835	10378	8304
MEAN	515	1704	317	186	198	340	2088	2652	1086	156	335	277
MAX	2300	6160	874	218	250	2300	8260	10800	2990	282	1000	675
MIN	112	401	190	167	173	144	771	541	322	90	88	97
CFSM	1.46	4.83	.90	.53	.56	.96	5.92	7.51	3.08	.44	.95	.78
IN.	1.68	5.39	1.03	.61	.58	1.11	6.60	8.66	3.43	.51	1.09	.88

CAL YR 1988 TOTAL 221799 MEAN 606 MAX 6160 MIN 82 CFSM 1.72 IN. 23.37
WTR YR 1989 TOTAL 299734 MEAN 821 MAX 10800 MIN 88 CFSM 2.33 IN. 31.59

e Estimated

KENNEBEC RIVER BASIN

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 upstream from Bog Stream, 2.1 mi north of Mercer, and 8.6 mi upstream from mouth.

DRAINAGE AREA.--514 mi².

PERIOD OF RECORD.--Discharge: October 1929 to September 1979, June 1987 to current year.

Chemical analyses: Water year 1954.

REVISED RECORDS.--WSP 756: 1933. WSP 801: Drainage area. WSP 1231: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 197.1 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 4 to Mar. 30. Records good except for period of ice effect, Dec. 4 to Mar. 30, which is fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--53 years, (water years 1929-1979, 1988 to current year) 972 ft³/s 25.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,600 ft³/s, Mar. 19, 1936, gage height, 16.75 ft, from rating curve extended above 15,000 ft³/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, Feb. 12, 1979, from floodmark (backwater from ice); minimum discharge, 32 ft³/s Sept. 22-26, 1939, gage height, 2.15 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 1, 1987 reached a stage of 19.25 ft, present datum, from floodmarks, discharge, 51,100 ft³/s, from rating curve extended above 15,000 ft³/s on the basis of slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base discharge of 6,000 ft³/s, and minimum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 6	2045	7,800	8.29	May 13	0400	*25,300	*13.33
Apr. 7	1400	18,000	11.45	June 3	0645	7,910	8.33
May 3	0515	10,600	9.24	June 10	2345	6,400	7.77
May 7	0430	13,500	10.08				

Minimum discharge 81 ft³/sec, Aug. 30, gage height, 2.68 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	433	1200	e260	e255	e305	1710	1180	863	371	107	125
2	130	2050	1030	e260	e278	e290	1470	2940	1120	342	98	154
3	129	3890	896	e260	e298	e280	1430	7940	5650	337	94	328
4	126	2550	e824	e259	e322	e270	1890	3560	2530	316	94	243
5	130	1750	e580	e258	e288	e260	2970	2440	1860	295	223	176
6	138	3860	e452	e257	e255	e256	7380	4810	1410	278	1580	142
7	200	4360	e380	e256	e250	e250	13200	9770	1860	266	665	125
8	201	3030	e345	e254	e247	e243	8050	4410	2010	250	515	115
9	193	2170	e315	e275	e246	e235	4310	2910	2360	232	504	107
10	210	1690	e300	e268	e244	e230	3620	2170	3270	218	346	102
11	247	1410	e285	e262	e241	e225	2950	2390	4690	210	260	98
12	315	1190	e275	e257	e240	e220	2430	13000	2620	210	244	93
13	376	1080	e265	e256	e239	e215	2100	20000	1780	195	562	88
14	300	1640	e275	e256	e237	e211	1930	7530	1420	179	613	86
15	249	1630	e300	e255	e239	e216	1790	4820	1160	169	483	109
16	219	1290	e295	e253	e245	e230	2260	3390	2130	170	333	229
17	204	1190	e290	e250	e245	e260	3140	2530	2710	164	266	259
18	199	1550	e285	e249	e242	e290	3810	2010	2150	155	228	223
19	333	1230	e280	e249	e236	e263	3510	1640	3210	147	195	248
20	613	1010	e278	e247	e235	e252	3060	1400	1830	141	177	239
21	396	1970	e275	e242	e235	e240	2460	1240	1300	136	164	807
22	393	1850	e282	e240	e255	e232	2220	2120	1030	131	159	578
23	1500	1280	e275	e238	e295	e225	1830	1690	832	126	158	378
24	1520	1060	e272	e238	e400	e220	1530	1270	716	120	152	359
25	1690	915	e270	e237	e375	e221	1330	1150	657	114	141	347
26	1260	870	e265	e235	e360	e237	1200	1030	564	109	132	315
27	881	853	e264	e230	e340	e380	1190	1500	497	109	122	646
28	691	1020	e263	e230	e322	e1250	1220	1420	459	108	114	573
29	594	2290	e262	e230	---	e3030	1140	1030	475	108	105	397
30	553	1570	e261	e233	---	e4220	1110	846	435	121	105	317
31	483	---	e260	e240	---	2240	---	843	---	120	113	---
TOTAL	14605	52681	12099	7734	7664	17496	88240	114979	53598	5947	9052	8006
MEAN	471	1756	390	249	274	564	2941	3709	1787	192	292	267
MAX	1690	4360	1200	275	400	4220	13200	20000	5650	371	1580	807
MIN	126	433	260	230	235	211	1110	843	435	108	94	86
CFSM	.92	3.42	.76	.49	.53	1.10	5.72	7.22	3.48	.37	.57	.52
IN.	1.06	3.81	.88	.56	.55	1.27	6.39	8.32	3.88	.43	.66	.58

CAL YR 1988 TOTAL 268236 MEAN 733 MAX 4360 MIN 118 CFSM 1.43 IN. 19.41

WTR YR 1989 TOTAL 392101 MEAN 1074 MAX 20000 MIN 86 CFSM 2.09 IN. 28.38

e Estimated

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 upstream from Twentyfivemile Stream and 5.0 mi south of Pittsfield.

DRAINAGE AREA.--572 mi².

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

Chemical analyses: Water year 1952-53.

REVISED RECORDS.--WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 133.94 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 22-24, Jan. 4-10, 23-26, 28-29, Feb. 4, 8, 16-20, 27-28, Mar. 3, 7-9, 12-13, 19-20 and 23. Records good except for periods of ice effect, Dec. 22-24, Jan. 4-10, 23-26, 28-29, Feb. 4, 8, 16-20, 27-28, Mar. 3, 7-9, 12-13, 19-20 and 23, which are fair. Flow regulated by dam 0.4 mi upstream, and by Great Moose and Sebasticook Lakes and Plymouth Pond, combined capacity about 2,345,000,000 ft³. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--60 years (water years 1930 to current year), 955 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft³/s, Apr. 3, 1987, gage height, 15.53 ft; minimum daily, 4.5 ft³/s, Nov. 10, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,850 ft³/s, Apr. 8, gage-height, 9.42 ft, minimum daily, 15 ft³/s, Jan. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	463	1740	103	352	160	1780	1090	853	429	54	178
2	164	532	1690	100	227	297	1530	1200	911	213	119	229
3	208	1480	1590	100	109	e321	1460	1920	1060	182	54	245
4	178	1750	1480	e98	e78	384	1770	2320	1090	193	106	332
5	75	1880	1340	e98	77	155	2160	2390	1140	199	118	184
6	142	1870	1210	e98	80	298	3520	2740	1110	175	150	79
7	180	1790	1130	e96	83	e249	5110	3780	1210	120	134	98
8	165	1700	1050	e96	e121	e215	6920	4400	1330	32	213	354
9	164	1640	883	e96	126	e152	7540	4490	1610	57	246	705
10	211	1570	773	e65	122	347	7380	4220	2000	72	269	984
11	488	1490	760	46	128	222	6620	3950	2570	197	372	1020
12	537	1400	727	43	107	e128	5590	4010	2770	177	407	939
13	525	1300	730	41	80	e120	4550	4590	2680	83	419	878
14	184	1310	713	54	92	209	3730	5630	2480	68	532	935
15	201	1330	618	122	115	412	3180	6270	2260	79	703	909
16	350	1310	231	135	e109	303	2920	6170	2160	87	800	863
17	305	1300	362	77	e107	420	3000	5800	2080	191	843	846
18	478	1370	143	50	e104	558	3370	4960	2060	105	812	816
19	382	1400	109	187	e98	e454	3690	3880	2060	79	450	727
20	223	1390	151	249	e96	e377	3690	2960	1980	173	242	672
21	223	1560	134	213	162	392	3510	2370	1810	99	450	710
22	429	1770	e44	137	234	337	3170	1910	1590	72	298	746
23	432	1840	e22	e30	288	e334	2840	1530	1390	77	324	779
24	464	1780	e96	e15	266	198	2600	1210	1210	82	331	969
25	663	1660	155	e47	577	292	2380	1030	1050	85	197	1120
26	726	1530	137	e207	634	212	2190	923	904	343	192	1050
27	710	1410	115	141	e421	343	1870	971	731	48	216	972
28	685	1400	121	e101	e317	629	1510	980	681	110	212	895
29	636	1610	132	e71	---	1240	1270	946	559	59	190	844
30	622	1730	126	19	---	1890	1160	886	518	66	182	807
31	544	---	113	28	---	1890	---	839	---	134	176	---
TOTAL	11364	44565	18625	2963	5310	13538	102010	90365	45857	4086	9811	20885
MEAN	367	1485	601	95.6	190	437	3400	2915	1529	132	316	696
MAX	726	1880	1740	249	634	1890	7540	6270	2770	429	843	1120
MIN	70	463	22	15	77	120	1160	839	518	32	54	79

CAL YR 1988 TOTAL 243200 MEAN 664 MAX 3100 MIN 14
WTR YR 1989 TOTAL 369379 MEAN 1012 MAX 7540 MIN 15

e Estimated

KENNEBEC RIVER BASIN

01049130 JOHNSON BROOK AT SOUTH ALBION, ME

LOCATION.--Lat 44°29'53", long 69°29'12", Kennebec County, Hydrologic Unit 01030003, on right bank approximately 0.8 mi downstream from Dutton Pond and approximately 0.5 mi southwest of Albion.

DRAINAGE AREA.--2.92 mi².

PERIOD OF RECORD.--May 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 230 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 11 to Jan. 12, and Jan. 15 to Mar. 29. Records are good except for periods of ice effect, Dec. 11 to Jan. 12, and Jan. 15 to Feb. 5, and for flows below 1.5 ft³/s, which are fair, and period of ice effect and doubtful gage height record, Feb. 6 to Mar. 29, which is poor.

AVERAGE DISCHARGE.--9 years, 4.58 ft³/s, 21.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 178 ft³/s, Apr. 1, 1987, gage height 12.34 ft; minimum discharge, no flow many days during Aug., Sept. Oct., and Nov. 1983, and Sept. 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 02	0815	31	9.80	May 2	1530	32	9.84
Mar. 29	1830	34	9.89	May 6	0845	*65	*10.54
Apr. 7	0815	61	10.46				

Minimum discharge, .02 ft³/s, Sept. 13, gage-height, 8.16 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	1.9	9.9	e.76	e.80	e1.5	13	3.8	2.5	.78	.05	.05
2	.36	19	7.6	e.70	e.67	e1.4	9.6	19	6.5	.75	.04	.28
3	.39	22	6.1	e.66	e.59	e1.3	9.3	25	12	.67	.04	.13
4	.34	16	5.1	e.62	e.55	e1.3	16	19	11	.61	.04	.08
5	.83	10	4.0	e.59	e.51	e1.8	23	12	8.0	.59	.12	.06
6	.94	8.9	3.5	e.57	e.49	e2.3	29	34	8.3	.56	.18	.06
7	.61	7.7	3.2	e.56	e.48	e1.9	54	38	11	.50	.11	.05
8	.54	7.1	2.9	e.65	e.46	e1.7	54	31	12	.42	.18	.05
9	.96	5.6	2.5	e.95	e.45	e1.5	41	23	12	.34	.10	.05
10	1.0	5.1	2.3	e.76	e.43	e1.3	31	13	17	.36	.07	.04
11	1.1	5.2	e1.9	e.64	e.43	e1.2	26	15	20	.47	.05	.04
12	1.1	4.8	e1.7	e.60	e.42	e1.1	21	22	14	.34	.45	.03
13	1.0	5.2	e1.4	.65	e.42	e1.0	14	27	8.5	.26	1.1	.03
14	.88	8.1	e1.2	.76	e.70	e1.9	11	21	5.5	.22	.56	.03
15	.80	7.8	e1.3	e1.6	e.94	e3.7	9.4	14	4.2	.19	.30	.26
16	.75	6.2	e.95	e1.2	e.70	e7.0	12	10	12	.17	.22	.18
17	.76	7.6	e.89	e1.0	e.58	e5.8	15	7.1	11	.18	.18	.13
18	.83	9.2	e.84	e.92	e.54	e4.7	15	5.7	8.7	.19	.15	.11
19	1.3	8.5	e.81	e.90	e.52	e4.0	13	4.9	6.5	.16	.13	.07
20	1.2	7.6	e.80	e.93	e.51	e3.5	11	3.9	4.8	.22	.14	.33
21	.96	19	e.92	e1.0	e1.8	e3.3	9.2	3.7	3.5	.16	.29	.82
22	3.1	18	e.88	e.87	e4.4	e3.2	7.4	3.0	2.7	.11	.34	.33
23	6.8	13	e.78	e.78	e2.8	e3.2	5.2	2.5	2.2	.08	.20	.43
24	7.8	9.7	e.73	e.73	e2.3	e3.1	4.3	2.4	1.8	.06	.16	.75
25	7.2	6.9	e1.4	e.69	e2.1	e4.7	4.0	2.3	1.6	.09	.09	.45
26	4.8	5.3	e1.1	e.66	e1.9	e7.2	3.9	4.1	1.4	.23	.07	.46
27	3.8	5.0	e.90	e.64	e1.8	e15	3.7	11	1.3	.13	.06	.74
28	3.1	9.5	e1.1	e.61	e1.6	e26	3.3	8.9	1.2	.10	.05	.44
29	2.8	14	e1.5	e.58	---	e29	3.7	4.9	1.1	.07	.05	.37
30	2.4	13	e1.1	e.57	---	26	3.8	3.4	.93	.06	.06	.34
31	2.1	---	e.90	e.56	---	19	---	2.9	---	.05	.06	---
TOTAL	60.92	286.9	70.20	23.71	29.89	189.6	475.8	397.5	213.23	9.12	5.64	7.19
MEAN	1.97	9.56	2.26	.76	1.07	6.12	15.9	12.8	7.11	.29	.18	.24
MAX	7.8	22	9.9	1.6	4.4	29	54	38	20	.78	1.1	.82
MIN	.34	1.9	.73	.56	.42	1.0	3.3	2.3	.93	.05	.04	.03
CFSM	.67	3.28	.78	.26	.37	2.09	5.43	4.39	2.43	.10	.06	.08
IN.	.78	3.66	.89	.30	.38	2.42	6.06	5.06	2.72	.12	.07	.09

CAL YR 1988 TOTAL 1241.33 MEAN 3.39 MAX 31 MIN .05 CFSM 1.16 IN. 15.81
WTR YR 1989 TOTAL 1769.70 MEAN 4.85 MAX 54 MIN .03 CFSM 1.66 IN. 22.55

e Estimated

01049265 KENNEBEC RIVER AT NORTH SIDNEY, ME
(National stream-quality accounting network station)

LOCATION.--Lat 43°28'25", long 69°41'08", Kennebec County, Hydrologic Unit 01030003, on right bank at North Sidney, 5.3 mi downstream from Sebasticook River, and 11.5 mi upstream from Cushnoc Dam at Augusta.
DRAINAGE AREA.--5,403 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

REVISED RECORDS.--WDR ME-81-1: Drainage area. WDR ME-86-1: 1984, 1985. WDR ME-88-1: Gage datum.

GAGE.--Water-stage recorder. Datum of gage is 15.12 ft above National Geodetic Vertical Datum of 1929. Prior to Oct 1, 1979, at datum 21.90 ft higher. Since July 10, 1980, auxiliary water-stage recorder 11.5 mi downstream from base gage.

REMARKS.--Estimated daily discharges: Oct. 22 to Nov. 1, Dec. 5 to Mar. 28, Apr. 27 to May 1, June 26 to Aug. 5, and Aug. 10 to Sept. 30. Records good including period of ice effect Dec. 5 to Mar. 28, except for periods of doubtful gage-height record, July 21 to 25, and Aug. 14 to Sept. 30, and periods of undetermined backwater condition, Oct. 22 to Nov. 1, Apr. 27 to May 1, June 26 to Aug. 5, and Aug. 10 to Sept. 30, which are fair. Flow regulated by Moosehead Lake (station 01040500), Brassua and Flagstaff Lakes, First Roach, Indian, Moxie, and Wyman Ponds (Reservoirs in Kennebec River Basin).

AVERAGE DISCHARGE.--11 years, 8,907 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 232,000 ft³/s, Apr. 2, 1987, gage height, 39.31 ft; minimum daily, 1,160 ft³/s, July 7, 1988, caused by unusual regulation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 75,000 ft³/s, May 13, gage height, 21.24 ft; minimum daily, 3,080 ft³/s, July 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5300	e6050	12200	e5080	e4820	e4700	14200	e8400	8390	e6300	e3220	e4550
2	5730	11800	11600	e5100	e4820	e4550	12300	10800	6510	e5340	e3190	e4820
3	5470	29100	10900	e5120	e4820	e4500	11700	31800	15800	e3960	e3200	e5800
4	4790	17700	10300	e5140	e4820	e4350	12800	25100	14200	e4120	e3310	e5610
5	4500	14900	e8950	e5160	e4820	e4200	15900	19700	12500	e5080	e4050	e4870
6	4750	16200	e7800	e5180	e4820	e4050	28000	25200	11100	e4420	8960	e4410
7	4770	23000	e7000	e5200	e4820	e4000	e57400	48300	12100	e4520	7450	e4250
8	5540	23600	e6500	e5220	e4800	e3900	e57000	37100	14600	e4360	6050	e4480
9	5570	23400	e6150	e5240	e4750	e3800	36900	28200	16300	e4360	6450	e5400
10	5470	18300	e5900	e5250	e4700	e3700	29900	24600	19000	e4360	e4770	e5590
11	5710	16500	e5750	e5260	e4690	e3650	27300	21300	29100	e4480	e3970	e5660
12	6230	14100	e5650	e5280	e4670	e3600	23400	37200	21800	e4490	e4030	e5590
13	5890	12300	e5600	e5350	e4640	e3550	18300	68500	17200	e4250	e5700	e5870
14	6380	14700	e5500	e5400	e4600	e3600	18000	59100	15000	e3780	e5920	e5840
15	5560	14600	e5450	e5450	e4580	e3620	16200	48500	12500	e3880	e5890	e5750
16	4720	13200	e5400	e5450	e4540	e3650	15500	39600	14500	e3860	e5350	e5770
17	4900	12900	e5350	e5450	e4520	e3700	18400	33200	16400	e3890	e5340	e5860
18	4910	14300	e5250	e5450	e4520	e3700	20500	26700	15200	e3870	e5280	e5830
19	5600	13600	e5240	e5400	e4550	e3650	21500	22900	17900	e3810	e4870	e5990
20	6230	12300	e5230	e5350	e4650	e3600	20600	19500	15000	e3880	e4590	e6550
21	5510	14000	e5200	e5200	e4800	e3560	18700	16300	13400	e3790	e4710	e7660
22	e5470	15700	e5150	e5000	e4900	e3520	17200	15500	12000	e3730	e4510	e7400
23	e10000	13600	e5100	e4900	e5000	e3500	16100	19100	10600	e3650	e4490	e6650
24	e9440	12600	e5060	e4900	e5020	e3500	14100	15300	7940	e3520	e4620	e6950
25	e10800	11700	e5050	e4900	e5040	e3500	12500	14000	7460	e3290	e4530	e7060
26	e9570	10800	e5040	e4900	e5000	e3500	10300	13300	e6600	e3560	e4320	e6820
27	e7820	10500	e5040	e4900	e4980	e4300	e8500	13100	e6390	e3410	e4400	e7520
28	e6750	10500	e5030	e4880	e4900	e6000	e8300	14200	e6310	e3230	e4090	e7160
29	e6220	13300	e5020	e4860	---	10800	e7800	13600	e6040	e3080	e4280	e6150
30	e6110	13800	e5040	e4840	---	18200	e8000	11400	e5970	e3110	e4430	e5700
31	e5760	---	e5060	e4820	---	16400	---	10000	---	e3350	e4510	---
TOTAL	191470	449050	197510	159630	133590	154850	597300	791500	387810	124730	150480	177560
MEAN	6176	14970	6371	5149	4771	4995	19910	25530	12930	4024	4854	5919
MAX	10800	29100	12200	5450	5040	18200	57400	68500	29100	6300	8960	7660
MIN	4500	6050	5020	4820	4520	3500	7800	8400	5970	3080	3190	4250

CAL YR 1988 TOTAL 2589210 MEAN 7074 MAX 29100 MIN 1160
WTR YR 1989 TOTAL 3515480 MEAN 9631 MAX 68500 MIN 3080

e Estimated

01049265 KENNEBEC RIVER AT NORTH SIDNEY, ME--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1978 to current year.

pH: October 1978 to current year.

WATER TEMPERATURE: October 1978 to current year.

DISSOLVED OXYGEN: October 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1978. Continuous flow through system. Submersible pump located 50 ft. streamward from right bank.

REMARKS.--Beginning in water year 1985, monitor not operated during winter periods. Other interruptions in the record were due to malfunctions of the monitor or pumping system.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 174 microsiemens, July 13, 1979; minimum, 30 microsiemens, June 1, 2, 4, 1984, Sept. 23, 1986.

pH: Maximum, 8.1 units, July 22, 1989; minimum, 6.1 units, Mar. 26, July 27, 1979, June 29, 1981.

WATER TEMPERATURE: Maximum, 28.5°C, Aug. 6, 13, 1988; minimum, 0.0°C, on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.4 mg/L, Apr. 7, 1984; minimum, 4.0 mg/L, Sept. 23, 1986.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
11...	0900	5160	56	6.8	10.0	11.5	1.9	750	10.7	99	64	46
DEC												
14...	1400	E 5500	85	7.1	0.0	0.0	3.4	760	14.3	98	290	64
FEB												
06...	1000	E 4820	76	7.1	-8.0	0.0	2.6	760	14.5	99	88	60
APR												
06...	1100	26100	74	7.1	6.0	0.5	12	750	15.6	110	K 1300	460
JUN												
19...	1400	20100	55	7.3	27.5	16.0	2.6	760	9.9	101	170	94
SEP												
05...	1400	E 4870	59	7.0	20.5	19.5	0.6	760	8.9	98	72	K 10

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT												
11...	17	5.0	1.2	3.9	0.9	15	0	12	12	13	10	3.0
DEC												
14...	19	5.9	1.1	8.6	0.9	18	0	14	16	16	8.0	9.5
FEB												
06...	20	5.7	1.3	7.7	0.9	16	0	13	14	15	7.3	9.2
APR												
06...	23	6.7	1.4	4.6	1.2	17	0	14	15	15	6.6	7.2
JUN												
19...	19	5.8	1.2	3.4	0.6	17	0	14	15	15	5.0	4.2
SEP												
05...	18	5.5	1.1	4.4	0.6	16	0	13	14	13	6.0	5.2

E Estimated discharge.

K Results based on colony count outside the acceptable range (non-ideal colony count).

KENNEBEC RIVER BASIN

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01049265 KENNEBEC RIVER AT NORTH SIDNEY, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	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)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT 11...	<0.1	3.0	43	35	0.12	0.02	0.03	0.4	0.02	0.02	0.01
DEC 14...	0.1	4.4	66	49	0.24	0.05	0.06	0.4	0.03	0.03	<0.01
FEB 06...	0.1	4.3	52	46	0.17	0.07	0.09	0.6	0.02	0.01	<0.01
APR 06...	0.1	4.6	54	43	0.26	0.09	0.12	0.6	0.07	0.02	0.01
JUN 19...	0.1	4.3	44	34	0.14	0.03	0.04	0.4	0.02	0.02	0.01
SEP 05...	0.1	3.2	38	35	0.12	0.03	0.04	0.4	0.02	0.02	0.01

DATE	ALUMINUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHROMIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGANESE, DIS- SOLVED (UG/L AS MN)
OCT 11...	20	<1	3	<0.5	<1	<1	<3	2	42	<5	<4	8
DEC 14...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 06...	40	<1	6	<0.5	<1	<1	3	1	75	<5	<4	30
APR 06...	70	<1	4	<0.5	<1	2	<3	3	100	<5	<4	36
JUN 19...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 05...	30	<1	4	<0.5	<1	<1	<3	<1	60	<1	<4	8

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYBDENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELENIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRONTIUM, DIS- SOLVED (UG/L AS SR)	VANADIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 11...	<0.1	<10	<1	<1	1.0	25	<6	12	1	14	50
DEC 14...	--	--	--	--	--	--	--	--	3	45	89
FEB 06...	<0.1	<10	3	<1	1.0	27	<6	8	3	39	92
APR 06...	<0.1	<10	2	<1	<1.0	35	<6	20	64	4510	66
JUN 19...	--	--	--	--	--	--	--	--	10	543	75
SEP 05...	<0.1	<10	<1	<1	<1.0	27	<6	9	1	13	100

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN
		FEBRUARY			MARCH				APRIL					MAY	
1	---	---	---		---	---	---		---	---	---		---	---	---
2	---	---	---		---	---	---		---	---	---		---	---	---
3	---	---	---		---	---	---		---	---	---		---	---	---
4	---	---	---		---	---	---		---	---	---		---	---	---
5	---	---	---		---	---	---		---	---	---		---	---	---
6	---	---	---		---	---	---		---	---	---		---	---	---
7	---	---	---		---	---	---		---	---	---		---	---	---
8	---	---	---		---	---	---		---	---	---		---	---	---
9	---	---	---		---	---	---		---	---	---		---	---	---
10	---	---	---		---	---	---		---	---	---		---	---	---
11	---	---	---		---	---	---		---	---	---		---	---	---
12	---	---	---		---	---	---		---	---	---		---	---	---
13	---	---	---		---	---	---		---	---	---		---	---	---
14	---	---	---		---	---	---		---	---	---		---	---	---
15	---	---	---		---	---	---		---	---	---		---	---	---
16	---	---	---		---	---	---		---	---	---		---	---	---
17	---	---	---		---	---	---		---	---	---		---	---	---
18	---	---	---		---	---	---		---	---	---		---	---	---
19	---	---	---		---	---	---		---	---	---		---	---	---
20	---	---	---		---	---	---		---	---	---		---	---	---
21	---	---	---		---	---	---		---	---	---		---	---	---
22	---	---	---		---	---	---		---	---	---		---	---	---
23	---	---	---		---	---	---		---	---	---		---	---	---
24	---	---	---		---	---	---		---	---	---		---	---	---
25	---	---	---		---	---	---		---	---	---		49	46	47
													49	48	48
26	---	---	---		---	---	---		---	---	---		57	49	50
27	---	---	---		---	---	---		---	---	---		57	50	53
28	---	---	---		---	---	---		---	---	---		52	48	50
29	---	---	---		---	---	---		---	---	---		---	---	---
30	---	---	---		---	---	---		---	---	---		---	---	---
31	---	---	---		---	---	---		---	---	---		---	---	---
MONTH	---	---	---		---	---	---		---	---	---		57	46	50

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	61	54	56	68	60	65	97	90	93	82	70	73
2	72	58	61	70	59	64	102	94	98	82	68	72
3	66	57	63	71	68	70	98	89	94	70	65	68
4	62	52	55	72	67	70	98	89	94	70	63	66
5	63	55	59	74	66	69	102	92	98	65	59	62
6	68	53	58	80	75	77	91	64	83	68	60	65
7	68	58	62	80	69	75	67	60	64	69	62	65
8	66	59	62	80	69	75	72	64	67	75	68	71
9	60	57	59	78	74	77	79	68	72	77	71	75
10	63	56	59	77	73	75	79	71	74	76	71	74
11	58	49	52	81	74	77	79	72	75	76	68	71
12	49	47	48	81	73	77	80	71	75	74	67	70
13	51	47	49	76	71	74	81	74	78	71	65	67
14	52	50	51	75	71	73	89	79	84	72	65	68
15	55	51	52	80	75	77	81	72	76	73	56	64
16	61	55	59	78	72	75	82	73	78	69	59	65
17	58	55	56	78	72	75	83	73	78	68	59	64
18	58	55	56	84	74	80	86	74	80	72	64	67
19	56	51	53	75	73	74	86	77	82	75	66	70
20	54	51	52	77	72	75	84	76	80	85	68	76
21	55	51	53	75	72	74	82	73	77	80	71	76
22	56	52	54	75	70	73	80	74	77	76	65	70
23	57	54	55	78	72	75	93	75	78	69	61	64
24	65	57	58	80	73	77	97	73	82	66	62	64
25	66	57	61	81	75	77	79	73	75	68	62	65
26	66	62	64	---	---	---	80	72	77	70	64	67
27	67	62	65	---	---	---	75	67	71	69	62	65
28	67	64	65	---	---	---	76	70	73	65	59	62
29	65	60	62	---	---	---	79	72	76	66	60	63
30	67	61	64	---	---	---	77	71	74	68	63	66
31	---	---	---	---	---	---	78	71	74	---	---	---
MONTH	72	47	57	84	59	74	102	60	79	85	56	68
PERIOD	102	46	68									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

[illegible]

KENNEBEC RIVER BASIN

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01049265 KENNEBEC RIVER AT NORTH SIDNEY, ME--Continued

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.5	15.0	15.5	---	---	---	---	---	---	---	---	---
2	17.0	15.5	16.5	---	---	---	---	---	---	---	---	---
3	16.5	15.5	16.5	---	---	---	---	---	---	---	---	---
4	15.5	14.5	15.5	---	---	---	---	---	---	---	---	---
5	14.5	14.0	14.5	---	---	---	---	---	---	---	---	---
6	14.5	14.0	14.0	---	---	---	---	---	---	---	---	---
7	14.5	13.5	14.0	---	---	---	---	---	---	---	---	---
8	13.5	12.0	13.0	---	---	---	---	---	---	---	---	---
9	12.5	11.5	12.0	---	---	---	---	---	---	---	---	---
10	12.0	11.5	11.5	---	---	---	---	---	---	---	---	---
11	12.0	11.5	11.5	---	---	---	---	---	---	---	---	---
12	11.5	11.0	11.5	---	---	---	---	---	---	---	---	---
13	11.0	10.5	11.0	---	---	---	---	---	---	---	---	---
14	10.5	10.5	10.5	---	---	---	---	---	---	---	---	---
15	11.0	10.5	10.5	---	---	---	---	---	---	---	---	---
16	11.0	10.5	10.5	---	---	---	---	---	---	---	---	---
17	11.5	11.0	11.0	---	---	---	---	---	---	---	---	---
18	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
19	11.0	10.5	11.0	---	---	---	---	---	---	---	---	---
20	11.0	10.0	10.5	---	---	---	---	---	---	---	---	---
21	11.0	10.0	10.5	---	---	---	---	---	---	---	---	---
22	10.5	10.0	10.0	---	---	---	---	---	---	---	---	---
23	10.0	9.5	10.0	---	---	---	---	---	---	---	---	---
24	9.5	9.0	9.5	---	---	---	---	---	---	---	---	---
25	9.5	9.0	9.0	---	---	---	---	---	---	---	---	---
26	9.0	8.5	8.5	---	---	---	---	---	---	---	---	---
27	8.5	7.5	8.0	---	---	---	---	---	---	---	---	---
28	9.0	8.5	8.5	---	---	---	---	---	---	---	---	---
29	9.0	8.5	8.5	---	---	---	---	---	---	---	---	---
30	8.5	7.5	8.0	---	---	---	---	---	---	---	---	---
31	7.5	7.0	7.5	---	---	---	---	---	---	---	---	---
MONTH	17.0	7.0	11.5	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	14.0	14.0	14.0
26	---	---	---	---	---	---	---	---	---	15.5	14.0	15.0
27	---	---	---	---	---	---	---	---	---	16.0	15.0	15.5
28	---	---	---	---	---	---	---	---	---	15.5	14.5	15.0
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	16.0	14.0	15.0

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.5	15.0	15.5	22.0	21.0	21.5	25.5	23.0	24.5	20.5	19.5	20.0
2	17.0	15.5	16.5	22.0	20.5	21.0	25.0	22.5	24.0	20.5	19.5	20.5
3	16.5	15.5	16.0	23.0	20.5	21.5	25.5	22.5	24.0	21.0	19.5	20.5
4	17.5	16.0	16.5	22.0	20.0	21.0	25.0	23.0	24.0	21.0	19.5	20.0
5	18.0	16.5	17.5	21.0	19.5	20.5	24.5	23.0	23.5	20.0	19.0	19.5
6	17.5	16.5	17.0	22.0	20.5	21.0	24.0	23.0	23.0	20.5	18.5	19.5
7	17.5	16.5	17.0	23.0	21.5	22.0	24.5	23.0	23.5	21.0	18.5	19.5
8	17.0	16.5	17.0	24.0	21.5	22.5	23.5	22.0	23.0	21.0	19.0	20.0
9	17.0	16.0	16.5	24.5	22.0	23.0	23.0	21.5	22.0	21.0	19.0	20.0
10	16.5	15.0	16.0	22.5	21.5	22.0	24.0	22.0	23.0	21.5	20.0	20.5
11	15.0	14.5	15.0	22.5	21.0	22.0	24.0	22.0	23.0	21.5	20.5	21.0
12	15.0	14.0	14.5	23.0	21.0	22.0	23.0	21.5	22.5	21.5	20.5	21.0
13	16.0	15.0	15.5	24.0	21.5	22.5	23.0	22.0	22.5	22.0	20.0	21.0
14	17.5	15.5	16.5	22.5	21.5	22.5	24.0	22.0	23.0	21.0	20.0	20.5
15	17.0	16.5	16.5	23.5	21.5	22.5	24.5	22.5	23.5	20.5	19.5	20.0
16	16.5	16.0	16.0	23.5	21.5	22.5	24.0	22.5	23.5	21.0	19.5	20.0
17	16.0	16.0	16.0	22.0	21.0	21.5	24.5	22.5	23.5	19.5	18.5	19.0
18	16.0	15.5	16.5	23.0	20.5	22.0	24.5	22.0	23.0	20.0	18.5	19.0
19	16.5	15.0	15.5	23.5	21.0	22.5	24.5	22.0	23.0	19.5	18.5	19.0
20	18.0	16.0	17.0	23.0	22.0	22.5	23.5	22.0	22.5	19.0	18.0	18.5
21	19.5	17.0	18.0	24.0	21.5	22.5	24.5	22.0	23.0	20.0	18.0	19.0
22	20.5	19.0	19.5	25.0	22.0	23.0	24.5	23.0	23.5	20.0	18.5	19.0
23	20.5	20.0	20.5	25.5	22.5	23.5	23.5	22.5	23.0	20.5	19.5	20.0
24	21.0	20.0	20.5	25.0	22.5	24.0	23.5	21.5	22.5	19.5	18.0	19.0
25	21.5	20.5	21.0	25.5	23.0	24.0	22.5	21.0	21.5	18.5	17.5	18.0
26	22.5	20.5	21.5	---	---	---	22.0	20.0	21.0	18.5	17.0	17.5
27	23.0	21.5	22.0	---	---	---	22.0	19.5	20.5	17.0	16.0	17.0
28	22.5	22.0	22.5	---	---	---	22.0	20.0	21.0	16.5	15.0	15.5
29	22.5	21.5	22.0	---	---	---	21.5	20.0	20.5	15.5	14.5	15.0
30	22.5	21.0	22.0	---	---	---	21.5	20.0	20.5	16.0	14.5	15.0
31	---	---	---	---	---	---	21.5	20.0	20.5	---	---	---
MONTH	23.0	14.0	18.0	25.5	19.5	22.0	25.5	19.5	22.5	22.0	14.5	19.0
PERIOD	25.5	7.0	18.5									

[illegible]

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 downstream from bridge on Main Street, at Winthrop.

DRAINAGE AREA.--32.7 mi².

PERIOD OF RECORD.--October 1977 to current year.

REVISED RECORDS.--ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 176.42 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: May 31 to June 29 and July 6 to Sept. 7. Records excellent except for periods of no gage-height record, May 31 to June 29, erroneous gage-height record July 6 to Sept. 7, and doubtful gage-height record Sept. 8-30, which are poor. Some regulation at low flow by Maranacook Lake Outlet dam 0.3 mi upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--12 years, 54.5 ft³/s, 22.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,330 ft³/s, Apr. 2, 1987, gage height, 6.16 ft, minimum, 1.0 ft³/s, Dec. 19, 1978, gage height, 0.99 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 547 ft³/s, May 13, gage height, 4.52 ft, minimum, 4.7 ft³/s, Oct. 21, gage height, 1.35 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	8.4	94	25	16	21	119	109	e115	52	e19	e14
2	9.8	10	88	25	15	20	114	120	e103	51	e19	e15
3	9.4	12	86	24	15	20	111	149	e98	49	e18	e14
4	8.4	15	82	22	16	20	121	151	e98	47	e18	e13
5	6.8	19	76	22	16	20	145	146	e100	45	e18	e12
6	6.9	31	71	21	15	19	228	182	e103	e43	e19	e12
7	7.5	39	67	21	15	19	312	229	e124	e40	e20	e12
8	7.3	46	64	21	15	18	331	221	e142	e38	e20	12
9	6.5	52	60	21	15	18	321	208	e174	e37	e20	12
10	6.0	52	57	19	14	18	301	194	e197	e35	e21	12
11	6.2	52	53	19	14	18	284	189	e201	e33	e25	12
12	6.2	52	48	19	14	18	264	355	e202	e32	e27	11
13	5.9	53	45	19	14	16	242	532	e182	e30	e28	10
14	5.7	62	43	19	15	16	221	503	e160	e29	e28	10
15	6.6	65	43	20	15	18	206	441	e152	e28	e27	9.6
16	6.7	63	41	19	15	19	206	379	e198	e27	e25	9.9
17	6.1	65	39	19	15	22	221	337	e192	e26	e23	10
18	5.9	69	38	18	15	24	221	299	e170	e25	e22	9.1
19	5.3	69	35	19	15	26	227	268	e163	e25	e21	9.0
20	5.1	70	33	19	14	25	247	239	e140	e24	e19	9.8
21	4.8	89	31	20	16	27	221	217	e127	e23	e18	9.6
22	6.6	98	30	19	20	27	193	199	e116	e22	e17	9.7
23	5.8	97	29	18	21	27	162	185	e104	e21	e16	9.7
24	6.5	94	29	17	22	27	145	171	e93	e20	e16	9.3
25	7.3	89	30	17	23	35	136	179	e83	e21	e15	8.0
26	8.1	87	29	17	23	40	131	193	e76	e22	e14	8.6
27	8.7	82	26	18	22	45	148	195	e70	e23	e14	7.7
28	9.0	83	28	17	21	56	134	188	e64	e22	e14	7.5
29	9.0	95	27	18	---	88	124	160	e60	e22	e13	7.8
30	8.5	96	26	16	---	116	117	142	56	e21	e13	8.3
31	7.9	---	25	16	---	122	---	e125	---	e20	e13	---
TOTAL	220.2	1814.4	1473	604	466	1005	5953	7205	3863	953	600	314.6
MEAN	7.10	60.5	47.5	19.5	16.6	32.4	198	232	129	30.7	19.4	10.5
MAX	9.8	98	94	25	23	122	331	532	202	52	28	15
MIN	4.8	8.4	25	16	14	16	111	109	56	20	13	7.5
CFSM	.22	1.85	1.45	.60	.51	.99	6.07	7.11	3.94	.94	.59	.32
IN.	.25	2.06	1.68	.69	.53	1.14	6.77	8.20	4.39	1.08	.68	.36

CAL YR 1988 TOTAL 14451.5 MEAN 39.5 MAX 124 MIN 4.8 CFSM 1.21 IN. 16.44
WTR YR 1989 TOTAL 24471.2 MEAN 67.0 MAX 532 MIN 4.8 CFSM 2.05 IN. 27.84

e Estimated

101

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 168.58 ft May 15; minimum daily elevation, 163.94 ft Feb. 6.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165.78	165.11	165.88	165.28	164.02	164.37	165.82	167.34	167.51	167.30	166.64	166.44
2	165.70	165.44	165.87	165.25	163.99	164.38	165.89	167.43	167.49	167.29	166.62	166.46
3	165.62	165.66	165.84	165.21	164.00	164.38	165.98	167.55	167.47	167.27	166.60	166.43
4	165.53	165.68	165.81	165.17	163.99	164.39	166.09	167.43	167.45	167.26	166.60	166.41
5	165.46	165.67	165.76	165.12	163.96	164.41	166.22	167.29	167.44	167.24	166.60	166.40
6	165.41	165.75	165.71	165.06	163.94	164.43	166.64	167.38	167.41	167.22	166.61	166.38
7	165.32	165.77	165.67	165.01	163.95	164.43	167.15	167.53	167.45	167.21	166.60	166.37
8	165.23	165.77	165.63	164.98	163.96	164.44	167.53	167.51	167.48	167.19	166.64	166.36
9	165.18	165.76	165.59	164.95	163.97	164.44	167.82	167.43	167.55	167.17	166.63	166.35
10	165.10	165.76	165.54	164.90	163.97	164.45	168.07	167.33	167.66	167.15	166.63	166.33
11	165.06	165.74	165.48	164.84	163.97	164.45	168.22	167.26	167.85	167.13	166.62	166.31
12	164.99	165.71	165.43	164.79	163.98	164.45	168.23	167.74	167.85	167.10	166.62	166.29
13	164.92	165.70	165.37	164.75	163.98	164.46	168.11	168.33	167.76	167.07	166.68	166.28
14	164.90	165.77	165.31	164.70	164.02	164.47	167.96	168.52	167.66	167.06	166.70	166.27
15	164.89	165.78	165.27	164.68	164.04	164.50	167.80	168.58	167.55	167.03	166.69	166.29
16	164.89	165.77	165.24	164.64	164.06	164.58	167.71	168.52	167.49	167.01	166.69	166.30
17	164.90	165.78	165.24	164.60	164.07	164.64	167.65	168.34	167.47	166.98	166.68	166.29
18	164.92	165.80	165.25	164.55	164.07	164.68	167.55	168.13	167.51	166.96	166.66	166.28
19	164.93	165.79	165.26	164.51	164.08	164.71	167.46	167.97	167.55	166.93	166.65	166.27
20	164.93	165.79	165.27	164.47	164.08	164.73	167.34	167.92	167.55	166.89	166.64	166.32
21	164.92	165.93	165.28	164.44	164.12	164.78	167.23	167.87	167.54	166.87	166.64	166.34
22	164.95	165.98	165.29	164.37	164.20	164.80	167.26	167.80	167.52	166.84	166.63	166.35
23	165.05	165.97	165.30	164.32	164.26	164.82	167.30	167.71	167.48	166.82	166.61	166.38
24	165.07	165.94	165.32	164.27	164.28	164.85	167.32	167.62	167.43	166.79	166.59	166.37
25	165.13	165.91	165.36	164.22	164.31	164.97	167.33	167.52	167.37	166.78	166.56	166.36
26	165.14	165.87	165.37	164.18	164.33	165.05	167.35	167.45	167.32	166.76	166.52	166.38
27	165.14	165.84	165.37	164.14	164.35	165.14	167.36	167.54	167.31	166.76	166.50	166.40
28	165.15	165.84	165.39	164.11	164.36	165.26	167.36	167.58	167.32	166.75	166.48	166.40
29	165.15	165.90	165.41	164.09	---	165.43	167.36	167.58	167.32	166.71	166.47	166.39
30	165.14	165.90	165.37	164.07	---	165.60	167.35	167.56	167.31	166.69	166.45	166.37
31	165.12	---	165.33	164.04	---	165.73	---	167.54	---	166.66	166.45	---
MAX	165.78	165.98	165.88	165.28	164.36	165.73	168.23	168.58	167.85	167.30	166.70	166.46
MIN	164.89	165.11	165.24	164.04	163.94	164.37	165.82	167.26	167.31	166.66	166.45	166.27
CAL YR 1988	MAX 167.53		MIN 164.14									
WTR YR 1989	MAX 168.58		MIN 163.94									

KENNEBEC RIVER BASIN

01049500 COBBOSSECONTEE STREAM AT GARDINER, ME

LOCATION.--Lat 44°13'42", long 69°46'42", Kennebec County, Hydrologic Unit 01030003, on left bank 300 ft upstream from Winter Street bridge in Gardiner, 0.4 mi upstream from mouth, and 0.8 mi downstream from Gardiner Water District dam.

DRAINAGE AREA.--217 mi².

PERIOD OF RECORD.--Discharge: June 1890 to September 1964, October 1976 to current year.

Chemical analyses: Water years 1954-56.

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 above National Geodetic Vertical Datum of 1929. June 16, 1890, to Sept. 30, 1964, nonrecording gage at site 0.8 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records good except for period of doubtful gage-height record, July 1 to Sept. 1, which is fair, and period of doubtful gage height record, Nov. 10 to Jan. 9, which is poor. Flow regulated by Cobbosseecontee Lake (station 01049400) and several other lakes upstream.

COOPERATION.--Prior to 1961 records furnished by S.D. Warren Co. 1961 to 1964 records furnished by Gardiner Water District.

AVERAGE DISCHARGE.--87 years (water years 1891-64, 1977 to current year), 345 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,020 ft³/s, Mar. 21, 1936; minimum, leakage only when all gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,890 ft³/s, May 13, gage height, 8.63 ft; minimum daily, 8.6 ft³/s, Sept. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	130	316	61	241	39	655	439	705	128	26	20
2	235	631	96	71	166	40	553	643	597	126	31	12
3	233	977	289	96	137	41	315	985	532	125	45	11
4	241	545	201	53	137	42	259	1410	523	66	53	12
5	215	746	87	54	137	43	516	1420	521	42	56	12
6	135	701	77	53	135	43	936	1540	547	46	89	12
7	135	679	217	50	137	43	1650	2110	718	49	75	13
8	154	522	270	103	137	43	1270	1980	762	52	66	14
9	138	455	83	158	137	45	977	1830	864	55	64	14
10	141	454	68	233	137	47	1140	1680	968	81	52	14
11	211	456	56	233	137	48	300	1580	1100	119	44	33
12	289	347	64	203	135	48	633	1970	1090	133	46	60
13	251	326	75	239	135	47	566	2450	1120	131	47	59
14	280	466	162	239	135	112	793	2760	1070	130	78	57
15	263	473	262	244	135	154	525	2490	997	130	94	72
16	260	418	69	244	134	226	861	2210	1010	128	94	85
17	255	643	72	244	131	255	1300	2030	1020	127	94	81
18	250	566	76	244	130	254	1500	1930	891	126	94	39
19	242	303	88	244	59	238	1520	1780	455	126	94	9.5
20	180	323	101	244	28	237	885	1370	270	126	94	9.7
21	127	553	194	189	37	253	927	884	449	126	94	8.6
22	135	429	121	230	42	244	573	685	478	124	85	12
23	126	292	62	244	39	230	321	680	481	119	82	17
24	126	193	93	249	40	242	265	689	409	119	82	119
25	126	296	221	247	36	252	339	781	346	97	76	158
26	125	334	97	244	36	257	423	635	351	46	66	148
27	128	304	68	244	38	259	469	364	226	25	66	141
28	202	529	193	244	39	346	469	412	225	24	45	91
29	230	436	89	244	---	683	442	424	223	24	28	17
30	226	382	64	244	---	769	458	431	188	25	28	16
31	179	---	87	240	---	614	---	665	---	26	29	---
TOTAL	6073	13909	4018	5929	2967	6194	21840	41257	19136	2801	2017	1366.8
MEAN	196	464	130	191	106	200	728	1331	638	90.4	65.1	45.6
MAX	289	977	316	249	241	769	1650	2760	1120	133	94	158
MIN	125	130	56	50	28	39	259	364	188	24	26	8.6

CAL YR 1988 TOTAL 75195 MEAN 205 MAX 1390 MIN 18
WTR YR 1989 TOTAL 127507.8 MEAN 349 MAX 2760 MIN 8.6

KENNEBEC RIVER BASIN

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01049550 TOGUS STREAM AT TOGUS, MAINE

LOCATION.--Lat 44°15'57", long 69°41'55", Kennebec County, Hydrologic Unit 01030003, on right bank 100 ft downstream from mouth of Chase Meadow Stream and 600 ft downstream from State Route 226 bridge, 1.5 mi northeast of Chelsea.

DRAINAGE AREA.--23.7 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 131.28 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1982, at datum 0.28 ft lower.

REMARKS.--Estimated daily discharges: Jan. 5-7, Feb. 5, 6, 10, 11, 17-19, Mar. 7, May 6, 7, 12-15, June 8-12, and July 26 to Sept. 30. Records good except for periods of ice effect, Jan. 5-7, Feb. 5, 6, 10, 11, 17-19, and Mar. 7, and the periods of doubtful gage-height record, May 6, 7, 12-15, and June 8-12, which are fair and the period of unknown stage-discharge relationship, July 26 to Sept. 30, which is poor. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--8 years, 41.1 ft³/s, 23.6 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1010 ft³/s, Apr. 1, 1987, gage height, 7.50 ft; minimum discharge 0.79 ft³/s, Sept. 30, 1984, gage height, 2.60 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base discharge of 220 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 6	1800	*452	*5.61	May 13	unknown	a340	a5.11
May 6	unknown	a392	a5.35				

a Estimated

Minimum daily discharge, 2.3 ft³/s, Sept. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	5.2	60	16	9.9	16	98	18	47	25	e4.6	e4.0
2	4.2	38	56	15	9.4	15	98	75	44	24	e4.5	e4.7
3	4.3	74	52	15	9.9	15	110	129	43	22	e4.5	e4.8
4	4.3	50	50	15	12	13	141	91	43	19	e4.8	e4.3
5	4.5	43	46	e15	e12	13	164	76	43	18	e5.2	e3.9
6	4.5	43	42	e15	e9.8	14	383	e252	49	17	e5.1	e3.7
7	4.1	45	37	e15	9.0	e12	400	e248	60	16	e5.2	e3.6
8	4.0	42	36	15	9.0	11	304	180	e66	16	e5.4	e3.6
9	4.2	38	33	13	8.8	11	255	150	e72	13	e5.1	e3.6
10	3.8	33	31	11	e9.0	9.8	220	128	e101	11	e5.0	e3.6
11	3.5	35	29	11	e8.3	9.4	192	142	e117	11	e4.9	e3.7
12	3.6	31	28	9.8	7.4	9.0	168	e242	e88	9.4	e5.2	e3.7
13	3.4	32	26	9.9	6.5	8.9	147	e330	73	8.1	e6.2	e3.7
14	3.1	46	24	9.4	9.8	11	131	e277	66	8.2	e6.5	e3.9
15	3.2	41	24	13	10	30	118	e208	62	7.6	e7.0	e4.5
16	3.1	37	23	12	11	34	138	152	83	6.9	e6.4	e5.2
17	3.2	44	22	12	e9.8	30	149	127	80	7.0	e6.0	e3.7
18	3.1	51	21	11	e9.8	28	137	111	75	6.7	e6.0	e3.8
19	3.8	46	19	12	e9.0	26	132	96	73	6.3	e5.8	e3.7
20	3.5	48	18	12	8.9	26	117	85	66	6.4	e5.4	e5.6
21	3.3	103	17	13	14	27	103	77	60	5.8	e5.0	e6.2
22	3.6	80	17	12	23	27	94	70	55	5.5	e4.9	e4.3
23	7.2	68	16	11	23	27	84	65	51	5.3	e4.8	e4.5
24	4.8	63	16	10	21	27	75	60	47	5.1	e4.6	e3.5
25	5.4	55	18	9.5	19	41	68	58	44	4.9	e4.4	e2.3
26	5.2	51	17	10	18	57	62	58	39	e4.9	e4.2	e5.1
27	4.9	48	17	10	18	71	58	80	34	e4.8	e4.0	e6.2
28	4.6	61	19	9.7	17	85	54	71	32	e4.8	e3.9	e3.5
29	4.7	74	19	9.1	---	148	50	60	30	e4.8	e3.9	e3.0
30	5.5	65	18	9.0	---	134	36	53	27	e4.8	e4.0	e2.8
31	5.4	---	17	8.5	---	107	---	51	---	e4.7	e4.0	---
TOTAL	130.4	1490.2	868	368.9	342.3	1093.1	4286	3820	1770	314.0	156.5	122.7
MEAN	4.21	49.7	28.0	11.9	12.2	35.3	143	123	59.0	10.1	5.05	4.09
MAX	7.2	103	60	16	23	148	400	330	117	25	7.0	6.2
MIN	3.1	5.2	16	8.5	6.5	8.9	36	18	27	4.7	3.9	2.3
CFSM	.18	2.10	1.18	.50	.52	1.49	6.03	5.20	2.49	.43	.21	.17
IN.	.20	2.34	1.36	.58	.54	1.72	6.73	6.00	2.78	.49	.25	.19

CAL YR 1988 TOTAL 9547.6 MEAN 26.1 MAX 171 MIN 3.1 CFSM 1.10 IN. 14.99
WTR YR 1989 TOTAL 14762.1 MEAN 40.4 MAX 400 MIN 2.3 CFSM 1.71 IN. 23.17

e Estimated

KENNEBEC RIVER BASIN

Reservoirs in Kennebec River Basin

- 01038500 BRASSUA LAKE on Moose River, 4 mi southwest of Rockwood, Maine, completed in 1928 for power, has usable capacity of 8,560,000,000 ft³ between elevations 1,043.0 ft and 1,073.0 ft. 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 between gage heights 1.0 ft and 8.0 ft. Gage-height record furnished by Kennebec Water Power Co.
- 01040500 MOOSEHEAD LAKE on Kennebec River (see p. 84).
- 01041500 INDIAN POND on Kennebec River, in T. 1, R. 6, Maine, 13 mi downstream from east outlet of Moosehead Lake, completed in 1954 for power, has usable capacity of 690,000,000 ft³ between elevations 950.0 ft and 955.0 ft. Elevation record furnished by Central Maine Power Co.
- 01042000 MOXIE POND on Moxie Stream, 4.8 mi east of The Forks, Maine, used for power, has usable capacity of 640,000,000 ft³ between gage heights 6.0 ft and 14.0 ft. Gage-height record furnished by Kennebec Water Power Co.
- 01043000 FLAGSTAFF LAKE on Dead River, in T. 3, R. 4, Maine, 0.8 mi upstream from Black Brook, completed in 1950 for power, has usable capacity of 12,050,000,000 ft³ between elevations 1,110.0 ft and 1,146.0 ft. Elevation record furnished by Kennebec Water Power Co.
- 01045500 WYMAN POND on Kennebec River, 1.5 mi upstream from Bingham, Maine, completed in 1930 for power, has usable capacity of 2,943,000,000 ft³ between elevations 462.0 ft and 485.0 ft. Elevation record furnished by Central Maine Power Co.

MONTHEND USABLE CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

	BRASSUA	FIRST ROACH	INDIAN	MOXIE	FLAGSTAFF	WYMAN
DATE	LAKE	POND	POND	POND	LAKE	POND
Sept. 30, 1988.....	4,166	557	639	162	9,827	2,826
Oct. 31.....	50	144	810	54	10,843	2,874
Nov. 30.....	503	170	695	409	11,493	2,898
Dec. 31.....	0	13	523	290	10,631	2,873
Jan. 31, 1989.....	0	0	667	60	7,792	2,846
Feb. 28.....	0	0	603	0	5,325	2,890
Mar. 31.....	135	92	576	0	4,811	2,771
Apr. 30.....	7,022	705	610	577	10,393	2,933
May 31.....	8,877	938	719	604	11,891	2,780
June 30.....	8,714	856	738	604	11,107	2,686
July 31.....	8,180	746	820	514	8,170	2,891
Aug. 31.....	8,560	760	675	586	7,949	2,929
Sept. 30.....	8,472	490	733	604	8,075	2,854

NOTE.--All values observed 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 upstream from mouth and 1.6 mi north of Wentworth Location.

DRAINAGE AREA.--152 mi².

PERIOD OF RECORD.--Discharges: July 1941 to current year.

Chemical analyses: Water year 1954.

REVISED RECORDS.--WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,259.48 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 1 to Mar. 29, July 11-19 and Aug. 8 to Sept. 14. Records good except for period of ice effect, Dec. 1 to Mar. 29 and periods of no gage-height record, Jan. 6-20, July 11-19 and Aug. 8 to Sept. 14, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--48 years, 348 ft³/s, 31.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,630 ft³/s, June 16, 1943, gage height, 10.66 ft, from rating curve extended above 4,300 ft³/s; maximum gage height, 12.23 ft, Feb. 21, 1981, (ice jam); minimum discharge, 6.8 ft³/s, Aug. 27, 28, 1949, Sept. 1, 1952, gage height, 0.81 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 7	0300	4,060	7.75	May 6	1700	4,130	7.80
May 2	1800	*5,520	*8.75	May 12	1600	3,740	7.50

Minimum discharge, 20 ft³/s, July 26, 27, gage height, 1.15 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	165	e378	e97	e71	e80	698	1360	345	129	33	e58
2	92	935	e283	e95	e92	e77	526	3690	342	120	28	e112
3	117	1030	e228	e93	e100	e73	469	4020	761	123	25	e286
4	125	516	e186	e93	e89	e70	463	2460	495	102	44	e112
5	109	479	e152	e92	e80	e67	848	1870	372	90	341	e78
6	153	1200	e128	e91	e73	e64	2480	3250	335	84	390	e59
7	149	927	e115	e90	e71	e61	3640	3390	554	74	241	e50
8	130	745	e104	e94	e68	e59	1830	1780	385	69	e141	e45
9	129	587	e99	e107	e66	e56	1010	1060	325	62	e112	e40
10	141	534	e93	e103	e63	e54	816	804	506	55	e70	e37
11	295	501	e88	e100	e61	e52	620	970	1040	e108	e51	e34
12	508	402	e84	e98	e59	e51	502	2860	1030	e77	e260	e32
13	291	337	e82	e110	e57	e51	451	2690	569	e56	e387	e32
14	212	380	e80	e105	e56	e50	432	1460	416	e49	e280	e70
15	205	444	e78	e102	e55	e62	418	1080	321	e47	e215	656
16	220	374	e77	e110	e53	e373	520	823	504	e41	e100	393
17	189	711	e76	e104	e53	e880	661	643	819	e37	e178	498
18	231	985	e76	e100	e53	e375	1470	525	527	e41	e100	471
19	671	526	e75	e97	e53	e160	1420	443	495	e47	e72	224
20	369	411	e75	e92	e53	e130	1220	382	411	42	e56	483
21	263	763	e82	e87	e55	e115	909	334	300	28	e57	715
22	237	550	e90	e84	e83	e104	961	362	244	26	e93	343
23	311	405	e86	e81	e214	e96	657	346	200	25	e116	269
24	288	330	e84	e77	e565	e91	534	307	176	23	e86	269
25	276	227	e94	e75	e196	e86	455	322	157	22	e72	212
26	234	266	e92	e72	e115	e103	483	284	136	21	e53	180
27	202	311	e91	e70	e97	e115	623	559	133	21	e43	194
28	189	653	e91	e69	e88	e281	602	425	215	40	e38	158
29	244	814	e105	e68	---	e1960	500	327	290	63	e36	137
30	209	484	e102	e67	---	2470	897	265	179	43	e34	132
31	179	---	e100	e68	---	1160	---	341	---	35	e80	---
TOTAL	7064	16992	3574	2791	2739	9426	27115	39432	12582	1800	3832	6379
MEAN	228	566	115	90.0	97.8	304	904	1272	419	58.1	124	213
MAX	671	1200	378	110	565	2470	3640	4020	1040	129	390	715
MIN	92	165	75	67	53	50	418	265	133	21	25	32
CFSM	1.50	3.73	.76	.59	.64	2.00	5.95	8.37	2.76	.38	.81	1.40
IN.	1.73	4.16	.87	.68	.67	2.31	6.64	9.65	3.08	.44	.94	1.56

CAL YR 1988 TOTAL 123450 MEAN 337 MAX 3470 MIN 60 CFSM 2.22 IN. 30.21
WTR YR 1989 TOTAL 133726 MEAN 366 MAX 4020 MIN 21 CFSM 2.41 IN. 32.73

e Estimated

ANDROSCOGGIN RIVER BASIN

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 downstream from Errol Dam, 0.4 mi northeast of Errol, and 0.6 mi upstream from Clear Stream.

DRAINAGE AREA.--1,046 mi².

PERIOD OF RECORD.--Discharge: January 1905 to current year. Prior to 1922, published as "at Errol Dam."
Chemical analyses: Water years 1955, 1958.

REVISED RECORDS.--WDR ME-81-1: Drainage area.

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

REMARKS.--Estimated daily discharges: May 19 to July 20. Records excellent including period of no gage-height record, May 19 to July 20. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Aziscohos, and Umbagog Lakes (Reservoirs in Androscoggin River Basin), combined usable capacity, 28,100,000,000 ft³, with final regulation at Errol Dam, 0.4 mi upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--84 years, 1,899 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s, May 22, 1969, gage height 9.40 ft; minimum daily, leakage only at various times when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,550 ft³/s, May 17, gage-height, 7.05 ft; minimum daily, 1040 ft³/s, Aug. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1780	1710	1720	2270	2020	1520	2350	1280	e1840	e1600	1530	1670
2	1820	1290	1720	2270	2020	1490	2350	2000	e1390	e1600	1530	1670
3	1830	1370	1720	2270	2020	1480	1970	2850	e1260	e1600	1530	1680
4	1830	1550	1720	2270	2020	1480	1820	4440	e1940	e1600	1490	1680
5	1830	1550	1450	2270	2020	1480	1650	5550	e2530	e1600	1230	1680
6	1840	1550	1840	2260	2030	1480	2180	5700	e3260	e1600	1040	1670
7	1830	2010	1840	2270	2030	1480	2630	5610	e3620	e1620	1110	1670
8	1840	2320	1780	2270	2030	1480	2840	5680	e4300	e1630	1110	1670
9	1800	2310	1820	2250	2030	1480	3420	3610	e4630	e1630	1110	1670
10	1810	1900	1940	2260	2040	1480	2880	3210	e4340	e1630	1160	1670
11	1810	1700	2020	2260	2030	1490	2180	3700	e3960	e1630	1280	1640
12	1740	1700	2100	2270	2030	1490	1980	4400	e3960	e1630	1280	1620
13	1730	1710	2150	2280	2030	1490	1660	6200	e3430	e1670	1280	1620
14	1730	1670	2090	2280	1880	1500	1500	6910	e2850	e1680	1440	1580
15	1710	1720	2000	2280	1800	1510	1510	8380	e2410	e1680	1720	1500
16	1750	1720	2160	2280	1800	1290	1500	9460	e2500	e1680	1770	1470
17	1730	1730	2210	2280	1800	1170	1510	9310	e2720	e1680	1810	1470
18	1730	1730	2210	2250	1790	1200	1510	7780	e2720	e1540	1830	1560
19	1750	1730	2210	2220	1790	1210	1520	e6750	e2720	e1490	1820	1770
20	1740	1730	2210	2080	1820	1240	1930	e5040	e2720	e1560	1820	1920
21	1730	1730	2040	1700	1840	1260	2290	e4280	e2430	1540	1820	1990
22	1730	1720	2140	1700	1710	1300	2400	e3230	e2160	1520	1820	2240
23	1730	1730	2240	1690	1630	1320	2400	e2610	e1890	1530	1810	2010
24	1730	1730	2250	1700	1640	1320	2390	e2610	e1790	1530	1810	1680
25	1650	1730	2250	1700	1640	1320	1790	e3020	e1790	1530	1810	1870
26	1610	1730	2260	1700	1600	1310	1510	e2610	e1590	1530	1810	2190
27	1600	1760	2260	1700	1590	1190	1510	e2610	e1680	1510	1820	2190
28	1630	1730	2150	1700	1590	1130	1510	e2610	e1550	1520	1820	2290
29	1640	1650	2270	1700	---	1100	1510	e2610	e1480	1530	1830	2340
30	1660	1720	2260	2000	---	1580	1510	e2370	e1510	1530	1690	2350
31	1680	---	2270	2070	---	2180	---	e2240	---	1530	1680	---
TOTAL	54020	51930	63300	64500	52270	43450	59710	138660	76970	49150	48610	54030
MEAN	1743	1731	2042	2081	1867	1402	1990	4473	2566	1585	1568	1801
MAX	1840	2320	2270	2280	2040	2180	3420	9460	4630	1680	1830	2350
MIN	1600	1290	1450	1690	1590	1100	1500	1280	1260	1490	1040	1470

CAL YR 1988 TOTAL 574295 MEAN 1569 MAX 2840 MIN 794
WTR YR 1989 TOTAL 756600 MEAN 2073 MAX 9460 MIN 1040

e Estimated

ANDROSCOGGIN RIVER BASIN

107

01054000 ANDROSCOGGIN RIVER NEAR GORHAM, NH

LOCATION.--Lat 44°26'30", long 71°11'16", Coos County, Hydrologic Unit 01040001, on right bank at Pulsifer Rips, 2.2 mi downstream from Dead River, and 4.0 mi upstream from Gorham.

DRAINAGE AREA.--1,361 mi².

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

REVISED RECORDS.--WDR ME-81-1: Drainage area.

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

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Azischohos, and Umbagog Lakes combined usable capacity, 28,100,000,000 ft³, with final regulation at Errol Dam 35 mi upstream. Diurnal fluctuations caused by power plant 0.8 mi upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--76 years, 2,460 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,600 ft³/s, May 12, gage height, 8.00 ft; minimum daily, 1,380 ft³/s, Aug. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1830	1930	2390	2370	2190	1750	3330	2710	2680	1640	1670	1790
2	1830	3630	2240	2380	2190	1650	3390	4590	2370	1820	1510	2030
3	2020	3540	2170	2420	2170	1640	3140	8550	3260	1760	1610	1980
4	2000	3010	2180	2360	2130	1640	2720	6630	2610	1760	1630	1880
5	2020	2540	2010	2320	1930	1650	3430	7310	3240	1710	2790	1850
6	1950	3160	1740	2290	2300	1640	6580	8810	3530	1740	2980	1810
7	2010	3240	2170	2310	2170	1630	9260	9300	4710	1670	1950	1810
8	2020	3360	2200	2500	2140	1640	6320	8180	4690	1770	1700	1810
9	1980	3220	2050	2470	2110	1610	5120	6310	5420	1770	1560	1800
10	2050	2970	2090	2430	2080	1620	4730	4090	6050	1780	1380	1790
11	2090	2500	2100	2420	2140	1620	3780	4770	5890	1930	1400	1800
12	2160	2460	2140	2400	2130	1640	3020	9570	5320	1680	1650	1760
13	2110	2250	2230	2450	2110	1620	2760	10500	4710	1690	1940	1740
14	1950	2350	2400	2390	2110	1630	2320	9020	3850	1730	1850	1770
15	1960	2360	2230	2430	1930	1810	2330	8860	3250	1760	1970	1970
16	1990	2390	2150	2440	1920	1850	2530	10100	3330	1760	2050	1920
17	1960	2410	2290	2430	1870	1540	2800	10200	3800	1860	2030	1800
18	2010	2860	2190	2410	1880	1510	3560	9530	3520	1770	1970	1940
19	2390	2510	2350	2360	1880	1480	3640	8060	3200	1490	2020	1920
20	2250	2360	2340	2360	1840	1460	3390	6350	3180	1610	1950	2330
21	2100	2760	2430	2310	1970	1500	3500	4850	3060	1640	1990	3060
22	2150	2890	2230	2280	2200	1490	3680	4760	2510	1610	1950	2720
23	2340	2590	2340	2360	1920	1530	3410	3500	2480	1590	1950	2550
24	2260	2370	2460	2350	1870	1520	3240	3260	2060	1610	1950	2070
25	2180	2260	2440	2340	1860	1540	3000	3400	2060	1550	1910	1960
26	2110	2070	2390	2310	1810	1640	2190	3410	2130	1630	1890	2380
27	1980	1970	2310	2360	1800	1730	2340	3580	1760	1630	1890	2490
28	1920	2180	2490	2340	1740	1930	2310	3510	1810	1650	1930	2460
29	1920	2690	2370	2350	---	4240	2190	3300	1670	1660	1960	2540
30	1920	2550	2260	2340	---	4310	2350	3150	1660	1630	1860	2510
31	1920	---	2440	2330	---	3130	---	2690	---	1670	1690	---
TOTAL	63380	79380	69820	73610	56390	57190	106360	192850	99810	52570	58580	62240
MEAN	2045	2646	2252	2375	2014	1845	3545	6221	3327	1696	1890	2075
MAX	2390	3630	2490	2500	2300	4310	9260	10500	6050	1930	2980	3060
MIN	1830	1930	1740	2280	1740	1460	2190	2690	1660	1490	1380	1740

CAL YR 1988 TOTAL 767140 MEAN 2096 MAX 7830 MIN 1390
WTR YR 1989 TOTAL 972180 MEAN 2664 MAX 10500 MIN 1380

ANDROSCOGGIN RIVER BASIN

01054200 WILD RIVER AT GILEAD, ME
(Hydrologic bench-mark station)

LOCATION.--Lat 44°23'27", long 70°58'47", Oxford County, Hydrologic Unit 01040002, on right bank 200 ft upstream from highway bridge on U.S. Route 2, 2,000 ft upstream from mouth, and 0.4 mi west of Gilead.
DRAINAGE AREA.--69.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge measurement water year 1959. July 1964 to current year.

REVISED RECORDS.--WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 683.10 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 12, 1977, at site 180 ft downstream on left bank at same datum.

REMARKS.--Estimated daily discharges: Dec. 3 to Mar. 28. Records good except for period of ice effect, Dec. 3 to Mar. 28, and period of missing record, Dec. 3-13, which are fair.

AVERAGE DISCHARGE.--25 years, 182 ft³/s, 35.51 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s, Mar. 31, 1987, gage height, 13.03 ft; minimum, 7.6 ft³/s, July 16, 1971, gage height, 1.89 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 24, 1959, reached a stage of 15.6 ft, from floodmarks; discharge, 18,100 ft³/s, from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	0745	7680	9.79	May 6	1245	6400	9.15
Nov. 6	0330	8400	10.21	May 12	0700	*9000	*10.65
Mar. 29	0500	3370	7.21	June 10	0930	3140	7.11
Apr. 7	0145	2970	6.98	Aug. 5	1715	4450	8.02
May 2	1445	6320	9.10				

Minimum discharge, 14 ft³/s, July 27, gage height, 2.90 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	97	141	e56	e59	e69	159	273	110	74	18	22
2	26	3370	127	e54	e76	e65	132	2590	211	68	16	91
3	25	689	e118	e52	e69	e61	131	912	315	64	17	48
4	25	328	e108	e50	e57	e57	192	448	188	59	20	31
5	29	284	e99	e49	e51	e54	667	354	170	55	1070	27
6	42	2950	e91	e48	e48	e51	1590	2730	238	52	393	24
7	37	665	e84	e47	e47	e49	1390	1110	309	50	120	23
8	33	432	e79	e46	e46	e47	474	560	316	47	90	23
9	35	315	e77	e45	e45	e46	281	360	295	42	62	22
10	37	251	e74	e44	e44	e44	244	293	1340	38	47	20
11	83	232	e72	e44	e43	e43	199	1430	549	39	40	20
12	90	188	e70	e43	e43	e43	174	5260	299	39	93	19
13	54	201	e69	e43	e42	e44	152	1070	213	35	251	19
14	44	348	e78	e43	e42	e54	145	597	180	31	299	19
15	41	286	e84	e44	e50	e115	148	426	159	30	117	40
16	39	217	e86	e46	e48	e150	195	339	618	29	76	40
17	38	379	e77	e47	e44	e105	304	287	354	27	57	34
18	224	315	e71	e49	e41	e80	517	252	275	25	47	38
19	339	205	e66	e53	e40	e64	459	224	200	24	40	31
20	131	184	e63	e54	e40	e55	327	199	151	23	38	124
21	91	328	e64	e54	e42	e49	238	200	132	23	43	134
22	248	199	e67	e53	e48	e46	221	274	129	21	37	62
23	698	157	e66	e52	e180	e43	165	181	122	19	33	71
24	276	141	e68	e51	e135	e41	146	162	138	17	37	74
25	306	129	e72	e50	e105	e45	136	167	128	16	30	51
26	180	163	e74	e49	e89	e84	143	146	119	15	26	55
27	137	148	e69	e49	e81	e257	154	223	107	15	24	100
28	118	249	e67	e48	e74	e699	153	159	97	21	24	61
29	126	249	e63	e48	---	1950	145	134	91	28	24	48
30	107	165	e61	e47	---	420	190	123	82	21	24	40
31	93	---	e58	e47	---	210	---	114	---	20	22	---
TOTAL	3779	13864	2463	1505	1729	5140	9571	21597	7635	1067	3235	1411
MEAN	122	462	79.5	48.5	61.7	166	319	697	254	34.4	104	47.0
MAX	698	3370	141	56	180	1950	1590	5260	1340	74	1070	134
MIN	25	97	58	43	40	41	131	114	82	15	16	19
CFSM	1.75	6.64	1.14	.70	.89	2.38	4.58	10.0	3.66	.49	1.50	.68
IN.	2.02	7.41	1.32	.80	.92	2.75	5.12	11.54	4.08	.57	1.73	.75

CAL YR 1988 TOTAL 60448 MEAN 165 MAX 3780 MIN 16 CFSM 2.37 IN. 32.31
WTR YR 1989 TOTAL 72996 MEAN 200 MAX 5260 MIN 15 CFSM 2.87 IN. 39.02

e Estimated

01054200 WILD RIVER AT GILEAD, ME--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1964 to September 1983.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOGOCOCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT												
20...	0830	166	24	6.4	4.0	5.0	0.7	740	12.2	98	K 5	K 13
FEB												
15...	1200	E 50	24	6.5	3.0	0.0	0.3	750	14.2	99	<1	<1
APR												
05...	0930	416	19	6.2	3.0	0.5	1.0	740	14.1	101	K 4	K 1
SEP												
05...	0900	27	23	6.9	13.0	12.5	0.2	760	10.8	101	<1	K 8

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT (MG/L AS HCO3)	CAR- BONATE WATER DIS IT (MG/L AS CO3)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT												
20...	6	1.6	0.6	1.1	0.7	2	0	1	4	3	5.2	0.9
FEB												
15...	6	1.5	0.5	1.4	0.6	4	0	4	5	5	5.8	0.5
APR												
05...	6	1.4	0.6	0.9	0.5	2	0	1	3	3	4.4	0.5
SEP												
05...	6	1.5	0.5	1.5	0.5	4	0	3	5	4	4.0	0.5

DATE	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)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT											
20...	<0.1	6.5	30	19	<0.10	0.04	0.05	0.3	0.01	0.01	<0.01
FEB											
15...	0.1	7.9	12	21	<0.10	<0.01	--	<0.2	<0.01	<0.01	<0.01
APR											
05...	0.1	4.7	12	15	<0.10	<0.01	--	<0.2	<0.01	<0.01	<0.01
SEP											
05...	0.1	7.8	21	19	<0.10	<0.01	--	0.2	<0.01	<0.01	<0.01

E Estimated discharge.

K Results based on colony count outside acceptable range (non-ideal colony count).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 20...	160	<1	8	<0.5	1	<1	<3	2	56	<5	<4	12
FEB 15...	40	<1	4	<0.5	<1	<1	<3	1	18	<5	<4	1
APR 05...	130	<1	4	<0.5	<1	<1	<3	<1	42	<5	<4	11
SEP 05...	50	<1	7	<0.5	1	<1	<3	<1	32	<1	<4	1

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 20...	0.6	<10	<1	<1	<1.0	15	<6	9	3	1.3	9
FEB 15...	<0.1	<10	<1	<1	<1.0	16	<6	<3	2	0.27	33
APR 05...	<0.1	<10	<1	<1	1.0	13	<6	4	3	3.4	90
SEP 05...	<0.1	<10	<1	<1	<1.0	16	<6	6	2	0.15	75

[illegible]

ANDROSCOGGIN RIVER BASIN

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01054500 ANDROSCOGGIN RIVER AT RUMFORD, ME

LOCATION.--Lat 44°32'33", long 70°32'50", Oxford County, Hydrologic Unit 01040002, on right bank below lower power plant of Rumford Falls Power Co. in Rumford and 1,000 ft upstream from Swift River.

DRAINAGE AREA.--2,068 mi².

PERIOD OF RECORD.--Discharge: May 1892 to current year. Monthly discharge only October 1903 to September 1904, published in WSP 1301.

Chemical analyses: Water year 1953.

REVISED RECORDS.--WSP 1001: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 420.00 ft above National Geodetic Vertical Datum of 1929. Aug. 1, 1937, to Nov. 19, 1979, 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.--No estimated daily discharges. Records good. Prior to Nov. 19, 1979, discharge computed from flow over upper dam and through wheels. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Umbagog, and Azischohos Lakes (Reservoirs in Androscoggin River Basin), with final regulation at Errol Dam about 84 mi upstream. Several observations of water temperature and specific conductance were made during the year.

COOPERATION.--Prior to Nov. 19, 1979, records furnished by Rumford Falls Power Co.

AVERAGE DISCHARGE.--97 years, 3,728 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,000 ft³/s, Mar. 20, 1936; minimum daily, 625 ft³/s, Mar. 27, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46,700 ft³/s, May 12, gage height 17.17 ft; minimum daily, 1,650 ft³/s, Aug. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2300	2730	4100	2940	2810	2210	5490	4500	4170	2270	1950	2080
2	2210	9490	3720	2920	2880	2140	5420	10300	4150	2300	2110	2500
3	2320	13100	3430	3070	2830	2080	5290	19100	6550	2490	1650	2850
4	2350	7290	3350	2890	2680	2020	5100	13200	6270	2310	1910	2470
5	2380	5410	2500	2630	2500	2010	6300	10700	5040	2500	3290	2250
6	2440	11900	2120	2660	2440	2060	15200	16300	5180	2370	9860	2260
7	2410	10900	2360	2770	2790	1890	21600	23400	6710	2050	4840	2200
8	2470	7890	3400	2830	2710	1980	15900	16100	7220	2170	3300	2180
9	2500	6610	2700	3050	2590	2010	10100	12100	8120	2300	2680	2140
10	2440	5730	2380	3000	2400	2020	8550	8900	10200	2270	2380	2150
11	2600	5290	2300	3000	2580	2030	7220	8200	12600	2300	1770	2140
12	2920	4790	1940	2850	2600	2000	6110	34900	9890	2320	2180	2070
13	2850	4240	2410	2900	2550	1990	5220	37000	7730	2100	3040	2020
14	2620	4740	2820	2930	2510	2040	4740	19600	6770	2160	3880	2040
15	2420	4800	3180	2960	2560	2060	4240	14100	5580	2160	3210	2290
16	2480	4570	2780	3020	2400	2840	4590	13000	6780	2170	2830	2670
17	2460	4310	2530	3010	2240	2660	5440	12900	7720	2140	2760	2390
18	2500	5000	2840	2960	2200	2240	7130	12300	6770	2270	2500	2390
19	3630	4860	2700	2960	2280	2070	7750	11000	6100	2080	2330	2460
20	3830	4150	2920	2910	2270	2000	7060	9540	5250	1800	2500	2850
21	3200	4610	3080	2880	2270	2000	6220	7920	4810	2010	2510	4150
22	2950	5230	3160	2620	2530	2000	6070	7930	4520	1950	2520	4140
23	4590	4570	2810	2840	2850	1960	5780	6750	3730	2000	2480	3820
24	4560	3990	2930	2860	2550	2050	5390	5650	3610	1930	2450	3290
25	4150	3220	3200	2920	2410	2080	5080	5370	3180	1950	2420	2860
26	3820	3390	3070	2790	2270	2270	4560	5310	3010	1870	2350	2840
27	3370	3540	2820	2780	2320	3030	3990	5790	2880	1930	2270	3540
28	3010	3560	2930	2850	2250	3480	4130	5850	2840	2000	2300	3570
29	2890	4640	3190	2870	---	9010	4000	5270	2600	1990	2420	3370
30	2850	4580	2940	2840	---	11300	3900	4870	2350	2020	2280	3330
31	2750	---	2970	2870	---	6890	---	4620	---	1910	2200	---
TOTAL	90270	169130	89580	89380	70270	88420	207570	372470	172330	66090	87170	81310
MEAN	2912	5638	2890	2883	2510	2852	6919	12020	5744	2132	2812	2710
MAX	4590	13100	4100	3070	2880	11300	21600	37000	12600	2500	9860	4150
MIN	2210	2730	1940	2620	2200	1890	3900	4500	2350	1800	1650	2020

CAL YR 1988 TOTAL 1238510 MEAN 3384 MAX 18200 MIN 1710
WTR YR 1989 TOTAL 1583990 MEAN 4340 MAX 37000 MIN 1650

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 downstream from Philbrick Brook, 2.1 mi downstream from Roxbury, and 7.2 mi upstream from mouth.

DRAINAGE AREA.--96.9 mi².

PERIOD OF RECORD.--Discharge: June 1929 to current year.

Chemical analyses: Water year 1956.

REVISED RECORDS.--WSP 801: 1934(M). WSP 1301: 1937-38(M), 1942(M). WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 615.67 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5 to Mar. 29. Records good except for period of ice effect, Dec. 5 to Mar. 29, which is fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--60 years, 199 ft³/s, 27.89 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s, Oct. 24, 1959, gage height, 12.87 ft, from rating curve extended above 7,000 ft³/s; minimum, 3.8 ft³/s, Sept. 16, 17, 1948, gage height, 0.93 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1030	2,940	5.86	May 16	1515	6,650	8.19
Nov. 6	0730	2,750	5.71	May 12	1300	*11,700	*11.60
Apr. 7	0430	3,580	6.33	June 2	1900	4,450	6.92
May 2	1745	4,670	7.06				

Minimum discharge, 8.9 ft³/s, July 27, gage height, 1.04 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	90	175	e39	e40	e34	247	613	186	50	15	32
2	27	1630	148	e38	e44	e33	188	2640	1010	53	13	381
3	28	751	143	e38	e45	e31	185	1570	1010	49	13	136
4	29	353	123	e37	e40	e30	243	834	422	44	20	72
5	35	271	e81	e37	e38	e29	620	668	293	42	569	50
6	66	1490	e73	e37	e37	e29	2220	2940	298	40	359	40
7	54	649	e68	e37	e36	e28	2360	1500	379	37	139	36
8	46	513	e64	e39	e35	e28	917	793	324	35	139	32
9	49	356	e61	e41	e34	e28	525	505	314	30	87	29
10	59	285	e58	e44	e32	e28	448	397	665	30	54	26
11	97	248	e56	e43	e32	e28	347	838	673	44	40	24
12	146	203	e54	e42	e31	e28	280	6330	376	34	168	22
13	85	187	e54	e41	e31	e28	256	1950	256	27	227	21
14	63	312	e53	e40	e31	e28	254	1090	209	30	211	36
15	55	270	e58	e40	e30	e30	257	659	180	37	109	197
16	51	211	e55	e40	e30	e80	351	462	588	29	80	134
17	50	267	e53	e39	e30	e104	428	359	429	26	71	123
18	90	313	e51	e39	e30	e52	762	295	382	23	53	125
19	449	212	e49	e39	e29	e46	710	251	336	21	40	75
20	177	185	e48	e39	e29	e42	610	218	224	19	35	571
21	115	285	e46	e39	e29	e40	473	238	175	18	46	423
22	119	199	e52	e39	e35	e38	494	352	142	16	53	193
23	430	162	e45	e39	e55	e37	333	231	121	14	50	180
24	301	144	e46	e38	e84	e35	274	194	123	12	46	179
25	292	122	e52	e37	e44	e37	249	195	102	11	35	124
26	194	144	e43	e37	e40	e44	290	183	87	10	28	184
27	145	141	e41	e37	e38	e185	367	499	76	9.5	24	300
28	121	267	e41	e36	e36	e267	355	282	78	36	22	170
29	131	351	e41	e36	---	e756	306	207	76	55	21	130
30	111	208	e40	e36	---	671	429	172	59	27	24	104
31	96	---	e39	e37	---	348	---	192	---	19	37	---
TOTAL	3739	10819	2011	1200	1045	3222	15778	27657	9593	927.5	2828	4149
MEAN	121	361	64.9	38.7	37.3	104	526	892	320	29.9	91.2	138
MAX	449	1630	175	44	84	756	2360	6330	1010	55	569	571
MIN	27	90	39	36	29	28	185	172	59	9.5	13	21
CFSM	1.24	3.72	.67	.40	.39	1.07	5.43	9.21	3.30	.31	.94	1.43
IN.	1.44	4.15	.77	.46	.40	1.24	6.06	10.62	3.68	.36	1.09	1.59

CAL YR 1988 TOTAL 56414 MEAN 154 MAX 1650 MIN 14 CFSM 1.59 IN. 21.66
WTR YR 1989 TOTAL 82968.5 MEAN 227 MAX 6330 MIN 9.5 CFSM 2.35 IN. 31.85

e Estimated

ANDROSCOGGIN RIVER BASIN

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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 upstream from upper highway bridge at Turner Center and 3.6 mi upstream from mouth.

DRAINAGE AREA.--169 mi².

PERIOD OF RECORD.--Discharge: August 1941 to current year.

Chemical analyses: Water year 1955, 1961.

REVISED RECORDS.--WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 276.29 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5-7, Dec. 9 to Mar. 29, and May 3-5. Records good except for period of ice effect, Dec. 5-7 and Dec. 9 to Mar. 29, and period of poorly defined backwater condition, May 3 to Jun. 29, which are fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--48 years, 303 ft³/s, 24.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft³/s, Mar. 27, 1953, gage height, 11.18 ft; minimum, 5.6 ft³/s, Aug. 29, 1956, gage height, 0.72 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0300	2,040	4.64	May 7	1300	1,720	4.46
Apr. 7	2100	3,350	5.71	May 13	0500	*6,300	*7.62
May 3	1000	2,100	4.69				

Minimum discharge, 21 ft³/s, Sept. 14, gage height, 1.00 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	135	395	e95	e78	e82	723	273	286	123	29	23
2	29	1080	345	e91	e82	e75	679	684	272	113	27	27
3	30	1840	308	e88	e82	e69	603	e1870	341	108	26	27
4	28	1170	280	e85	e81	e65	785	e1380	392	102	27	28
5	30	747	e204	e83	e78	e61	1050	e914	371	96	34	27
6	37	902	e175	e80	e76	e57	1850	1050	341	94	71	25
7	44	1090	e187	e78	e74	e54	3110	1670	427	93	102	27
8	45	871	195	e76	e70	e51	2790	1380	543	85	86	34
9	51	668	e175	e75	e67	e50	1700	917	708	79	74	34
10	55	527	e148	e74	e64	e49	1240	717	837	74	62	34
11	65	445	e120	e73	e62	e48	1020	761	1100	74	51	35
12	76	376	e96	e72	e60	e47	852	3530	869	69	51	29
13	77	339	e85	e72	e58	e47	725	5650	639	62	56	22
14	66	494	e93	e74	e57	e49	649	3070	516	60	70	21
15	58	514	e100	e75	e62	e60	600	1620	424	58	75	26
16	53	419	e110	e76	e66	e93	747	1070	640	55	62	29
17	52	401	e100	e79	e63	e137	1030	818	807	53	54	34
18	57	474	e93	e80	e61	e132	1130	692	725	54	49	36
19	76	424	e88	e82	e60	e122	1040	609	654	79	43	34
20	86	373	e85	e84	e58	e115	902	539	537	71	41	42
21	80	739	e88	e85	e64	e107	738	477	414	62	42	71
22	123	834	e94	e83	e92	e104	630	516	329	56	44	87
23	366	625	e92	e78	e140	e103	535	562	266	51	39	98
24	402	497	e94	e76	e133	e102	465	467	224	46	37	81
25	386	394	e98	e77	e120	e104	420	416	194	42	33	73
26	338	369	e104	e78	e108	e156	386	388	176	39	30	78
27	269	327	e96	e78	e97	e268	361	519	155	36	27	132
28	221	356	e101	e77	e90	e488	327	528	142	36	26	149
29	188	502	e110	e77	---	e1040	293	424	161	35	25	107
30	163	469	e105	e77	---	1310	279	345	148	33	25	79
31	145	---	e99	e77	---	876	---	306	---	31	24	---
TOTAL	3726	18401	4463	2455	2203	6121	27659	34162	13638	2069	1442	1549
MEAN	120	613	144	79.2	78.7	197	922	1102	455	66.7	46.5	51.6
MAX	402	1840	395	95	140	1310	3110	5650	1100	123	102	149
MIN	28	135	85	72	57	47	279	273	142	31	24	21
CFSM	.71	3.63	.85	.47	.47	1.17	5.46	6.52	2.69	.39	.28	.31
IN.	.82	4.05	.98	.54	.48	1.35	6.09	7.52	3.00	.46	.32	.34

CAL YR 1988 TOTAL 78227 MEAN 214 MAX 1840 MIN 28 CFSM 1.26 IN. 17.22
WTR YR 1989 TOTAL 117888 MEAN 323 MAX 5650 MIN 21 CFSM 1.91 IN. 25.95

e Estimated

01056000 GULF ISLAND POND NEAR LEWISTON, ME

LOCATION.--Lat 44°08'50", long 70°12'25", Androscoggin County, Hydrologic Unit 01040002, on the upstream side 300 ft from left edge of Gulf Island dam on the Androscoggin River, 4.0 mi north of Lewiston, 5.0 mi upstream from the mouth of the Little Androscoggin river.

DRAINAGE AREA.--2,863 mi².

PERIOD OF RECORD.--Water years 1981 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1981 to current year.

pH: July 1981 to current year.

WATER TEMPERATURE: July 1981 to current year.

DISSOLVED OXYGEN: July 1981 to current year.

INSTRUMENTATION.--Water quality monitor since July 1981. Continuous flow through system. Submersible pump located 30 ft below top of dam on May 20, 1983. Prior to this date pump was located 47 ft below top of dam.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 189 microsiemens, Aug. 20, 1988; minimum, 21 microsiemens, Apr. 2, 1987.

pH: Maximum, 7.3 units, Aug. 20, 1983, Dec. 20, 21, 1985; minimum, 5.7 units, Apr. 2, 1987.

WATER TEMPERATURE: Maximum, 28.5°C, Aug. 7, 12, 14, 1988; minimum, -0.5°C, Jan. 9, 1985.

DISSOLVED OXYGEN: Maximum, 15.5 mg/L, Dec. 15, 1983, April 7, 1984; minimum, 2.3 mg/L, July 28, 1982.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 185 microsiemens, Mar. 19; minimum, 27 microsiemens, May 13, 14.

pH: Maximum, 7.1 units, Mar. 19-25, 30; minimum, 6.0 units, May 13, 14.

WATER TEMPERATURE: Maximum, 25.5°C, July 29, 30; minimum, 0.0°C, Jan. 21.

DISSOLVED OXYGEN: Maximum, 13.8 mg/L, Feb. 16, Apr. 1, 2; minimum, 3.1 mg/L, July 24, Aug. 6.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	135	132	134	94	92	93	---	---	---	150	148	149
2	137	135	136	98	93	94	---	---	---	149	143	147
3	137	135	135	114	99	108	---	---	---	147	142	144
4	136	134	135	109	60	83	---	---	---	156	145	148
5	136	135	135	65	50	54	---	---	---	154	151	152
6	138	137	137	51	47	49	---	---	---	153	151	152
7	142	137	140	68	50	57	---	---	---	152	142	147
8	144	142	143	68	52	62	---	---	---	144	142	143
9	145	143	144	51	47	49	---	---	---	143	138	141
10	159	145	152	52	48	50	---	---	---	141	138	139
11	161	155	159	56	52	54	---	---	---	142	140	141
12	158	154	156	62	56	58	---	---	---	144	142	143
13	155	152	153	66	62	64	124	104	116	144	143	144
14	152	146	150	71	67	69	130	117	122	144	143	144
15	148	136	143	76	70	73	128	122	125	144	141	142
16	141	131	137	79	74	77	126	123	125	143	137	141
17	133	124	128	84	79	81	135	122	127	142	138	140
18	131	119	123	84	82	83	141	124	131	141	139	140
19	136	135	136	84	82	83	148	132	140	141	139	140
20	136	135	136	83	81	82	148	138	144	140	136	138
21	135	129	132	---	---	---	148	140	144	138	134	136
22	130	127	129	---	---	---	145	138	141	137	132	134
23	132	127	128	---	---	---	142	139	140	135	130	133
24	136	131	134	---	---	---	140	138	139	134	131	133
25	134	120	126	---	---	---	141	137	139	137	133	135
26	122	116	119	---	---	---	142	139	140	138	135	137
27	120	112	116	---	---	---	140	138	139	138	136	137
28	114	103	108	---	---	---	139	137	139	138	135	137
29	106	101	104	---	---	---	144	138	141	136	132	135
30	101	97	99	---	---	---	147	142	144	134	129	132
31	99	94	97	---	---	---	150	144	147	133	129	131
MONTH	161	94	132	114	47	71	150	104	136	156	129	140

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	131	129	130	166	160	163	79	54	63	81	78	79
2	131	128	129	164	160	162	57	53	54	84	80	82
3	133	129	131	163	158	160	61	54	57	91	78	81
4	134	132	133	162	160	161	66	60	62	74	40	55
5	135	133	134	162	160	161	75	65	70	43	40	40
6	134	133	134	162	161	162	80	75	78	46	41	44
7	134	132	133	162	161	161	78	44	63	52	44	49
8	135	132	133	162	161	161	44	37	39	42	34	37
9	137	135	135	163	162	162	39	37	38	40	36	38
10	138	136	137	164	162	164	43	39	41	45	40	43
11	140	137	137	165	164	164	49	44	46	48	45	47
12	142	138	140	164	160	163	55	49	51	60	48	53
13	143	140	142	163	160	162	57	54	56	57	27	36
14	145	141	143	165	161	163	60	57	58	32	27	29
15	145	144	144	171	164	166	64	60	62	38	32	35
16	144	144	144	180	169	171	71	64	67	44	39	41
17	145	144	144	179	171	175	74	70	72	48	44	46
18	146	144	145	182	175	179	80	74	77	51	48	49
19	147	145	146	185	180	182	81	75	79	52	51	51
20	146	145	146	183	179	181	75	70	72	54	52	53
21	145	145	145	180	177	178	70	65	68	58	54	56
22	146	145	146	177	172	175	66	62	63	63	57	61
23	148	146	147	175	167	171	63	61	62	66	63	64
24	153	148	149	172	168	170	66	63	65	68	65	67
25	157	150	153	170	165	168	70	66	68	68	67	67
26	162	155	158	169	163	166	72	70	71	68	64	66
27	167	156	161	166	161	165	73	71	72	70	66	68
28	167	157	164	165	160	162	74	72	73	72	70	71
29	---	---	---	167	161	164	78	74	76	73	71	72
30	---	---	---	165	123	151	79	77	78	73	71	72
31	---	---	---	125	72	94	---	---	---	73	70	71
MONTH	167	128	142	185	72	164	81	37	63	91	27	56

[illegible]

ANDROSCOGGIN RIVER BASIN
01056000 GULF ISLAND POND NEAR LEWISTON, ME--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	6.8	6.7	6.7	6.9	6.8	6.9	6.9	6.7	6.8	6.8	6.7	6.7
2	6.9	6.7	6.8	6.9	6.8	6.9	6.7	6.6	6.7	6.8	6.7	6.8
3	6.9	6.8	6.8	6.9	6.8	6.9	6.7	6.6	6.6	6.8	6.8	6.8
4	6.9	6.8	6.9	6.9	6.8	6.9	6.6	6.6	6.6	6.7	6.4	6.6
5	6.9	6.9	6.9	6.9	6.8	6.9	6.7	6.6	6.7	6.4	6.4	6.4
6	6.9	6.9	6.9	6.9	6.8	6.9	6.7	6.7	6.7	6.5	6.4	6.4
7	6.9	6.8	6.9	6.9	6.9	6.9	6.7	6.5	6.6	6.5	6.4	6.5
8	6.9	6.8	6.9	6.9	6.8	6.9	6.5	6.3	6.4	6.4	6.2	6.3
9	6.9	6.9	6.9	6.9	6.8	6.9	6.4	6.3	6.3	6.4	6.3	6.3
10	6.9	6.9	6.9	6.9	6.8	6.9	6.4	6.3	6.4	6.4	6.4	6.4
11	6.9	6.9	6.9	6.9	6.9	6.9	6.5	6.4	6.4	6.5	6.4	6.5
12	6.9	6.9	6.9	6.9	6.9	6.9	6.5	6.5	6.5	6.6	6.4	6.5
13	6.9	6.8	6.9	6.9	6.9	6.9	6.5	6.5	6.5	6.5	6.0	6.2
14	6.9	6.9	6.9	6.9	6.9	6.9	6.6	6.5	6.5	6.2	6.0	6.1
15	6.9	6.9	6.9	6.9	6.9	6.9	6.6	6.5	6.6	6.3	6.1	6.2
16	6.9	6.8	6.9	6.9	6.9	6.9	6.7	6.6	6.6	6.5	6.3	6.4
17	6.9	6.9	6.9	7.0	6.9	7.0	6.7	6.7	6.7	6.5	6.4	6.5
18	6.9	6.9	6.9	7.0	7.0	7.0	6.7	6.7	6.7	6.6	6.5	6.6
19	6.9	6.9	6.9	7.1	7.0	7.0	6.7	6.7	6.7	6.7	6.6	6.6
20	6.9	6.8	6.9	7.1	7.0	7.1	6.7	6.7	6.7	6.7	6.6	6.6
21	6.9	6.8	6.9	7.1	7.0	7.1	6.7	6.7	6.7	6.7	6.6	6.7
22	6.9	6.8	6.9	7.1	7.0	7.1	6.7	6.7	6.7	6.7	6.6	6.7
23	6.9	6.8	6.9	7.1	7.0	7.1	6.7	6.7	6.7	6.7	6.6	6.7
24	6.9	6.8	6.9	7.1	7.0	7.1	6.7	6.7	6.7	6.7	6.6	6.6
25	6.9	6.8	6.9	7.1	7.0	7.0	6.8	6.7	6.7	6.7	6.6	6.6
26	6.9	6.8	6.9	7.0	7.0	7.0	6.8	6.7	6.7	6.7	6.5	6.6
27	6.9	6.8	6.9	7.0	7.0	7.0	6.8	6.7	6.7	6.8	6.6	6.7
28	6.9	6.8	6.9	7.0	7.0	7.0	6.8	6.7	6.7	6.8	6.7	6.8
29	---	---	---	7.0	6.9	7.0	6.8	6.7	6.7	6.7	6.7	6.7
30	---	---	---	7.1	7.0	7.1	6.8	6.7	6.7	6.8	6.7	6.7
31	---	---	---	7.0	6.9	7.0	---	---	---	6.8	6.6	6.7
MONTH	6.9	6.7	6.9	7.1	6.8	7.0	6.9	6.3	6.6	6.8	6.0	6.5

ANDROSCOGGIN RIVER BASIN
01056000 GULF ISLAND POND NEAR LEWISTON, ME--Continued

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PH (STANDARD UNITS), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.7	6.6	6.7	---	---	---	6.9	6.7	6.8	6.8	6.7	6.8
2	6.7	6.6	6.7	---	---	---	6.8	6.7	6.7	6.8	6.7	6.7
3	6.8	6.6	6.7	---	---	---	6.7	6.7	6.7	6.8	6.7	6.7
4	6.9	6.7	6.8	---	---	---	6.7	6.6	6.7	6.7	6.6	6.7
5	6.8	6.6	6.7	---	---	---	6.7	6.6	6.7	6.7	6.6	6.7
6	6.7	6.6	6.7	---	---	---	6.7	6.5	6.7	6.7	6.7	6.7
7	6.7	6.5	6.6	---	---	---	6.7	6.5	6.6	6.7	6.6	6.7
8	6.7	6.5	6.6	---	---	---	6.7	6.5	6.6	6.8	6.6	6.7
9	6.7	6.6	6.6	---	---	---	6.7	6.5	6.6	6.8	6.7	6.8
10	6.7	6.6	6.7	---	---	---	6.6	6.4	6.5	6.8	6.7	6.8
11	6.7	6.7	6.7	6.8	6.6	6.8	6.5	6.4	6.4	6.9	6.7	6.8
12	6.7	6.6	6.7	6.8	6.7	6.7	6.7	6.4	6.6	6.8	6.7	6.8
13	6.6	6.5	6.6	6.9	6.6	6.7	6.6	6.3	6.5	6.7	6.6	6.7
14	6.6	6.5	6.5	6.9	6.8	6.9	6.5	6.4	6.4	6.8	6.7	6.8
15	6.7	6.5	6.6	6.9	6.8	6.9	6.5	6.3	6.4	6.8	6.8	6.8
16	6.7	6.6	6.7	6.8	6.7	6.8	6.5	6.4	6.5	6.8	6.7	6.8
17	6.7	6.6	6.6	6.8	6.7	6.7	6.6	6.4	6.5	6.8	6.7	6.7
18	6.6	6.6	6.6	6.8	6.5	6.7	6.6	6.5	6.6	6.7	6.6	6.7
19	6.6	6.5	6.6	6.6	6.5	6.5	6.7	6.5	6.6	6.8	6.6	6.7
20	6.6	6.5	6.6	6.6	6.5	6.6	6.8	6.6	6.7	6.7	6.5	6.6
21	6.6	6.4	6.5	6.7	6.6	6.6	6.8	6.5	6.7	6.7	6.6	6.7
22	6.6	6.4	6.5	6.6	6.5	6.6	6.9	6.6	6.7	6.8	6.7	6.7
23	6.6	6.4	6.5	6.6	6.5	6.6	6.8	6.6	6.7	6.8	6.8	6.8
24	6.9	6.5	6.6	6.5	6.5	6.5	6.8	6.6	6.7	6.8	6.8	6.8
25	7.0	6.5	6.8	6.6	6.5	6.5	6.7	6.6	6.7	6.8	6.8	6.8
26	6.6	6.5	6.6	6.6	6.5	6.6	6.7	6.6	6.7	6.8	6.8	6.8
27	6.6	6.4	6.5	6.6	6.5	6.6	6.7	6.6	6.7	6.8	6.8	6.8
28	6.5	6.4	6.5	6.8	6.6	6.7	6.6	6.6	6.6	6.8	6.8	6.8
29	6.9	6.4	6.6	7.0	6.6	6.9	6.8	6.6	6.7	6.8	6.8	6.8
30	---	---	---	7.0	6.8	6.9	6.8	6.7	6.8	6.9	6.8	6.8
31	---	---	---	6.9	6.7	6.8	6.8	6.7	6.8	---	---	---
MONTH	7.0	6.4	6.6	7.0	6.5	6.7	6.9	6.3	6.6	6.9	6.5	6.7
YEAR	7.1	6.0	6.7									

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	16.5	16.5	8.0	7.5	7.5	---	---	---	1.0	1.0	1.0
2	16.5	16.0	16.0	7.5	7.5	7.5	---	---	---	1.0	1.0	1.0
3	17.5	16.0	17.0	7.5	6.0	6.5	---	---	---	1.0	1.0	1.0
4	17.0	16.5	16.5	6.0	5.5	5.5	---	---	---	1.0	1.0	1.0
5	16.5	15.5	16.0	6.0	5.5	5.5	---	---	---	1.0	1.0	1.0
6	15.5	15.5	15.5	6.5	6.0	6.0	---	---	---	1.0	1.0	1.0
7	15.5	15.0	15.0	7.0	6.5	6.5	---	---	---	1.0	.5	1.0
8	15.0	14.0	14.5	8.0	7.0	7.5	---	---	---	1.0	.5	1.0
9	14.0	13.5	14.0	8.0	8.0	8.0	---	---	---	1.0	.5	.5
10	13.5	12.5	13.0	8.0	8.0	8.0	---	---	---	1.0	.5	.5
11	13.0	12.0	12.5	8.0	7.5	7.5	---	---	---	1.0	.5	.5
12	12.5	12.0	12.5	7.5	7.0	7.5	---	---	---	1.0	.5	.5
13	12.5	12.0	12.0	7.0	7.0	7.0	2.0	1.5	1.5	1.0	.5	.5
14	12.0	11.5	11.5	7.0	6.5	6.5	2.0	1.5	1.5	1.0	.5	.5
15	11.5	10.5	11.0	6.5	6.0	6.5	1.5	1.0	1.5	1.0	.5	1.0
16	11.0	10.0	10.5	6.0	6.0	6.0	1.5	1.0	1.5	1.0	.5	.5
17	10.0	9.5	10.0	6.0	5.5	5.5	1.5	1.0	1.5	1.0	.5	.5
18	10.5	9.5	10.0	5.5	5.5	5.5	1.5	1.0	1.5	1.0	.5	.5
19	10.5	10.0	10.5	5.5	5.0	5.0	1.5	1.0	1.0	1.0	.5	.5
20	10.0	10.0	10.0	5.0	5.0	5.0	1.5	1.0	1.0	1.0	.5	.5
21	10.0	9.5	10.0	---	---	---	1.5	1.0	1.0	.5	.0	.5
22	9.5	9.5	9.5	---	---	---	1.0	1.0	1.0	.5	.5	.5
23	9.5	9.0	9.5	---	---	---	1.0	1.0	1.0	.5	.5	.5
24	9.5	9.0	9.0	---	---	---	1.0	1.0	1.0	.5	.5	.5
25	9.5	9.0	9.0	---	---	---	1.0	1.0	1.0	.5	.5	.5
26	9.0	8.5	9.0	---	---	---	1.0	1.0	1.0	.5	.5	.5
27	9.0	8.5	8.5	---	---	---	1.0	1.0	1.0	.5	.5	.5
28	8.5	8.5	8.5	---	---	---	1.0	1.0	1.0	.5	.5	.5
29	8.5	8.5	8.5	---	---	---	1.0	1.0	1.0	.5	.5	.5
30	8.5	8.0	8.0	---	---	---	1.0	1.0	1.0	.5	.5	.5
31	8.0	8.0	8.0	---	---	---	1.0	1.0	1.0	.5	.5	.5
MONTH	17.5	8.0	11.5	8.0	5.0	6.5	2.0	1.0	1.0	1.0	.0	.5

ANDROSCOGGIN RIVER BASIN

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01056000 GULF ISLAND POND NEAR LEWISTON, ME--Continued

OXYGEN DISSOLVED (DO), (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	7.8	7.5	7.7	10.1	9.9	10.0	---	---	---	---	---	---
2	7.7	7.4	7.6	10.3	9.9	10.1	---	---	---	---	---	---
3	8.1	7.4	7.8	11.2	10.3	10.8	---	---	---	---	---	---
4	8.0	7.9	8.0	11.8	11.1	11.5	---	---	---	---	---	---
5	8.0	7.8	7.9	11.8	11.7	11.8	---	---	---	---	---	---
6	7.7	7.6	7.6	11.8	11.7	11.7	---	---	---	---	---	---
7	7.6	7.2	7.4	11.8	11.5	11.7	---	---	---	---	---	---
8	7.7	7.3	7.6	11.5	11.3	11.5	---	---	---	12.8	12.7	12.7
9	7.7	7.5	7.6	11.3	11.2	11.2	---	---	---	12.7	12.6	12.7
10	7.9	7.5	7.7	11.1	11.1	11.1	---	---	---	12.8	12.6	12.7
11	8.2	7.9	8.0	11.3	11.1	11.2	---	---	---	12.9	12.6	12.8
12	8.3	8.0	8.1	11.4	11.3	11.3	---	---	---	12.8	12.6	12.7
13	8.5	8.1	8.3	11.4	11.3	11.4	---	---	---	12.9	12.6	12.8
14	8.7	8.3	8.5	11.3	11.2	11.3	---	---	---	12.7	12.5	12.6
15	9.2	8.6	8.8	11.5	11.2	11.3	---	---	---	12.6	12.5	12.5
16	9.3	8.9	9.1	11.7	11.5	11.6	---	---	---	12.6	12.5	12.5
17	9.5	9.2	9.3	11.9	11.6	11.7	---	---	---	12.7	12.5	12.6
18	9.5	9.1	9.3	12.0	11.8	11.9	---	---	---	12.6	12.4	12.5
19	9.2	8.5	8.9	12.1	12.0	12.1	---	---	---	12.6	12.5	12.5
20	8.9	8.6	8.8	12.1	11.0	12.0	---	---	---	12.6	12.4	12.5
21	9.0	8.7	8.8	---	---	---	---	---	---	13.1	12.5	12.8
22	9.3	8.9	9.1	---	---	---	---	---	---	12.6	12.4	12.5
23	9.7	9.2	9.4	---	---	---	---	---	---	12.8	12.5	12.6
24	9.7	9.4	9.4	---	---	---	---	---	---	12.8	12.5	12.6
25	9.7	9.4	9.6	---	---	---	---	---	---	13.2	12.5	12.8
26	9.9	9.6	9.7	---	---	---	---	---	---	13.3	12.8	13.0
27	10.1	9.7	9.9	---	---	---	---	---	---	13.1	12.7	12.9
28	10.5	10.1	10.3	---	---	---	---	---	---	13.2	12.8	13.0
29	10.5	10.2	10.3	---	---	---	---	---	---	13.1	12.8	12.9
30	10.6	9.8	10.3	---	---	---	---	---	---	13.1	12.9	12.9
31	10.0	9.8	9.9	---	---	---	---	---	---	13.1	12.8	12.9
MONTH	10.6	7.2	8.7	12.1	9.9	11.4	---	---	---	13.3	12.4	12.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	13.1	12.9	13.0	13.4	13.0	13.1	13.8	13.2	13.6	11.5	11.0	11.3
2	13.5	12.9	13.2	13.4	13.0	13.1	13.8	13.7	13.7	11.3	10.7	11.1
3	13.4	13.1	13.2	13.4	13.0	13.1	13.7	13.2	13.5	11.0	10.5	10.8
4	13.4	13.2	13.3	13.3	12.9	13.1	13.2	13.1	13.2	12.0	10.9	11.5
5	13.3	13.2	13.3	13.3	12.9	13.0	13.2	12.8	13.1	12.1	11.8	12.0
6	13.2	12.9	13.1	13.2	12.9	13.0	13.0	12.7	12.9	12.0	11.5	11.8
7	13.1	12.5	12.8	13.0	12.6	12.8	13.4	12.8	13.1	11.9	11.4	11.6
8	12.8	12.5	12.6	12.9	12.6	12.8	13.5	13.1	13.4	12.3	11.6	12.0
9	13.0	12.5	12.8	12.8	12.7	12.7	13.6	13.2	13.5	12.0	11.4	11.8
10	13.0	12.6	12.8	12.9	12.7	12.8	13.5	13.1	13.4	11.7	11.2	11.6
11	13.2	12.8	12.9	12.9	12.6	12.7	13.4	12.8	13.2	11.7	11.3	11.5
12	13.3	12.9	13.1	12.9	12.7	12.7	13.1	12.7	12.9	11.4	10.6	11.1
13	13.4	13.2	13.3	13.0	12.7	12.8	13.0	12.6	12.9	12.9	11.1	12.0
14	13.4	13.3	13.4	12.8	12.7	12.7	12.9	12.5	12.8	12.9	12.1	12.5
15	13.5	13.3	13.5	12.9	12.4	12.6	12.8	12.4	12.7	12.3	11.5	11.9
16	13.8	13.4	13.6	12.7	12.4	12.6	12.7	12.3	12.6	11.4	10.8	11.1
17	13.7	13.3	13.6	12.7	12.4	12.6	12.6	12.1	12.4	10.8	10.4	10.7
18	13.5	13.2	13.4	12.6	12.4	12.5	12.3	12.0	12.2	10.5	10.1	10.4
19	13.4	13.1	13.3	12.5	12.3	12.4	12.3	12.0	12.2	10.4	9.9	10.2
20	13.5	13.2	13.3	12.4	12.2	12.3	12.2	11.9	12.1	10.3	9.8	10.1
21	13.5	13.2	13.3	12.3	12.1	12.2	12.2	11.8	12.0	10.1	9.6	9.9
22	13.5	13.2	13.3	12.2	12.0	12.1	12.0	11.7	11.9	9.8	9.2	9.6
23	13.6	13.2	13.4	12.2	12.0	12.1	12.0	11.7	11.9	9.4	8.8	9.1
24	13.6	13.2	13.4	12.0	11.8	11.9	12.1	11.7	12.0	9.4	8.6	8.9
25	13.4	13.2	13.3	11.9	11.7	11.8	12.1	11.7	12.0	9.6	8.9	9.2
26	13.4	13.0	13.2	11.8	11.7	11.8	12.1	11.7	11.9	9.1	8.4	8.9
27	13.2	12.9	13.1	11.7	11.6	11.7	12.0	11.6	11.9	9.1	8.5	8.8
28	13.2	13.0	13.1	11.8	11.5	11.7	11.9	11.6	11.8	9.0	8.4	8.6
29	---	---	---	11.8	11.6	11.7	11.9	11.4	11.7	8.6	8.2	8.5
30	---	---	---	12.1	11.8	11.9	11.7	11.2	11.5	8.8	8.0	8.2
31	---	---	---	13.5	12.1	12.9	---	---	---	8.6	8.0	8.2
MONTH	13.8	12.5	13.2	13.5	11.5	12.5	13.8	11.2	12.6	12.9	8.0	10.5

01056000 GULF ISLAND POND NEAR LEWISTON, ME--Continued

OXYGEN DISSOLVED (DO), (MG/L), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

[illegible]

01057000 LITTLE ANDROSCOGGIN RIVER NEAR SOUTH PARIS, ME

LOCATION.--Lat 44°18'12", long 70°32'22", Oxford County, Hydrologic Unit 01040002, on island 50 ft upstream from Snow Falls and 6 mi upstream from South Paris.

DRAINAGE AREA.--73.5 mi².

PERIOD OF RECORD.--Discharge: September 1913 to April 1924, October 1931 to current year.

Chemical analyses: Water year 1958.

REVISED RECORDS.--WSP 1301: 1915-23(M): WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 447.00 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 30, 1924, nonrecording gage, and Oct. 1, 1931, to Sept. 27, 1984, water-stage recorder at site 1.0 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 5 to Mar. 17. Records good except for period of ice-effect, Dec. 5 to Mar. 17, which is fair. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--68 years (water years 1914-23, 1932 to current year), 139 ft³/s, 25.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,340 ft³/s, Apr. 1, 1987, gage height, 12.22 ft, from rating curve extended above 5,500 ft³/s, on basis of slope-area measurement of peak flow; minimum, 1.0 ft³/s, Aug. 16, 1914, Feb. 22 to Mar. 5, 1920.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1845	1,130	6.02	May 6	2115	1,400	6.46
Apr. 7	1030	1,680	6.87	May 12	1530	*5,010	*9.91
May 3	0015	1,270	6.26	June 10	1915	1,020	5.83

Minimum discharge, 5.0 ft³/s, Sept. 12, 13, 14, gage height, 1.67 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	51	168	e40	e33	e36	264	138	112	46	6.4	8.1
2	9.4	703	147	e38	e36	e34	232	502	122	46	5.6	9.0
3	9.3	692	136	e37	e38	e31	245	990	261	44	5.4	9.8
4	9.4	353	123	e36	e35	e29	350	488	192	38	5.3	8.7
5	10	249	e89	e35	e33	e28	490	328	170	36	11	7.7
6	16	442	e83	e35	e31	e26	1230	808	156	34	106	7.0
7	18	400	e81	e34	e30	e25	1520	1010	240	31	57	6.7
8	17	323	e86	e33	e29	e24	965	549	367	28	62	6.2
9	20	258	e67	e33	e28	e23	549	371	416	24	49	5.9
10	28	214	e55	e32	e27	e23	433	296	664	21	32	5.7
11	34	191	e45	e32	e26	e22	349	367	709	25	24	5.4
12	50	160	e36	e32	e25	e22	298	3320	368	21	27	5.3
13	36	148	e33	e31	e24	e22	263	2080	250	17	75	5.0
14	30	281	e32	e31	e24	e23	250	932	207	16	138	5.1
15	27	239	e35	e32	e27	e27	244	591	167	17	78	7.6
16	24	192	e44	e33	e27	e40	321	412	444	16	54	11
17	27	207	e40	e34	e26	e52	467	325	382	15	51	11
18	26	246	e38	e34	e25	60	504	263	335	15	34	12
19	51	201	e36	e34	e25	58	429	222	298	20	27	11
20	44	175	e35	e35	e24	52	342	191	209	17	23	28
21	35	317	e37	e34	e26	49	284	173	166	15	22	67
22	57	276	e39	e33	e32	47	250	384	130	13	21	43
23	208	223	e36	e32	e56	43	216	267	103	13	23	38
24	162	185	e39	e32	e52	44	193	214	92	11	24	60
25	172	183	e42	e31	e48	51	175	219	80	10	19	42
26	136	143	e44	e31	e45	108	163	184	68	9.3	16	52
27	104	136	e41	e32	e42	174	157	243	57	9.1	13	116
28	82	167	e43	e32	e39	239	149	202	74	8.9	11	72
29	73	240	e46	e32	---	614	142	158	79	8.2	9.5	50
30	64	197	e44	e32	---	607	138	129	57	7.7	8.7	37
31	55	---	e42	e32	---	333	---	117	---	7.3	7.7	---
TOTAL	1643.5	7792	1862	1034	913	2966	11612	16473	6975	639.5	1045.6	753.2
MEAN	53.0	260	60.1	33.4	32.6	95.7	387	531	232	20.6	33.7	25.1
MAX	208	703	168	40	56	614	1520	3320	709	46	138	116
MIN	9.3	51	32	31	24	22	138	117	57	7.3	5.3	5.0
CFSM	.72	3.53	.82	.45	.44	1.30	5.27	7.23	3.16	.28	.46	.34
IN.	.83	3.94	.94	.52	.46	1.50	5.88	8.34	3.53	.32	.53	.38

CAL YR 1988 TOTAL 38604.9 MEAN 105 MAX 812 MIN 6.6 CFSM 1.44 IN. 19.54
WTR YR 1989 TOTAL 53708.8 MEAN 147 MAX 3320 MIN 5.0 CFSM 2.00 IN. 27.18

e Estimated

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 downstream from Little Androscoggin River and 2.1 mi downstream from north bridge between Auburn and Lewiston.

DRAINAGE AREA.--3,263 mi².

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

Chemical analyses: Water years 1052-56, 1966 to 1975.

REVISED RECORDS.--WSP 781: 1930, 1933-34. WSP 1301: 1932-36: WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 109.18 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records excellent. Considerable diurnal fluctuation and some regulation by powerplants above station. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Aziscohos, Umbagog, Auburn, and Thompson Lakes and Gulf Island Pond (Reservoirs in Androscoggin River Basin) with major regulation at Errol Dam 136 mi upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--61 years, 6,127 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 135,000 ft³/s, Mar. 20, 1936, gage height, 27.57 ft, from rating curve extended above 76,000 ft³/s, on basis of slope-area measurement of peak flow and computation of flow over dam; minimum daily, 340 ft³/s, Sept. 28, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 63,400 ft³/s, May 13, gage height, 17.42 ft; minimum daily, 1,230 ft³/s, Oct. 9, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2830	3730	7240	3620	3530	2730	10100	6150	7010	1920	2810	3790
2	2930	8170	6680	3600	3810	2660	8920	8890	6720	1660	2600	4260
3	2820	25300	6550	3600	3430	2530	9310	27800	9900	2970	2310	3700
4	2820	16200	6410	3810	3320	2570	9700	25000	11700	4010	2030	4290
5	2830	10500	5450	3540	3290	2600	11000	18200	9340	2910	2110	3160
6	3260	11600	4260	3120	3090	2500	22500	18800	8620	3240	7610	2670
7	3710	21200	3980	2800	2880	2470	35900	33100	9300	3780	9260	2640
8	1280	14400	3370	2900	2970	2310	34200	29900	11900	3540	5530	2640
9	1230	11900	3420	3610	3110	2290	23300	21200	12900	2570	4250	1760
10	1230	9960	3750	3850	2950	2650	17700	18100	14900	2390	3200	1340
11	3310	9190	3700	3590	2920	2710	15500	15200	21200	3910	3380	1400
12	2650	7890	3640	3410	2800	2260	12800	36300	18000	3240	3690	1430
13	3380	7660	3330	3350	2880	2470	11200	61900	13700	5470	3800	1410
14	3470	7630	3350	3420	3150	2350	10400	49000	11600	4240	3660	1360
15	2590	8550	3310	3780	3390	2880	9360	34300	10000	4980	3580	1460
16	2250	8050	3790	3780	3250	3220	10100	27500	10300	4490	4610	1340
17	2920	7620	4040	3770	3060	3980	11800	23400	14300	3260	4430	1430
18	2910	7620	4040	3790	2870	3480	13200	22000	12700	2140	3690	1510
19	2960	8240	3760	3750	2870	3200	14700	18800	12200	1770	2370	2310
20	4250	8040	3650	3750	2710	3170	13700	16800	10400	1570	2210	3620
21	4370	8680	3640	3630	2820	2860	12400	13900	8760	1410	2850	4200
22	4690	10200	3650	4090	3440	2720	11000	13300	8020	1390	3170	5150
23	4820	8580	3630	3670	3510	4040	10700	13300	7170	1400	3120	5360
24	7150	7680	3620	3570	3350	2750	9320	10800	6770	1510	2990	4510
25	6490	7460	3680	3480	3180	2830	8890	9960	6600	1460	2650	4280
26	6060	6990	3720	3490	3110	3070	8390	9440	6160	1480	2170	4490
27	5490	6210	3700	3310	3110	3300	7540	10100	5250	1610	2070	4630
28	4360	5910	3660	3110	2940	5130	7140	10300	4680	1990	3160	4460
29	4290	4980	3740	3130	---	10400	7470	9390	4470	2000	4310	5280
30	4210	8410	3660	3230	---	20200	6980	8260	4770	1970	4200	5760
31	3830	---	3630	3100	---	13700	---	7330	---	2530	3930	---
TOTAL	111390	288550	128050	108650	87740	126030	395220	628420	299340	82810	111750	95640
MEAN	3593	9618	4131	3505	3134	4065	13170	20270	9978	2671	3605	3188
MAX	7150	25300	7240	4090	3810	20200	35900	61900	21200	5470	9260	5760
MIN	1230	3730	3310	2800	2710	2260	6980	6150	4470	1390	2030	1340

CAL YR 1988 TOTAL 1816460 MEAN 4963 MAX 27500 MIN 1230
WTR YR 1989 TOTAL 2463590 MEAN 6750 MAX 61900 MIN 1230

ANDROSCOGGIN RIVER BASIN

01059010 ANDROSCOGGIN RIVER BELOW DRESSERS RIPS NEAR AUBURN, ME

LOCATION.--Lat 44°03'55", long 70°12'34", Androscoggin County, Hydrologic Unit 01040002, on right bank 2.0 mi downstream from Little Androscoggin River and 2.6 mi downstream from North Bridge between Auburn and Lewiston.

DRAINAGE AREA.--3,263 mi².

PERIOD OF RECORD.--Water years August 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1988 to current year.

pH: August 1988 to current year.

WATER TEMPERATURE: August 1988 to current year.

DISSOLVED OXYGEN: August 1988 to current year.

INSTRUMENTATION.--Water-quality monitor since August 1988. Continuous flow through system. Submersible pump located 50 ft. streamward from right bank.

REMARKS.--Monitor not operated during winter periods. Other interruptions in the record were due to malfunctions of the monitor or pumping system.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 356 microsiemens, Sept. 15, 1988; minimum, 46 microsiemens, June 13, 14, 1989.

pH: Maximum, 7.2 units, Aug. 31, 1988; minimum, 6.4 units, July 18, 1989.

WATER TEMPERATURE: Maximum, 29.0°C, Aug. 13, 1988; minimum, 15.5°C, June 17-20, Sept. 29, 30, 1989.

DISSOLVED OXYGEN: Maximum, 12.5 mg/L, June 15, 1989; minimum, 5.6 mg/L, July 31, 1989.

[illegible]

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, at cable suspended footbridge, 530 ft downstream from railroad bridge at Brunswick.

DRAINAGE AREA.--3,434 mi².

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1975 to September 1981.

WATER TEMPERATURE: November 1975 to September 1981.

REVISED RECORDS.--WDR ME-81-1: Drainage area.

REMARKS.--Water-discharge records for Androscoggin River at Auburn (station 01059000) used for computation of mean daily discharge.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML)	
OCT													
19...	0830	3120	143	6.8	8.0	11.0	3.4	760	10.9	99	310	130	
DEC													
01...	1130	7620	91	7.1	9.0	2.0	4.8	760	14.7	108	120	65	
FEB													
07...	1200	3030	142	7.0	1.0	0.0	5.0	760	14.6	100	190	40	
APR													
04...	0900	10200	67	6.8	8.0	1.0	5.7	760	14.3	101	1500	550	
JUN													
19...	1100	12800	64	7.1	22.5	16.0	1.8	760	9.8	100	230	60	
AUG													
29...	1430	4540	126	7.3	26.0	22.0	1.5	760	8.0	92	68	K 140	
DATE		HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT													
19...	22	6.7	1.2	20	1.4	20	0	16	18	19	18	17	
DEC													
01...	17	5.3	1.0	11	1.0	14	0	11	13	12	12	10	
FEB													
07...	22	6.8	1.2	20	1.5	22	0	18	19	19	23	18	
APR													
04...	13	3.9	0.8	6.8	1.3	9	0	7	8	8	13	8.1	
JUN													
19...	14	4.2	0.8	6.9	0.8	11	0	9	10	10	10	6.3	
AUG													
29...	18	5.7	1.0	16	1.3	17	0	14	15	14	14	15	

K Results based on colony count outside the acceptable range (non-ideal colony count).

01059400 - ANDROSCOGGIN RIVER AT BRUNSWICK, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	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)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DIS-SOLVED (MG/L AS P)	PHOSPHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT 19...	0.1	4.1	93	81	0.19	0.06	0.08	0.5	0.04	0.03	0.02
DEC 01...	0.1	5.8	68	55	0.19	0.03	0.04	0.5	0.03	0.01	0.01
FEB 07...	0.1	5.2	88	89	0.23	0.10	0.13	0.7	0.05	0.03	0.05
APR 04...	0.1	4.3	38	45	0.25	0.09	0.12	0.5	0.05	0.02	<0.01
JUN 19...	0.1	4.9	48	41	0.30	0.06	0.08	0.4	0.03	0.02	0.01
AUG 29...	0.1	5.2	89	69	0.29	0.06	0.08	0.5	0.05	0.02	0.02

DATE	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYLLIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGANESE, DIS-SOLVED (UG/L AS MN)
OCT 19...	100	<1	9	<0.5	1	<1	<3	3	180	<5	<4	35
DEC 01...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 07...	130	<1	11	<0.5	<1	<1	<3	1	130	<5	<4	51
APR 04...	140	<1	7	<0.5	<1	1	<3	3	130	<5	<4	67
JUN 19...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	50	<1	9	<0.5	<1	<1	<3	2	180	1	<4	21

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	VANADIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 19...	<0.1	10	<1	<1	<1.0	28	<6	10	6	51	64
DEC 01...	--	--	--	--	--	--	--	--	6	123	95
FEB 07...	<0.1	<10	2	<1	1.0	30	<6	10	3	25	100
APR 04...	<0.1	<10	7	<1	1.0	19	<6	15	15	413	98
JUN 19...	--	--	--	--	--	--	--	--	12	415	84
AUG 29...	<0.1	<10	1	<1	<1.0	30	<6	9	3	37	62

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 in top 4.0 ft 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 between gage heights 8.3 ft and 20.5 ft. 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 between gage heights 3.0 ft and 20.5 ft. Gage-height record furnished by Union Water Power Co.
- 01052000 AZISCOHOS LAKE on Magalloway River in Lincoln Township, 3 mi east of village of Wilsons Mills, Maine, completed in 1911 for power, has usable capacity of 9,593,000,000 ft³ between elevations 1,490.0 ft and 1,535.0 ft. Elevation record furnished by Union Water Power Co.
- 01053000 UMBAGOG LAKE on Androscoggin River at Errol Dam, 0.6 mi northeast of Errol, NH, used for power, has usable capacity of 3,080,160,000 ft³ between gage heights 5.5 ft and 15.0 ft. Gage-height record furnished by Union Water Power Co.
- 01056000 GULF ISLAND POND on Androscoggin River, 3 mi upstream from Lewiston, Maine, completed in 1928 for power, has capacity of 1,100,000,000 ft³ in top 10 ft of pond below elevation 262.0 ft. 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 between elevations 254.7 ft and 260.7 ft. 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 between gage heights 95.0 ft and 100.0 ft. Gage-height record furnished by Robinson Manufacturing Co.

MONTHEND CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	RANGELEY LAKE	MOOSELOOKMEGUNTIC LAKE	UPPER AND LOWER RICHARDSON LAKES	AZISCOHOS LAKE
SEPT. 30, 1988	1,188	6,332	3,288	8,080
OCT. 31.	937	5,231	3,326	7,220
NOV. 30.	904	6,402	5,162	7,964
DEC. 31.	737	3,688	4,510	7,732
JAN. 31, 1989	636	2,363	2,175	6,240
FEB. 28.	452	568	1,443	5,059
MAR. 31.	402	767	2,018	4,510
APR. 30.	1,038	4,402	4,158	7,332
MAY 31.	1,356	8,515	5,807	8,305
JUNE 30.	1,272	7,795	5,462	9,207
JULY 31.	1,071	6,544	4,565	7,790
AUG. 31.	1,188	6,154	4,047	6,940
SEPT. 30.	1,105	5,302	3,696	6,660

DATE	UMBAGOG LAKE	GULF ISLAND POND	LAKE AUBURN	THOMPSON LAKE
SEPT. 30, 1988	1,848	2,342	463	1,582
OCT. 31.	2,417	2,380	452	1,529
NOV. 30.	2,436	2,469	592	1,605
DEC. 31.	2,807	2,399	556	1,615
JAN. 31, 1989	2,768	2,411	544	1,537
FEB. 28.	2,748	2,246	544	1,567
MAR. 31.	2,573	2,457	580	1,765
APR. 30.	2,710	2,270	616	1,970
MAY 31.	2,651	2,472	616	1,991
JUNE 30.	2,866	2,047	580	1,907
JULY 31.	2,651	2,472	452	1,803
AUG. 31.	2,262	2,002	397	1,676
SEPT. 30.	2,378	2,016	342	1,632

NOTE.--Contents of Gulf Island Pond at 2400, Lake Auburn and Thompson Lake at 0800. Contents of all others at 0700 on first day of following month.

ROYAL RIVER BASIN

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 upstream from East Main Street bridge in Yarmouth.

DRAINAGE AREA.--141 mi².

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 10 to Mar. 12. Records good except for period of ice effect, Dec. 10 to Mar. 12, and period of no gage-height record, Jan. 11 to 19, which are fair. Low flow may be regulated by operation of mills upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--40 years, 274 ft³/s, 26.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s, Mar. 13, 1977, gage height, 8.46 ft, from rating curve extended above 5,200 ft³/s; minimum, 2.3 ft³/s, July 23, 24, 1980, gage height, 0.48 ft, caused by unusual regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximums (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 3	0300	3,860	5.19	May 3	0900	1,890	3.72
Nov. 21	1100	1,540	3.40	May 7	0700	2,010	3.83
Mar. 29	1800	1,570	3.43	May 12	2400	*8,190	*7.70
Apr. 6	2300	2,780	4.45	June 10	1900	1,830	3.67

Minimum daily discharge, 30 ft³/s, Sept 12-14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	128	388	e76	e62	e85	331	263	168	82	42	34
2	43	2610	324	e70	e96	e73	405	790	168	82	42	36
3	44	3240	277	e65	e78	e66	706	1790	183	81	41	37
4	40	1500	256	e61	e66	e62	1280	1100	177	77	42	37
5	41	768	192	e58	e64	e60	1210	625	185	74	43	34
6	47	748	166	e55	e62	e58	2290	1290	219	81	46	32
7	51	769	184	e53	e58	e54	2430	1880	483	85	45	31
8	48	526	175	e52	e54	e52	1460	1070	480	79	45	31
9	49	396	149	e56	e52	e51	1000	600	663	69	43	31
10	59	333	e118	e70	e49	e52	642	434	1220	65	42	31
11	61	315	e109	e64	e47	e54	524	811	1610	69	40	31
12	69	278	e99	e56	e47	e58	431	5880	813	65	43	30
13	62	275	e91	e54	e45	64	358	6930	408	60	73	30
14	55	681	e94	e52	e54	85	329	3220	331	59	115	30
15	51	566	e115	e96	e73	249	297	1390	282	59	75	79
16	50	386	e121	e115	e71	565	860	885	707	58	60	93
17	49	350	e99	e94	e62	465	1330	636	747	58	51	62
18	50	455	e85	e85	e56	326	839	471	501	57	46	53
19	55	377	e73	e83	e52	216	674	394	370	58	42	44
20	62	368	e71	e75	e49	192	596	354	274	85	41	51
21	60	1390	e78	e71	e85	154	457	311	220	81	42	69
22	198	1120	e85	e58	e419	149	390	290	184	64	42	65
23	715	612	e73	e52	e518	173	333	262	158	56	41	55
24	458	400	e71	e56	e234	179	297	236	141	52	39	48
25	324	324	e99	e56	e169	339	271	233	131	50	37	44
26	249	287	e118	e47	e135	970	254	220	117	50	37	53
27	257	264	e102	e47	e115	1260	250	339	107	54	37	95
28	211	386	e99	e51	e99	1120	246	302	100	57	37	71
29	169	764	e118	e49	---	1450	237	239	101	54	35	58
30	140	552	e99	e52	---	1150	237	198	92	48	35	49
31	126	---	e85	e52	---	539	---	177	---	45	35	---
TOTAL	3934	21168	4213	1981	2971	10370	20964	33620	11340	2014	1434	1444
MEAN	127	706	136	63.9	106	335	699	1085	378	65.0	46.3	48.1
MAX	715	3240	388	115	518	1450	2430	6930	1610	85	115	95
MIN	40	128	71	47	45	51	237	177	92	45	35	30
CFSM	.90	5.00	.96	.45	.75	2.37	4.96	7.69	2.68	.46	.33	.34
IN.	1.04	5.58	1.11	.52	.78	2.74	5.53	8.87	2.99	.53	.38	.38

CAL YR 1988 TOTAL 92483 MEAN 253 MAX 3240 MIN 35 CFSM 1.79 IN. 24.40
WTR YR 1989 TOTAL 115453 MEAN 316 MAX 6930 MIN 30 CFSM 2.24 IN. 30.46

e Estimated

01064000 PRESUMPCOT RIVER AT OUTLET OF SEBAGO LAKE, ME

LOCATION.--Lat 42°49'03", long 70°27'01", Cumberland County, Hydrologic Unit 01060001, at dam of hydroelectric plant at Eel Weir Falls 1.0 mi downstream from lake outlet.

DRAINAGE AREA.--441 mi².

PERIOD OF RECORD.--Discharge: Jan. 1887 to current year.

Chemical analyses: Water years 1953, 1971.

REVISED RECORDS.--WSP 1301: 1920-50 (adjusted monthly runoff). WRD ME-81-1: Drainage area.

GAGES.--Nonrecording gages in forebay and tailrace of hydroelectric plant at Eel Weir Falls and at dam on outlet of Sebago Lake.

REMARKS.--Discharge computed from wheel ratings and from records of openings of two regulating gates at Eel Weir hydroelectric plant. Water wasted at rare intervals through gates in dam on outlet of Sebago Lake; flow computed from records of gate openings. Water diverted by Portland Water District and leakage through Dam, totaling about 40 ft³/s, not included in figures of daily discharge. Flow regulated by Long Lake and Sebago Lake, surface area, 45.6 mi², which have a combined usable capacity of 11,000,000,000 ft³.

COOPERATION.--Records furnished by S. D. Warren Co.

AVERAGE DISCHARGE.--102 years, 657 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	340	667	667	671	655	340	340	2650	546	415	423
2	340	340	1000	667	671	655	340	340	2650	546	423	423
3	340	340	667	667	671	670	340	340	2320	546	423	423
4	340	340	667	667	670	670	340	340	50	546	423	415
5	340	340	667	667	670	670	340	340	50	546	423	423
6	340	340	667	992	670	670	340	340	50	546	423	423
7	340	340	667	992	670	670	340	340	50	546	423	423
8	340	340	667	667	670	670	340	831	50	546	423	423
9	340	340	667	667	670	670	340	985	50	423	423	423
10	358	340	667	667	670	670	340	1650	1830	423	423	423
11	340	340	667	667	670	670	340	2650	1490	423	423	423
12	340	340	658	667	670	670	340	3310	1490	423	423	423
13	340	340	658	658	670	670	340	3310	1490	423	423	415
14	340	340	658	667	670	670	340	3310	1490	423	423	350
15	340	340	554	667	670	670	340	3310	1490	423	423	350
16	340	340	667	667	670	670	340	3310	1490	423	423	350
17	340	340	667	667	670	670	340	3310	1490	423	423	350
18	375	507	667	667	670	670	340	3310	1490	423	423	350
19	362	670	667	667	670	670	340	3310	1490	423	423	350
20	337	670	667	667	670	670	340	3310	1490	423	423	350
21	362	670	667	667	670	340	340	3310	1490	423	423	340
22	375	650	667	667	670	340	340	2640	1490	423	423	340
23	340	650	667	667	670	340	340	2350	1490	423	423	340
24	340	650	667	667	670	340	340	2350	1490	423	423	340
25	340	655	667	667	670	340	340	1830	1490	423	423	340
26	340	655	667	667	670	340	340	1830	1150	423	423	340
27	340	655	667	667	670	340	340	1830	1150	423	423	340
28	340	655	667	667	670	340	340	1830	819	423	423	340
29	340	675	667	667	---	340	340	985	819	423	423	340
30	340	662	667	667	---	340	340	1740	546	423	423	340
31	340	---	667	658	---	340	---	2650	---	423	423	---
TOTAL	10669	14204	20870	21309	18763	17110	10200	61631	36584	14097	13105	11333
MEAN	344	473	673	687	670	552	340	1988	1219	455	423	378
MAX	375	675	1000	992	671	670	340	3310	2650	546	423	423
MIN	337	340	554	658	670	340	340	340	50	423	415	340

CAL YR 1988 TOTAL 174775 MEAN 478 MAX 1000 MIN 50

WTR YR 1989 TOTAL 249875 MEAN 685 MAX 3310 MIN 50

PRESUMPCOT RIVER BASIN

01064118 PRESUMPCOT RIVER AT WESTBROOK, ME

LOCATION.--Lat 43°41'13", long 70°20'49", Cumberland County, Hydrologic Unit 01060001, on right bank, 0.4 mi downstream from Cumberland Street Bridge in Westbrook, under S. D. Warren owned bridge.

DRAINAGE AREA.--577 mi².

PERIOD OF RECORD.--October 1975 to current year. Prior to October 1984, published as "near West Falmouth".

GAGE.--Water-stage recorder. Datum of gage is 17.39 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 13, 1984, at site 4.1 mi. downstream at datum 6.24 ft lower.

REMARKS.--Estimated daily discharges: Oct. 1-30, Nov. 6-11, Nov. 23 to Mar. 12, Mar. 31 to Apr. 1, May 7, May 25 to June 5, June 9, and July 1 to Sept. 30. Records fair, except for estimated daily discharges, which are poor. Flow regulated by Sebago Lake and many small powerplants upstream.

AVERAGE DISCHARGE.--14 years, 964 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s, Mar. 14, 1977, gage height, 21.11 ft, former site and datum; minimum daily, 30 ft³/s, July 9, 1976, former site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,200 ft³/s, May 12, gage height 22.26 ft; minimum daily, 225 ft³/s, June 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e410	611	e1080	e740	e720	e720	e680	666	e2690	e610	e455	e445
2	e400	4450	e1300	e730	e740	e710	1020	1410	e2600	e605	e455	e445
3	e395	2670	e950	e720	e730	e710	1240	2140	e2500	e600	e455	e445
4	e390	1170	e900	e720	e720	e705	1490	1370	e225	e600	e455	e450
5	e390	1090	e840	e720	e715	e700	1340	1120	e240	e600	e460	e450
6	e395	e1000	e830	e1010	e715	e700	2310	1750	321	e610	e460	e450
7	e390	e910	e825	e1000	e715	e700	2070	e2160	397	e615	e460	e450
8	e390	e825	e815	e720	e710	e700	1630	1590	657	e580	e460	e450
9	e395	e710	e800	e720	e705	e700	1340	1680	e1020	e490	e465	e450
10	e410	e650	e770	e720	e700	e700	1090	1750	1710	e485	e460	e450
11	e400	e585	e760	e715	e700	e705	907	3230	2640	e480	e460	e450
12	e400	543	e745	e710	e700	e715	885	8530	1900	e475	e475	e435
13	e400	538	e740	e700	e705	749	642	7850	1690	e475	e495	e410
14	e395	1390	e700	e715	e715	819	552	6420	1730	e475	e520	e380
15	e390	1010	e680	e750	e730	1220	658	4740	1740	e475	e490	e415
16	e390	725	e740	e750	e725	1370	1530	3840	2240	e475	e480	e430
17	e400	994	e740	e750	e710	1230	1600	3600	1970	e480	e470	e405
18	e400	1330	e740	e745	e700	1130	1280	3480	1850	e480	e460	e395
19	e405	1120	e735	e740	e700	762	1150	3440	1740	e480	e460	e395
20	e410	1260	e730	e735	e705	782	897	3410	1670	e490	e460	e395
21	e450	2160	e730	e725	e820	632	776	3310	1640	e495	e460	e395
22	e600	1340	e735	e715	e1070	510	747	3080	1630	e480	e460	e395
23	e1020	e1160	e730	e700	e1170	469	592	2530	1620	e470	e460	e380
24	e830	e1000	e730	e710	e870	587	522	2270	1610	e465	e455	e375
25	e680	e945	e750	e720	e790	1010	545	e2000	1600	e465	e455	e385
26	e630	e910	e760	e710	e780	1550	628	e2010	1530	e465	e455	e405
27	e590	e960	e760	e700	e755	1420	606	e2040	1350	e470	e455	e420
28	e540	e1180	e760	e695	e740	1320	586	e1600	1370	e475	e450	e405
29	e505	e1380	e770	e695	---	1520	589	e1200	1180	e470	e450	e385
30	e480	e1200	e760	e700	---	1240	584	e2100	838	e465	e450	e380
31	475	---	e750	e700	---	e880	---	e2700	---	e460	e450	---
TOTAL	14755	35816	24655	22880	21255	27665	30486	89016	45898	15760	14355	12520
MEAN	476	1194	795	738	759	892	1016	2871	1530	508	463	417
MAX	1020	4450	1300	1010	1170	1550	2310	8530	2690	615	520	450
MIN	390	538	680	695	700	469	522	666	225	460	450	375

CAL YR 1988 TOTAL 269792 MEAN 737 MAX 4450 MIN 130
WTR YR 1989 TOTAL 355061 MEAN 973 MAX 8530 MIN 225

e Estimated

01064140 PRESUMPCOT RIVER NEAR WEST FALMOUTH, ME
(National stream-quality accounting network station)

LOCATION.--Lat 43°43'28", long 70°18'12", Cumberland County, Hydrologic Unit 01060001, on right bank 50 ft. upstream from bridge on Blackstrap Road, 0.1 mi downstream from Maine Turnpike, 0.6 mi downstream from Meader Brook, 0.9 mi upstream from Piscataqua River, and 1.5 mi south of West Falmouth.

DRAINAGE AREA.--598 mi².

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 TEMPERATURE: July 1976 to current year.

DISSOLVED OXYGEN: July 1976 to current year.

DISCHARGE: October 1975 to September 1984.

INSTRUMENTATION.--Water-quality monitor since July 1976. Continuous flow through system. Suction lift pump located in shelter house. Pump intake located 30 ft streamward from right bank.

REMARKS.--Beginning in water year 1985, monitor not operated during winter periods. Other interruptions in the record were due to malfunctions of the monitor or pumping system. Beginning in the 1985 water year, water-discharge records for the Presumpscot River at Westbrook (station 01064118) are used for computation of mean daily discharge.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 375 microsiemens, Jan. 8, 1979; minimum, 21 microsiemens, July 28, 1982.

pH: Maximum, 9.4 units, Dec. 7, 1977; minimum, 5.3 units, May 22, 1978.

WATER TEMPERATURE: Maximum, 29.0°C, July 21, 1977, Aug. 8, 9, 1980, Aug. 6, 7, 11, 1988; minimum, 0.0°C, on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.0 mg/L, Jan. 30, 1983; minimum, 4.4 mg/L, Aug. 8, 1980.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: minimum, 1.6 mg/L, July 9, 1976.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND	SPE-CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	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 18...	0930	415	122	7.1	14.0	11.5	3.2	760	10.5	97	1400	130
DEC 14...	0930	725	104	7.1	0.0	1.5	3.5	760	14.1	101	320	110
FEB 16...	0930	751	134	7.3	1.0	1.0	4.6	770	14.9	103	1900	4400
APR 03...	0930	1290	112	7.1	3.0	3.0	6.5	760	13.2	99	240	K 90
JUN 13...	0900	1750	55	6.8	13.0	16.0	2.3	750	10.0	103	130	55
AUG 29...	0900	466	133	7.5	26.0	21.5	1.5	760	7.9	89	K 170	K 170

K Results based on colony count outside the acceptable range (non-ideal colony count).

PRESUMPCOT RIVER BASIN

01064140 PRESUMPCOT RIVER NEAR WEST FALMOUTH, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	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)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT 18...	<0.1	3.1	78	71	0.10	0.06	0.08	0.6	0.04	0.04	0.02
DEC 14...	0.1	2.7	56	60	0.48	0.03	0.04	0.5	0.04	0.04	0.02
FEB 16...	0.1	2.7	75	79	0.22	0.09	0.12	0.5	0.03	0.03	0.01
APR 03...	0.1	4.0	59	59	0.19	0.06	0.08	0.5	0.05	0.02	<0.01
JUN 13...	0.1	2.6	39	32	0.11	0.03	0.04	0.4	0.07	0.06	0.05
AUG 29...	0.1	1.9	79	70	<0.10	0.01	0.01	0.3	0.04	0.02	0.05

DATE	ALUMINUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHROMIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGANESE, DIS- SOLVED (UG/L AS MN)
OCT 18...	20	<1	7	1	1	<1	<3	2	74	<5	<4	31
DEC 14...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 16...	30	<1	9	<0.5	<1	<1	<3	1	44	<5	<4	36
APR 03...	70	<1	7	<0.5	<1	1	<3	2	12	<5	<4	48
JUN 13...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	30	<1	8	<0.5	<1	<1	<3	<1	62	<1	<4	32

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYBDENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELENIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRONTIUM, DIS- SOLVED (UG/L AS SR)	VANADIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDIMENT, SUS- PENDED (MG/L)	SEDIMENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 18...	<0.1	<10	<1	<1	<1.0	32	<6	5	23	26	45
DEC 14...	--	--	--	--	--	--	--	--	68	133	4
FEB 16...	<0.1	<10	1	<1	<1.0	32	<6	5	13	26	23
APR 03...	<0.1	<10	3	<1	1.0	31	<6	8	10	35	97
JUN 13...	--	--	--	--	--	--	--	--	18	85	60
AUG 29...	<0.1	<10	<1	<1	<1.0	31	<6	10	2	2.5	100

01064140 PRESUMPCOT RIVER NEAR WEST FALMOUTH, ME--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	157	130	144	---	---	---	---	---	---	---	---	---
2	129	120	125	---	---	---	---	---	---	---	---	---
3	132	111	122	---	---	---	---	---	---	---	---	---
4	169	134	152	---	---	---	---	---	---	---	---	---
5	180	148	168	---	---	---	---	---	---	---	---	---
6	172	156	163	---	---	---	---	---	---	---	---	---
7	156	142	149	---	---	---	---	---	---	---	---	---
8	151	137	143	---	---	---	---	---	---	---	---	---
9	154	122	152	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	180	111	146	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	133	112	125
2	---	---	---	---	---	---	---	---	---	139	84	117
3	---	---	---	---	---	---	---	---	---	90	82	86
4	---	---	---	---	---	---	---	---	---	119	90	101
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	131	88	108
7	---	---	---	---	---	---	---	---	---	95	91	93
8	---	---	---	---	---	---	---	---	---	101	78	94
9	---	---	---	---	---	---	---	---	---	93	81	90
10	---	---	---	---	---	---	---	---	---	85	73	80
11	---	---	---	---	---	---	---	---	---	78	61	69
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	59	56	57
24	---	---	---	---	---	---	---	---	---	60	56	59
25	---	---	---	---	---	---	---	---	---	184	57	82
26	---	---	---	---	---	---	---	---	---	73	61	66
27	---	---	---	---	---	---	---	---	---	64	61	63
28	---	---	---	---	---	---	---	---	---	64	62	63
29	---	---	---	---	---	---	---	---	---	73	61	64
30	---	---	---	---	---	---	---	---	---	83	73	78
31	---	---	---	---	---	---	---	---	---	73	55	65
MONTH	---	---	---	---	---	---	---	---	---	184	55	82

01064140 PRESUMPCOT RIVER NEAR WEST FALMOUTH, ME--Continued

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.0	17.0	17.5	---	---	---	---	---	---	---	---	---
2	18.5	17.5	18.0	---	---	---	---	---	---	---	---	---
3	18.5	18.0	18.0	---	---	---	---	---	---	---	---	---
4	18.5	17.5	18.0	---	---	---	---	---	---	---	---	---
5	17.5	16.0	17.0	---	---	---	---	---	---	---	---	---
6	16.0	15.5	16.0	---	---	---	---	---	---	---	---	---
7	15.5	14.5	15.0	---	---	---	---	---	---	---	---	---
8	14.5	13.5	14.0	---	---	---	---	---	---	---	---	---
9	13.5	13.0	13.5	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	18.5	13.0	16.5	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	11.0	10.5	10.5
2	---	---	---	---	---	---	---	---	---	11.0	8.0	9.5
3	---	---	---	---	---	---	---	---	---	7.0	6.0	6.5
4	---	---	---	---	---	---	---	---	---	10.0	7.0	8.5
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	10.5	9.0	10.0
7	---	---	---	---	---	---	---	---	---	10.5	8.5	9.5
8	---	---	---	---	---	---	---	---	---	12.0	10.0	11.0
9	---	---	---	---	---	---	---	---	---	12.0	11.0	11.5
10	---	---	---	---	---	---	---	---	---	12.0	10.0	11.5
11	---	---	---	---	---	---	---	---	---	11.5	9.5	10.5
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	14.0	12.5	13.0
24	---	---	---	---	---	---	---	---	---	13.5	13.0	13.5
25	---	---	---	---	---	---	---	---	---	16.0	13.0	14.0
26	---	---	---	---	---	---	---	---	---	15.5	14.5	15.0
27	---	---	---	---	---	---	---	---	---	15.0	14.5	15.0
28	---	---	---	---	---	---	---	---	---	14.5	14.0	14.0
29	---	---	---	---	---	---	---	---	---	15.0	14.0	14.5
30	---	---	---	---	---	---	---	---	---	16.0	15.0	15.5
31	---	---	---	---	---	---	---	---	---	15.0	15.0	15.0
MONTH	---	---	---	---	---	---	---	---	---	16.0	6.0	12.0

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

OXYGEN DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

[illegible]

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 downstream from Swift River and Conway.

DRAINAGE AREA.--385 mi².

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 1301: 1908-09. WDR ME-81-1: Drainage area. WDR ME-87-1: 1936 (M), 1951 (M), 1953 (M), 1960 (M), 1977 (M).

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

REMARKS.--Estimated daily discharges: Oct. 1-11, 13-18, and Dec. 5 to Mar. 27. Records good except for periods of ice-effect, Dec. 5 to Mar. 27, and period of doubtful gage-height record, Oct. 1-11, and 13-18, which are fair.

Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--66 years (water years 1904-09, 1930 to current year), 932 ft³/s, 32.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,200 ft³/s, Mar. 27, 1953, gage height, 17.20 ft., maximum gage height, 19.03 ft, Mar. 07, 1979, (ice jam); minimum discharge, 40 ft³/s, Mar. 16, 1932, gage height, 1.61 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	1415	9,530	8.19	May 2	2100	16,000	10.01
Nov. 6	1100	10,500	8.47	May 6	2000	19,100	10.79
Apr. 7	0645	9,070	8.05	May 12	1600	*23,200	*11.72

Minimum daily discharge, 140 ft³/s, Oct. 4, 5, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e155	345	841	e290	e240	e290	1300	1180	768	477	180	189
2	e150	5360	774	e270	e350	e280	1070	7440	725	465	173	371
3	e145	3130	721	e256	e290	e270	1070	7170	1060	438	178	375
4	e140	1660	682	e247	e245	e260	1180	3480	839	415	182	268
5	e140	1240	e540	e240	e242	e250	2310	2720	850	403	896	231
6	e150	6120	e500	e235	e240	e245	6540	10100	782	399	1600	212
7	e180	3070	e440	e232	e238	e240	6950	8300	1200	424	541	202
8	e155	2060	e380	e250	e235	e235	3710	4250	1200	377	385	196
9	e140	1530	e340	e280	e230	e225	2460	2790	1280	343	322	189
10	e160	1250	e310	e330	e228	e220	2040	2220	3840	347	276	184
11	e190	1190	e280	e305	e225	e215	1670	3660	3050	481	251	179
12	293	1010	e255	e290	e222	e210	1450	16600	2010	389	375	172
13	e245	908	e245	e285	e220	e208	1300	8580	1440	343	1200	167
14	e195	1170	e235	e275	e218	e215	1200	4640	1240	317	2020	165
15	e175	1150	e255	e270	e215	e245	1150	3320	1090	309	840	209
16	e165	995	e275	e315	e220	e485	1370	2660	2510	289	576	242
17	e160	1220	e265	e300	e232	e450	1600	2210	2060	272	454	233
18	e180	1590	e255	e285	e225	e400	2210	1930	1640	262	384	244
19	919	1120	e245	e275	e220	e355	2450	1740	1350	251	340	219
20	510	1010	e240	e265	e210	e340	1980	1550	1130	250	320	312
21	363	1750	e240	e255	e225	e310	1550	1390	1010	297	329	884
22	342	1380	e340	e250	e275	e295	1470	1370	890	256	304	480
23	1020	1090	e290	e248	e600	e270	1250	1180	840	239	275	406
24	721	967	e270	e245	e470	e280	1140	1090	1010	225	263	468
25	696	852	e350	e243	e400	e300	1050	1100	846	213	248	381
26	570	821	e325	e240	e350	e340	1020	988	717	203	231	369
27	471	791	e295	e238	e325	e575	1010	1370	641	195	219	593
28	416	970	e315	e235	e305	1220	999	1160	640	193	214	478
29	418	1210	e390	e232	---	5490	968	986	607	200	206	389
30	397	929	e350	e230	---	3080	1000	843	525	199	204	338
31	360	---	e310	e230	---	1650	---	783	---	186	196	---
TOTAL	10321	47888	11553	8141	7695	19448	56467	108800	37790	9657	14182	9345
MEAN	333	1596	373	263	275	627	1882	3510	1260	312	457	311
MAX	1020	6120	841	330	600	5490	6950	16600	3840	481	2020	884
MIN	140	345	235	230	210	208	968	783	525	186	173	165
CFSM	.86	4.15	.97	.68	.71	1.63	4.89	9.12	3.27	.81	1.19	.81
IN.	1.00	4.63	1.12	.79	.74	1.88	5.46	10.51	3.65	.93	1.37	.90

CAL YR 1988 TOTAL 283766 MEAN 775 MAX 15000 MIN 105 CFSM 2.01 IN. 27.42
WTR YR 1989 TOTAL 341287 MEAN 935 MAX 16600 MIN 140 CFSM 2.43 IN. 32.98

e Estimated

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 upstream from bridge on State Highway 153 at Effingham Falls, 0.3 mi downstream from outlet of Ossipee Lake, and 4 mi northwest of Effingham.

DRAINAGE AREA.--330 mi².

PERIOD OF RECORD.--Discharge: September 1942 to current year.
Chemical analyses: Water year 1955.

GAGE.--Water-stage recorder. Elevation of gage is 390 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Ossipee and Silver Lakes and Pine River Pond, combined capacity, 1,430,000,000 ft³. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--47 years, 685 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,360 ft³/s, May 14, gage height, 7.60 ft; minimum, 86 ft³/s, Sept. 13; minimum daily, 119 ft³/s, Oct. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	541	778	279	234	234	1490	528	557	443	187	170
2	129	613	750	276	233	234	1370	935	558	438	173	170
3	128	927	712	274	234	233	1230	2000	557	383	168	170
4	127	1030	688	267	234	232	1180	2460	560	306	168	170
5	127	1010	638	252	234	232	1420	2380	557	306	168	170
6	126	998	606	255	232	231	1950	2380	614	307	168	170
7	124	1030	588	251	231	231	2540	2860	678	308	177	170
8	123	999	573	251	231	231	2730	3070	712	309	188	169
9	123	959	557	254	231	229	3010	2840	1050	310	178	168
10	122	908	539	248	230	229	2750	2550	1400	312	166	168
11	122	872	519	245	229	229	2460	2330	1620	324	166	167
12	121	825	503	244	229	227	2120	2620	1920	333	168	166
13	120	795	494	245	227	227	1900	3190	1910	335	171	157
14	120	787	490	241	227	227	1850	3320	1600	335	173	154
15	120	781	488	243	227	227	1820	3110	1320	334	393	155
16	120	585	336	243	227	228	1810	2800	1450	337	628	154
17	120	485	238	240	226	229	1800	2510	1590	327	350	155
18	120	674	240	240	225	231	1620	2230	1630	322	174	155
19	120	769	241	240	225	232	1520	1680	1590	321	174	155
20	119	763	243	240	223	234	1570	1380	1500	317	175	157
21	265	780	247	240	224	234	1530	1290	1120	314	207	158
22	369	814	252	238	227	236	1470	1060	932	312	242	458
23	368	830	253	238	227	236	1390	908	902	309	241	598
24	514	826	258	237	229	236	1200	883	879	303	204	592
25	594	804	271	236	230	238	1090	874	854	303	174	584
26	587	779	279	236	231	241	1030	680	482	302	173	466
27	580	765	276	236	233	299	719	541	317	316	173	385
28	573	791	281	236	234	413	516	545	321	264	173	387
29	566	823	289	235	---	722	523	548	328	200	172	387
30	557	799	283	234	---	1210	526	552	385	200	171	386
31	549	---	284	234	---	1460	---	555	---	192	170	---
TOTAL	7983	24362	13194	7628	6424	10132	48134	55609	29893	9722	6413	7671
MEAN	258	812	426	246	229	327	1604	1794	996	314	207	256
MAX	594	1030	778	279	234	1460	3010	3320	1920	443	628	598
MIN	119	485	238	234	223	227	516	528	317	192	166	154

CAL YR 1988 TOTAL 184636 MEAN 504 MAX 3390 MIN 119
WTR YR 1989 TOTAL 227165 MEAN 622 MAX 3320 MIN 119

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 downstream from highway bridge in Cornish and 1.3 mi upstream from mouth.

DRAINAGE AREA.--452 mi².

PERIOD OF RECORD.--Discharge: July 1916 to current year.

Chemical analyses: Water year 1954.

REVISED RECORDS.--WSP 1301: 1927-29(M). WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 276.10 ft above 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 higher.

REMARKS.--Estimated daily discharges: Dec. 10 to Mar. 27. Records good except for period of ice effect, Dec. 10 to Mar. 27, which is fair. Flow partly regulated by mill at Kezer Falls and by Ossipee and Silver Lakes, and Pine River, Bickford, and Colcord Ponds, combined capacity 1,600,000,000 ft³. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--73 years, 879 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,200 ft³/s, Mar. 21, 1936, gage height, 16.32 ft present datum, from rating curve extended above 7,500 ft³/s; minimum daily, 65 ft³/s, Sept. 8, 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,010 ft³/s, May 12, gage height, 7.44 ft; minimum daily, 155 ft³/s, Oct. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	642	1100	e371	e310	e326	1980	833	828	575	245	205
2	176	1530	1040	e362	e344	e323	1930	1510	829	577	227	220
3	184	1510	995	e355	e326	e319	1910	2970	830	570	226	208
4	158	1420	951	e345	e312	e314	2050	3290	826	450	217	206
5	171	1330	877	e328	e311	e311	2230	3060	817	421	219	207
6	179	1360	832	e329	e308	e309	3740	3360	868	428	220	200
7	163	1360	800	e325	e306	e307	4020	3750	1120	419	217	204
8	165	1310	781	e330	e305	e305	4080	3820	1250	418	244	201
9	174	1250	753	e341	e304	e300	3940	3590	1420	406	234	200
10	163	1170	e725	e353	e302	e299	3590	3220	2150	423	219	199
11	170	1130	e697	e342	e300	e297	3200	3110	2370	466	212	198
12	175	1050	e680	e336	e299	e294	2800	4550	2300	438	244	197
13	161	1030	e669	e335	e297	e293	2470	4550	2450	433	273	195
14	161	1120	e653	e328	e296	e300	2100	4370	2200	434	286	188
15	155	1070	e621	e329	e295	e315	1730	4060	1760	450	254	208
16	156	944	e590	e343	e297	e382	1960	3630	2060	433	663	202
17	158	713	e490	e335	e300	e368	2170	3240	2200	428	656	209
18	157	791	e399	e330	e296	e352	2080	2880	2150	420	274	207
19	166	994	e391	e327	e295	e345	2170	2490	2080	419	230	200
20	163	1010	e387	e324	e290	e335	2190	1900	1940	409	224	239
21	158	1430	e383	e321	e295	e330	2110	1770	1690	399	227	271
22	452	1330	e379	e317	e314	e325	2010	1650	1270	387	272	271
23	538	1210	e387	e317	e417	e320	1890	1330	1190	382	287	684
24	518	1150	e387	e315	e378	e330	1730	1300	1160	377	283	705
25	707	1110	e382	e313	e357	e340	1520	1360	1120	363	223	683
26	696	1080	e382	e312	e342	e365	1440	1230	952	361	212	702
27	672	1050	e370	e311	e336	e500	1290	934	501	364	210	568
28	671	1140	e381	e310	e331	1060	849	888	509	403	210	489
29	665	1290	e413	e309	---	1620	826	858	494	286	209	469
30	649	1180	e394	e307	---	1820	830	838	481	262	212	456
31	638	---	e382	e307	---	1860	---	826	---	244	209	---
TOTAL	9702	34704	18671	10207	8863	15264	66835	77167	41815	12845	8138	9391
MEAN	313	1157	602	329	317	492	2228	2489	1394	414	263	313
MAX	707	1530	1100	371	417	1860	4080	4550	2450	577	663	705
MIN	155	642	370	307	290	293	826	826	481	244	209	188

CAL YR 1988 TOTAL 257271 MEAN 703 MAX 4220 MIN 155

WTR YR 1989 TOTAL 313602 MEAN 859 MAX 4550 MIN 155

e Estimated

SACO RIVER BASIN
01066000 SACO RIVER AT CORNISH, ME
(National stream-quality accounting network station)

LOCATION.--Lat 43°48'29", long 70°46'53", Cumberland County, Hydrologic Unit 01060002, on left bank 300 ft upstream from highway bridge at Cornish and 0.4 mi downstream from Ossipee River.

DRAINAGE AREA.--1,293 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1916 to current year.

REVISED RECORDS.--WSP 1301: 1917-18(M), 1936(M). WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 263.48 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 30, 1919, nonrecording gage on bridge downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 11 to Mar. 14. Records good except for period of ice effect, Dec. 11 to Mar. 14, which is 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.

AVERAGE DISCHARGE.--73 years, 2,700 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,000 ft³/s, Mar. 21-22, 1936, gage height, 21.90 ft, (from floodmarks); minimum daily, 244 ft³/s, Oct. 7, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,300 ft³/s, May 15; gage height, 11.67 ft.; minimum daily 410 ft³/s, Oct. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	512	1290	3090	e1060	e813	e946	4910	2830	3080	2020	671	583
2	688	2950	2960	e1060	e859	e942	4870	3850	2980	1910	655	643
3	482	3680	2710	e1120	e835	e936	4930	6150	2800	1830	537	629
4	490	3950	2620	e1220	e816	e930	5080	6950	2720	1730	644	628
5	440	3890	2400	e1030	e814	e788	5340	7740	2770	1670	644	706
6	562	4110	2350	e922	e811	e813	7790	9130	2760	1530	499	848
7	498	4250	2120	e870	e809	e821	8510	10100	3020	1550	1330	701
8	494	4560	2050	e870	e808	e808	9230	11400	3260	1420	1260	560
9	410	4770	1940	e890	e806	e833	10000	12700	3520	1430	1180	549
10	646	4830	1810	e908	e705	e800	10200	12000	4500	1260	944	513
11	594	4650	e1450	e894	e802	e797	9800	11300	5130	1410	889	516
12	487	4290	e1380	e887	e778	e663	8920	13500	5330	1270	926	512
13	550	4000	e1300	e885	e602	e716	7850	14100	5730	1380	955	511
14	660	3880	e1270	e877	e764	e778	6800	17400	5700	1130	1200	504
15	559	3710	e1470	e877	e762	963	5880	17900	5250	1290	1670	531
16	577	3420	e1470	e1000	e765	1380	5870	16100	5670	1160	1880	520
17	587	3140	e1390	e844	e736	1250	5980	13800	5750	1110	1940	535
18	486	3130	e1390	e851	e541	1320	5770	11800	5740	1100	1530	534
19	511	3300	e1420	e903	e621	1210	5810	10200	5730	1100	1180	523
20	546	3340	e1290	e899	e675	1170	5880	8650	5470	1060	1330	668
21	897	4010	e1340	e895	e797	1180	5830	7600	5000	1020	923	834
22	1140	3860	e1310	e886	e710	1170	5680	6760	4360	974	1040	887
23	1190	3730	e1190	e863	e931	1210	5420	5760	4020	886	987	1390
24	1210	3620	e1310	e822	e918	1240	4980	5210	3700	913	981	1380
25	1720	3450	e1150	e819	e942	1240	4620	5010	3430	834	890	1340
26	1550	3300	e1200	e818	e990	1420	4170	4420	3080	893	851	1470
27	1480	3170	e1120	e817	e981	1900	3930	4000	2560	908	846	1250
28	1510	3110	e1150	e733	e952	2460	3300	3780	2390	828	708	1190
29	1420	3280	e1320	e811	---	3670	3130	3540	2240	730	685	1190
30	1420	3180	e1090	e809	---	4610	3060	3390	2130	690	667	1190
31	1380	---	e1070	e809	---	4720	---	3240	---	674	651	---
TOTAL	25696	109850	51130	27949	22343	43684	183540	270310	119820	37710	31093	23835
MEAN	829	3662	1649	902	798	1409	6118	8720	3994	1216	1003	794
MAX	1720	4830	3090	1220	990	4720	10200	17900	5750	2020	1940	1470
MIN	410	1290	1070	733	541	663	3060	2830	2130	674	499	504

CAL YR 1988 TOTAL 772048 MEAN 2109 MAX 11100 MIN 410
WTR YR 1989 TOTAL 946960 MEAN 2594 MAX 17900 MIN 410

e Estimated

01066000 SACO RIVER AT CORNISH, ME--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1975 to September 1981.

WATER TEMPERATURE: July 1975 to September 1981.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	BARO- METRIC PRES- SURE (MM OF HG)	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												
24...	0900	1140	41	6.8	10.0	7.5	1.3	750	11.0	94	58	49
DEC												
13...	1130	E 1300	41	6.6	-5.0	2.0	2.1	760	13.9	101	K 11	K 6
FEB												
16...	1300	E 765	49	6.5	-1.0	0.0	0.6	760	13.3	90	K 3	K 1
APR												
04...	1215	4990	37	6.5	3.0	2.0	1.0	750	12.8	94	54	24
JUN												
13...	1200	5720	33	6.5	13.0	16.0	1.4	750	9.6	99	38	30
AUG												
30...	1330	754	45	7.0	29.0	20.0	0.5	750	8.8	99	20	41

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT												
24...	11	3.2	0.6	3.7	1.1	7	0	6	7	7	6.3	5.0
DEC												
13...	10	3.0	0.5	3.7	0.7	7	0	6	7	6	4.7	4.5
FEB												
16...	11	3.4	0.6	4.6	0.9	9	0	7	8	8	6.1	6.0
APR												
04...	9	2.5	0.6	3.3	0.8	5	0	4	5	5	4.0	4.4
JUN												
13...	7	2.2	0.4	3.0	0.5	4	0	3	4	5	4.0	3.7
AUG												
30...	10	3.1	0.6	4.5	0.8	7	0	6	8	7	3.0	5.2

E Estimated discharge.

K Results based on colony count outside acceptable range (non-ideal colony count)

01066000 SACO RIVER AT CORNISH, ME--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	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)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT 24...	0.3	7.0	37	32	<0.10	0.01	0.01	0.3	0.01	0.01	<0.01
DEC 13...	0.2	7.2	69	30	0.26	<0.01	--	0.3	<0.01	<0.01	<0.01
FEB 16...	0.3	8.5	30	36	0.19	0.04	0.05	<0.2	<0.01	<0.01	<0.01
APR 04...	0.2	5.7	21	25	0.12	0.01	0.01	<0.2	0.02	<0.01	<0.01
JUN 13...	0.2	5.3	13	22	<0.10	<0.01	--	0.6	<0.01	<0.01	<0.01
AUG 30...	0.4	5.9	26	29	0.13	0.02	0.03	0.4	<0.01	<0.01	0.04

DATE	ALUMINUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHROMIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGANESE, DIS- SOLVED (UG/L AS MN)
OCT 24...	70	<1	6	<0.5	<1	<1	<3	1	110	<5	<4	12
DEC 13...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 16...	50	<1	4	<0.5	1	<1	<3	1	100	<5	<4	17
APR 04...	80	<1	4	<0.5	<1	<1	<3	2	80	<5	<4	35
JUN 13...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	40	<1	4	<0.5	7	<1	<3	<1	150	<1	<4	13

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYBDENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELENIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRONTIUM, DIS- SOLVED (UG/L AS SR)	VANADIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDIMENT, SUS- PENDED (MG/L)	SEDIMENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 24...	0.2	<10	3	<1	<1.0	24	<6	7	6	18	65
DEC 13...	--	--	--	--	--	--	--	--	3	11	73
FEB 16...	<0.1	<10	<1	<1	<1.0	27	<6	4	2	4.1	57
APR 04...	<0.1	<10	1	<1	8.0	20	<6	14	14	189	47
JUN 13...	--	--	--	--	--	--	--	--	9	139	54
AUG 30...	<0.1	<10	<1	<1	<1.0	23	<6	7	5	10	76

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.

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 405 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharge. 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. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--21 years, 193 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft³/s, Apr. 6, 1984, gage height, 6.70 ft; minimum daily, 19 ft³/s, Aug. 30, Sept. 13, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,130 ft³/s, May 12, gage height, 4.93 ft; minimum daily, 33 ft³/s, Sept. 16, 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	115	361	119	47	111	398	111	115	69	39	37
2	102	200	347	118	47	110	393	436	97	69	37	37
3	116	417	330	115	47	127	232	744	98	65	38	37
4	127	477	312	113	47	140	123	598	96	60	38	37
5	127	431	295	112	47	140	150	529	90	60	37	37
6	127	411	279	110	62	139	637	564	86	63	38	37
7	127	403	274	110	74	137	902	641	94	60	38	37
8	127	400	262	110	74	136	723	586	172	56	38	37
9	128	400	190	109	74	100	554	386	404	56	39	37
10	130	357	139	76	74	73	330	340	501	61	39	37
11	130	313	139	45	74	72	247	495	534	76	37	36
12	129	306	137	46	73	72	263	907	546	81	38	36
13	154	302	130	46	58	57	257	1040	471	86	41	36
14	175	217	124	46	46	46	251	851	289	84	49	36
15	175	131	124	46	46	46	240	677	213	79	52	34
16	175	132	124	46	46	47	302	432	274	76	55	33
17	175	135	124	46	46	50	405	208	370	78	56	33
18	175	173	124	46	46	51	430	130	379	78	57	43
19	175	204	124	47	46	52	406	176	340	77	52	60
20	142	206	121	47	46	52	284	219	299	74	51	81
21	113	367	121	46	46	52	233	234	188	70	50	149
22	113	512	121	46	47	52	249	237	144	66	49	202
23	113	372	97	47	66	63	243	231	165	61	47	205
24	115	209	78	47	97	105	233	239	185	57	44	187
25	115	214	80	47	119	150	214	256	171	52	43	167
26	115	211	80	47	119	154	206	246	155	50	42	177
27	115	210	80	47	117	235	202	232	140	44	41	193
28	115	291	80	47	113	330	131	207	125	43	39	182
29	118	367	103	47	---	368	87	181	104	42	38	154
30	118	368	121	47	---	422	99	164	78	42	37	144
31	116	---	121	47	---	411	---	156	---	41	37	---
TOTAL	4084	8851	5142	2068	1844	4100	9424	12453	6923	1976	1336	2558
MEAN	132	295	166	66.7	65.9	132	314	402	231	63.7	43.1	85.3
MAX	175	512	361	119	119	422	902	1040	546	86	57	205
MIN	102	115	78	45	46	46	87	111	78	41	37	33

CAL YR 1988 TOTAL 58411 MEAN 160 MAX 1050 MIN 35
WTR YR 1989 TOTAL 60759 MEAN 166 MAX 1040 MIN 33

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously water (years)	Measurements	
					Date	Discharge (ft ³ /s)

Wilson Stream	Kennebec River	Lat 44°36'55", long 70°11'42",	45.8	Many	10-10-89	9.8
01047730		Franklin County, 0.1 mi upstream			10-10-89	9.5
		from railroad bridge in East				
		Wilton, and 1.5 mi downstream				
		from Varnum Stream at East Wilton				

Swift River	Androscoggin	Lat 44°33'17", long 70°32'43", downstream side of Route 2 highway bridge at Rumford.	125	Many	05-13-89	2,620
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Androscoggin River	Kennebec River	Lat 44°36'40", long 71°12'50", Coos County, N.H., 3.0 mi upstream of highway bridge at Milan, N.H.	1987	Many	06-28-89 06-28-89	343 1,580
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WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)
ST. JOHN RIVER BASIN											
01010000 ST. JOHN RIVER AT NINEMILE BRIDGE, ME (LAT 46 42 00N LONG 069 42 59W)											
OCT 1988						MAY					
04...	0945	2490	10.0	9.0	51	09...	1100	9560	7.0	17.0	31
JAN 1989						JUL					
17...	1430	300	0.5	-3.5	78	11...	1630	1090	20.0	17.0	54
FEB						AUG					
27...	1420	209	0.0	0.0	76	28...	1350	352	19.0	17.0	50
01010070 BIG BLACK RIVER NEAR DEPOT MTN, ME (LAT 46 53 38N LONG 069 45 08W)											
OCT 1988						MAY					
03...	1600	576	12.0	12.0	61	09...	1510	1050	8.0	16.0	39
NOV						JUL					
16...	1515	749	2.0	8.0	46	12...	0800	92	20.0	20.0	87
JAN 1989						AUG					
18...	0840	37	0.0	-7.0	125	28...	1855	15	21.0	18.0	105
FEB											
28...	1000	41	0.0	-4.0	142						
01010500 ST. JOHN RIVER AT DICKEY, ME (LAT 47 06 44N LONG 069 05 25W)											
JAN 1989						MAY					
10...	0930	695	0.0	-14.0	110	17...	0930	15300	9.0	21.0	37
MAR						JUL					
14...	0910	406	--	3.0	75	26...	1010	295	23.0	29.0	79
01011000 ALLAGASH RIVER NEAR ALLAGASH, ME (LAT 47 04 14N LONG 069 04 51W)											
JAN 1989						MAY					
10...	1125	460	0.0	-7.0	67	17...	1215	7470	11.0	23.0	42
MAR						JUL					
14...	1005	245	--	--	60	26...	1500	519	28.0	38.0	53
01013500 FISH RIVER NEAR FORT KENT, ME (LAT 47 14 14N LONG 068 34 56W)											
JAN 1989						JUL					
10...	1600	484	0.0	-9.0	82	26...	1810	400	27.0	36.0	65
MAR						SEP					
13...	1600	205	--	4.0	65	21...	0945	417	17.0	21.0	68
MAY											
17...	1510	6420	9.0	22.0	61						
01014000 ST. JOHN RIVER BELOW FISH R, AT FORT KENT, ME (LAT 47 15 27N LONG 068 35 35W)											
JAN 1989						MAY					
10...	1515	2140	0.0	-9.0	107	17...	1910	33400	9.0	21.0	64
MAR						JUL					
14...	1420	1060	0.0	10.0	85	26...	1905	1640	26.0	36.0	83
01015800 AROOSTOOK RIVER NEAR MASARDIS, ME (LAT 46 31 21N LONG 068 22 23W)											
NOV 1988						MAY					
08...	1000	3150	7.0	6.0	45	16...	0945	11800	9.0	22.0	--
JAN 1989						JUL					
09...	1315	342	0.0	-3.0	20	25...	1000	112	22.0	--	71
MAR											
13...	1200	141	--	8.0	55						

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)
ST. JOHN RIVER BASIN--Continued											
01017000 AROOSTOOK RIVER AT WASHBURN, ME (LAT 46 46 36N LONG 068 09 29W)											
JAN 1989						JUL					
09...	1425	751	0.0	-7.0	62	25...	1520	241	28.5	34.5	90
MAR						SEP					
15...	1030	219	--	8.0	80	18...	1300	790	17.0	19.0	68
MAY											
16...	1600	20600	15.0	27.0	107						
ST. CROIX RIVER BASIN											
01018500 ST. CROIX RIVER AT VANCEBORO, ME (LAT 45 34 08N LONG 067 25 47W)											
JUL 1989						SEP					
05...	1130	865	19.0	23.0	30	27...	1220	1350	14.0	8.0	37
01019000 GRAND LAKE STREAM AT GRAND LAKE STREAM, ME (LAT 45 10 23N LONG 067 46 06W)											
MAY 1989						SEP					
03...	1250	165	9.0	17.0	28	27...	0730	726	14.0	5.0	27
DENNY'S RIVER BASIN											
01021200 DENNY'S RIVER AT DENNYVILLE, ME (LAT 44 54 03N LONG 067 14 56W)											
NOV 1988						MAY					
03...	0915	1020	7.0	8.0	32	04...	0755	534	10.0	22.0	32
JAN 1989						JUL					
05...	1010	56	0.0	-14.0	--	06...	1155	107	19.0	29.0	40
PLEASANT RIVER BASIN											
01022260 PLEASANT RIVER NEAR EPPING, ME (SW SITE 13) (LAT 44 41 52N LONG 067 47 16W)											
JUL 1989											
06...	1515	65	19.0	28.0	27						
NARRAGUAGUS RIVER BASIN											
01022500 NARRAGUAGUS RIVER AT CHERRYFIELD, ME (LAT 44 36 29N LONG 067 56 10W)											
NOV 1988						MAY					
03...	1430	2720	7.0	8.0	31	04...	1510	1880	8.0	19.0	27
JAN 1989						JUL					
06...	0710	116	0.0	-10.0	--	07...	0815	165	19.0	--	33

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)	
PENOBSCOT RIVER BASIN												
01030000 PENOBSCOT RIVER NEAR MATTAWAMKEAG, ME (LAT 45 34 01N LONG 068 24 10W)												
NOV 1988	21...	1110	5710	2.5	3.0	43						
01030500 MATTAWAMKEAG RIVER NEAR MATTAWAMKEAG, ME (LAT 45 30 18N LONG 068 18 07W)												
JAN 1989	09...	1000	433	0.0	-2.5	38	JUL 18...	1055	517	20.5	23.5	59
MAR 01...	1300	355	0.0	6.0	82	SEP 18...	1025	371	17.5	18.0	56	
01031500 PISCATAQUIS RIVER NEAR DOVER-FOXCROFT, ME (LAT 45 10 31N LONG 069 18 55W)												
JAN 1989	11...	1055	99	0.0	-2.0	74	JUL 19...	1040	56	20.0	21.0	49
MAR 02...	0930	100	0.0	-4.0	61	SEP 19...	0935	140	15.5	14.0	49	
01033000 SEBEC RIVER AT SEBEC, ME (LAT 45 16 12N LONG 069 06 44W)												
NOV 1988	22...	0920	900	3.0	0.0	26	SEP 19...	0810	47	17.5	12.5	26
JUL 1989	19...	0845	64	23.5	18.5	25						
01034500 PENOBSCOT RIVER AT WEST ENFIELD, ME (LAT 45 14 12N LONG 068 38 56W)												
JAN 1989	12...	1130	5700	0.0	-5.0	85	JUL 18...	1440	4070	23.5	20.0	54
MAR 01...	1000	5480	0.0	3.0	54	SEP 18...	0840	6580	17.0	14.0	55	
MAY 05...	0820	34700	7.5	10.0	44							
SHEEPSHOT RIVER BASIN												
01038000 SHEEPSHOT RIVER AT NORTH WHITEFIELD, ME (LAT 44 13 23N LONG 069 35 38W)												
NOV 1988	08...	1300	409	9.0	14.0	--	SEP 07...	1630	19	22.0	28.0	63
JUN 1989	29...	1000	138	21.0	23.0	46						
KENNEBEC RIVER BASIN												
01042500 KENNEBEC RIVER AT THE FORKS, ME (LAT 45 20 25N LONG 069 57 48W)												
OCT 1988	11...	1025	6590	10.0	12.0	28	AUG 28...	0925	214	17.0	15.0	32
MAY 1989	08...	1100	3420	9.0	16.0	28						

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)
KENNEBEC RIVER BASIN											
01046500 KENNEBEC RIVER AT BINGHAM, ME (LAT 45 03 06N LONG 069 53 12W)											
MAY 1989 08...	0915	13400	8.0	13.0	36	JUL 11...	0830	3970	20.5	18.0	30
01047000 CARRABASSETT RIVER NEAR NORTH ANSON, ME (LAT 44 52 09N LONG 069 57 20W)											
NOV 1988 07...	1130	3360	7.5	10.0	27	APR 07...	1215	8730	1.5	7.5	23
JAN 1989 13...	1140	207	0.0	-3.0	45	MAY 01...	1130	963	8.0	15.0	31
MAR 02...	1435	173	0.0	-1.0	56	SEP 13...	1045	88	17.0	19.0	49
01048000 SANDY RIVER NEAR MERCER, ME (LAT 44 42 26N LONG 069 56 21W)											
JAN 1989 13...	0900	253	0.0	-4.0	62	MAY 01...	0830	1210	8.0	10.5	44
MAR 06...	0820	256	0.0	-11.0	60	JUL 17...	1000	178	22.0	19.5	66
APR 07...	1045	12400	2.0	8.5	32	SEP 13...	0840	88	15.0	17.5	76
01049000 SEBASTICOOK RIVER NEAR PITTSFIELD, ME (LAT 44 43 00N LONG 069 24 56W)											
NOV 1988 07...	1300	1810	8.5	16.0	--	MAY 04...	1000	2400	9.5	13.0	80
JAN 1989 11...	1345	44	0.0	3.0	190	SEP 11...	1000	952	21.0	23.0	123
01049130 JOHNSON BROOK AT SOUTH ALBION, ME (LAT 44 29 53N LONG 069 29 12W)											
NOV 1988 08...	1000	4.2	8.0	6.0	--	SEP 07...	1230	0.07	18.0	27.0	116
JUN 1989 29...	1330	1.1	21.5	22.0	156						
01049373 MILL STREAM AT WINTHROP, ME (LAT 44 18 24N LONG 069 58 18W)											
MAY 1989 03...	0840	149	7.5	11.0	65	SEP 07...	0930	12	19.0	19.0	67
01049500 COBBOSSEECONTEE STREAM AT GARDINER, ME (LAT 44 13 15N LONG 069 47 25W)											
JAN 1988 19...	1116	126	2.0	11.0	89	MAY 31...	1302	261	19.0	27.0	78
MAR 07...	1116	186	3.0	7.0	82	SEP 07...	1329	310	20.0	18.0	87
01049550 TOGUS STREAM AT TOGUS, ME (LAT 44 15 57N LONG 069 41 55W)											
NOV 1988 09...	1500	37	9.0	14.0	74	SEP 07...	1415	3.6	22.0	29.0	42
JUN 1989 29...	1545	31	24.0	26.0	48						

MISCELLANEOUS TEMPERATURE AND SPECIFIC CONDUCTANCE DETERMINATIONS--Continued

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WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)
ANDROSCOGGIN RIVER BASIN											
01052500 DIAMOND RIVER NEAR WENTWORTH LOCATION, NH (LAT 44 52 40N LONG 071 03 25W)											
JAN 1989						JUL					
20...	1100	93	0.0	0.0	43	20...	1145	33	21.5	23.0	40
MAY						SEP					
03...	1100	4140	3.5	9.0	22	14...	1015	40	15.5	18.0	41
01053500 ANDROSCOGGIN RIVER AT ERROL, NH (LAT 44 46 57N LONG 071 07 46W)											
JUL 1989											
25...	0920	1570	21.0	23.0	28						
01054000 ANDROSCOGGIN RIVER NEAR GORHAM, NH (LAT 44 26 10N LONG 071 11 27W)											
NOV 1988						JUL					
14...	1455	2630	5.5	9.0	52	20...	1545	1680	23.0	18.5	--
MAY 1989											
03...	1535	7580	5.5	8.0	151						
01055000 SWIFT RIVER NEAR ROXBURY, ME (LAT 44 38 32N LONG 070 35 17W)											
NOV 1988						JUL					
15...	1040	299	3.5	5.5	21	21...	1020	19	18.0	21.5	30
JAN 1989						SEP					
19...	1315	54	0.0	1.5	30	06...	1150	38	14.0	17.5	27
MAY											
04...	1005	771	4.0	15.0	19						
01055500 NEZINSCOT RIVER AT TURNER CENTER, ME (LAT 44 16 10N LONG 070 13 49W)											
NOV 1988						MAY					
14...	1530	517	6.0	5.0	54	05...	1300	871	10.0	17.0	38
JAN 1989						JUL					
17...	1530	79	0.0	0.0	92	25...	1400	43	26.0	30.0	86
MAR											
08...	1100	55	0.0	-1.0	96						
01057000 LITTLE ANDROSCOGGIN RIVER NEAR SOUTH PARIS, ME (LAT 44 17 08N LONG 070 32 16W)											
NOV 1988						APR					
07...	1415	351	11.0	16.0	35	07...	1030	1720	1.0	9.0	32
JAN 1989						JUN					
17...	1300	36	0.0	-2.0	64	26...	1200	67	20.0	35.0	55
MAR						JUL					
08...	1400	24	0.0	-3.0	70	25...	1115	9.9	21.0	28.0	76
ROYAL RIVER BASIN											
01060000 ROYAL RIVER AT YARMOUTH, ME (LAT 43 47 57N LONG 070 10 45W)											
MAY 1989											
11...	1300	519	10.0	11.0	78						

WATER QUALITY DATA, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	SPECIFIC CON- DUCT- ANCE (US/CM)
SACO RIVER BASIN											
01064500 SACO RIVER NEAR CONWAY, NH (LAT 43 59 27N LONG 071 05 29W)											
NOV 1988						MAY					
21...	1100	2020	3.0	4.0	33	08...	1200	4120	7.0	12.0	34
JAN 1989						SEP					
18...	1300	284	0.0	4.5	58	01...	1200	174	18.0	24.5	58
MAR											
09...	1130	225	0.0	5.0	68						
01065500 OSSIPEE RIVER AT CORNISH, ME (LAT 43 48 26N LONG 070 47 55W)											
JAN 1989						MAY					
18...	1530	323	0.0	5.0	55	09...	1200	3600	9.0	16.0	35
MAR											
09...	1530	288	0.0	2.0	54						

ANDROSCOGGIN COUNTY

440730070035304. Local number, ANW 988C.

LOCATION.--Lat 44°07'23", long 70°04'02", Hydrologic Unit 01040002, on Bowdoin Road, 0.4 mi 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., depth 43 ft, screened 38 to 43 ft.

INSTRUMENTATION.--Measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 220 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of pipe at land-surface datum, which is 2.7 ft above the general land surface.

REMARKS.--Water level affected by pumping of nearby well. Station discontinued as of September 30, 1989.

PERIOD OF RECORD.--October 1976 to January 1984 and August 29, 1984 to current year.

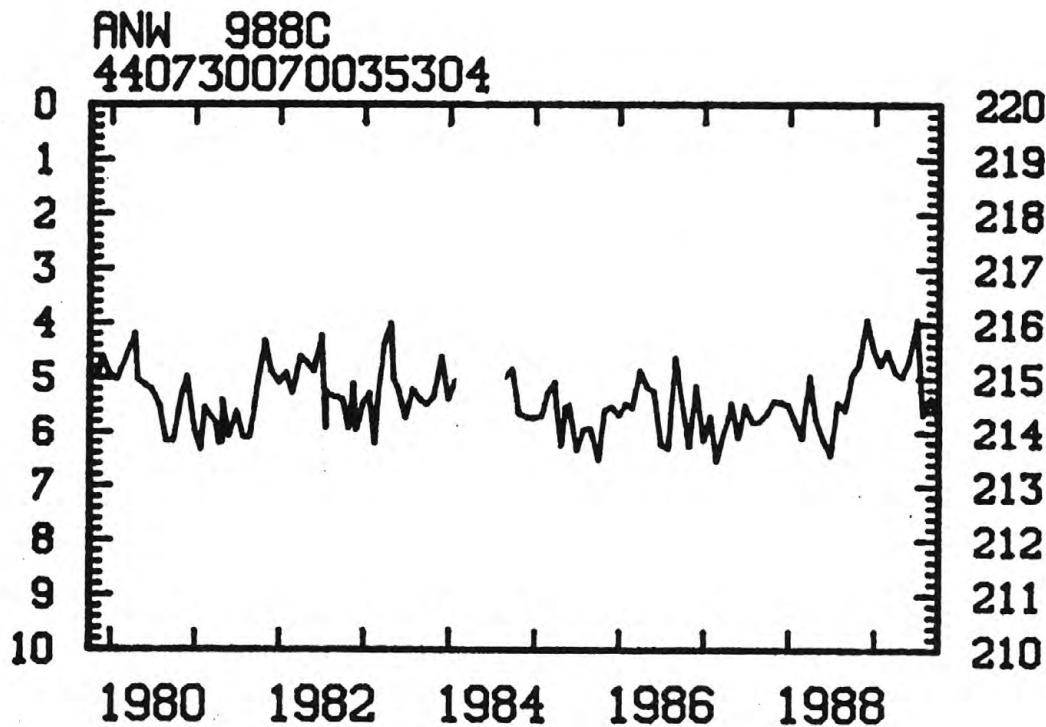
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.91 ft below land-surface datum, Jun. 30, 1989; lowest measured, 6.55 ft below land-surface datum, Feb. 24, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL	
Oct	24	4.75	Dec	27	4.48	Feb	23	4.50	Apr	26	4.99P
Nov	28	3.92	Jan	25	4.78	Mar	29	4.89P	May	25	4.70P
									Jun	30	3.91
									Jul	26	5.70P
									Aug	31	5.34P
									Sep	28	5.79P

P=Pumping

WATER LEVEL, FEET BELOW LAND SURFACE



AROOSTOOK COUNTY

464807068284401. Local number, ARW 1A.

LOCATION.--Lat 46°48'07", long 68°28'44", Hydrologic Unit 01010003, on State Highway 11, about 3.1 mi north of the village of Portage Lake. Owner: William Condon

AQUIFER.--Bedrock of Ordovician age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 81 ft, open hole. There is a 1.5 in. pipe in the center, depth 24 ft.

INSTRUMENTATION.--Measurement with chalked tape by local observer.

DATUM.--Elevation of land-surface datum is 713.08 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of 1.5 in. pipe coupling, at land-surface datum.

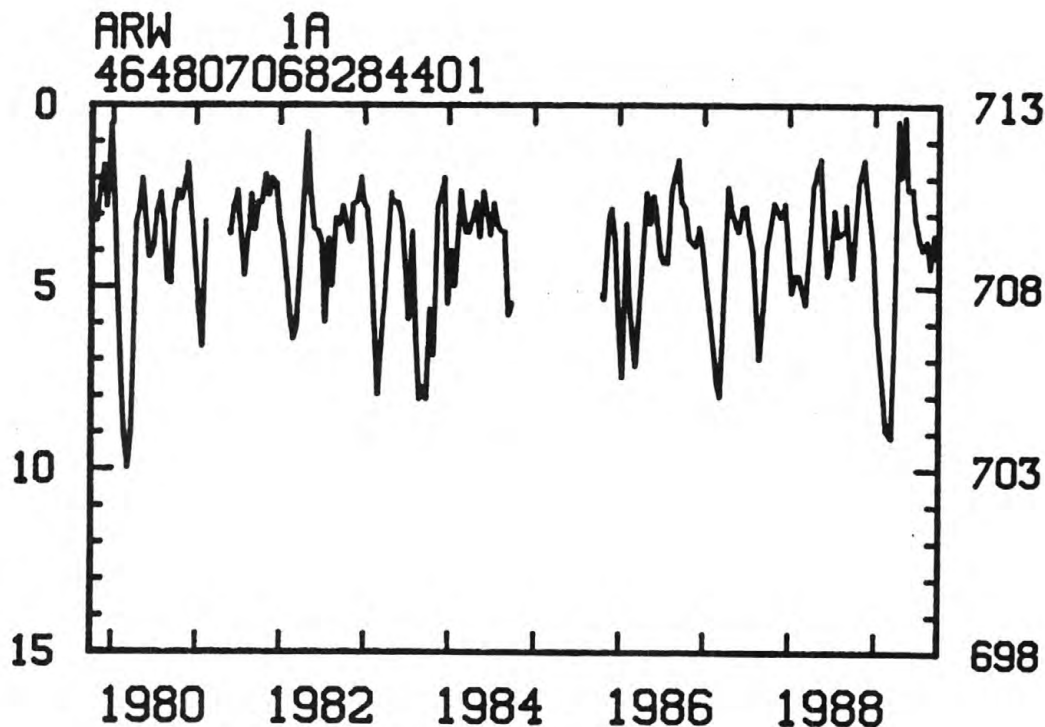
PERIOD OF RECORD.--November 1975 to current year. Records prior to October 1981 have not been published, but are available in the files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, overflowed, Jan. 27, 1976, Mar. 14, 1977, Apr. 27, 1978, Apr. 13, 1984, Mar. 13, 1985, and Mar. 25, 1987; lowest measured 10.10 ft below land-surface datum, Jan. 13, 1976, and Feb. 25, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 11	3.25	Dec 12	3.16	Feb 07	7.90	Apr 11	0.40	Jun 13	2.30	Aug 13	3.72
24	2.10	26	4.00	20	8.95	24	2.00	26	3.20	28	4.50
Nov 15	1.50	Jan 10	5.97	Mar 14	9.15	May 12	0.30	Jul 11	3.70	Sep 12	3.53
26	2.20	23	6.90	25	6.50	25	2.35	25	4.00	26	4.20

WATER LEVEL, FEET BELOW LAND SURFACE



WATER LEVEL, FEET ABOVE NGVD

AROOSTOOK COUNTY--Continued

471457068353001. Local number, ARW 890.

LOCATION.--Lat 47°14'57", long 68°35'30", Hydrologic Unit 01010003, 0.25 mi southeast of the intersection of State Highways 11 and 161 and U.S. Highway 1, 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., November 1976 constructed depth 50 ft, open end. November 1982 measured depth 48 ft.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 530 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Floor of recorder shelter at land-surface datum, which is 3.0 ft above the general land surface.

REMARKS.--Record lost between December 28 and January 10, doubtful gage-height record; record lost between May 15 and May 18 because recorder stopped.

PERIOD OF RECORD.--November 1976 to current year.

REVISED RECORDS.--WDR ME-84-1: 1980, 1981.

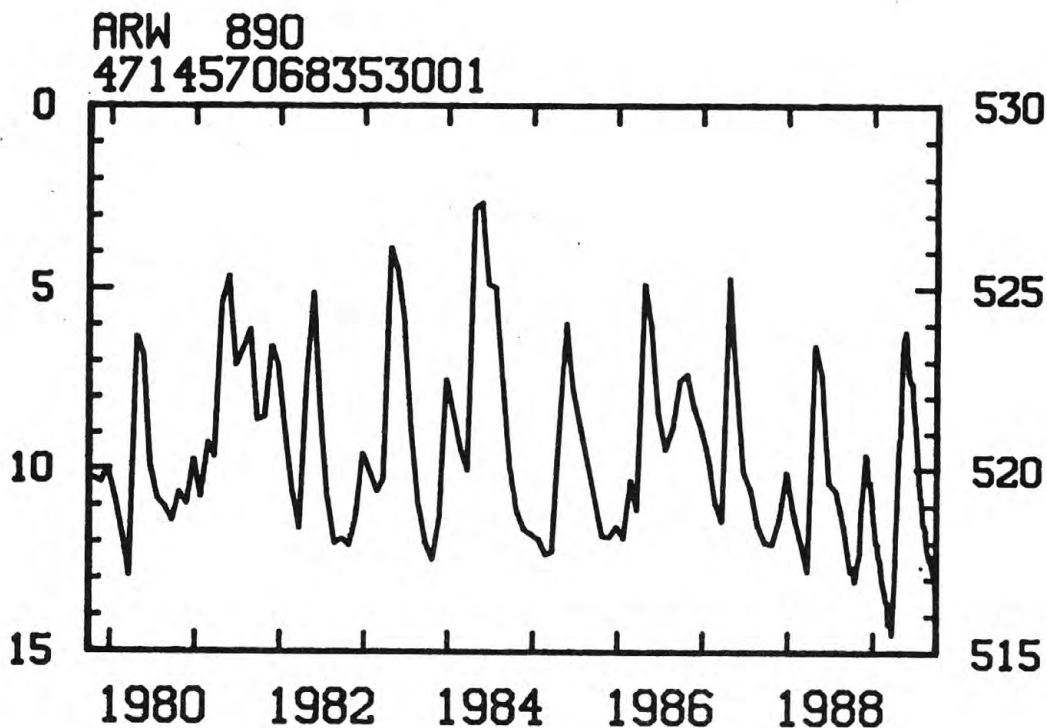
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.52 ft below land-surface datum, May 2, 1984; lowest, 15.28 ft below land-surface datum, Jan. 22 and 23, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.68	12.29	9.75	---	12.74	13.66	13.05	7.57	7.37	8.88	11.52	12.36
10	12.67	11.10	10.36	---	13.08	14.26	11.73	6.46	7.58	9.41	11.57	12.62
15	13.10	10.85	10.35	12.02	13.26	13.98	11.11	---	7.59	9.92	11.70	12.83
20	12.89	10.50	10.36	12.06	13.39	14.04	9.72	6.16	7.68	10.35	12.10	12.93
25	12.62	10.06	10.65	12.43	13.59	14.53	9.25	6.37	8.20	10.77	12.34	13.14
EOM	12.45	9.61	---	12.55	13.63	13.71	9.00	7.00	8.56	10.97	12.50	13.49

WTR YR 1989 HIGH 5.85 MAY 14 LOW 14.78 MAR 24-25

WATER LEVEL, FEET BELOW LAND SURFACE



AROOSTOOK COUNTY--Continued

463642069344601. Local number, ARW 891.

LOCATION.--Lat 46°36'42", long 69°34'46", Hydrologic Unit 01010002, about 2.7 mi west of the 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., depth 80 ft, open hole.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 1,050 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Electric tape gage index at land-surface datum, which is 2.8 ft above the general land surface.

REMARKS.--Record lost between January 17 and February 27 because recorder stopped.

PERIOD OF RECORD.--July 1978 to current year.

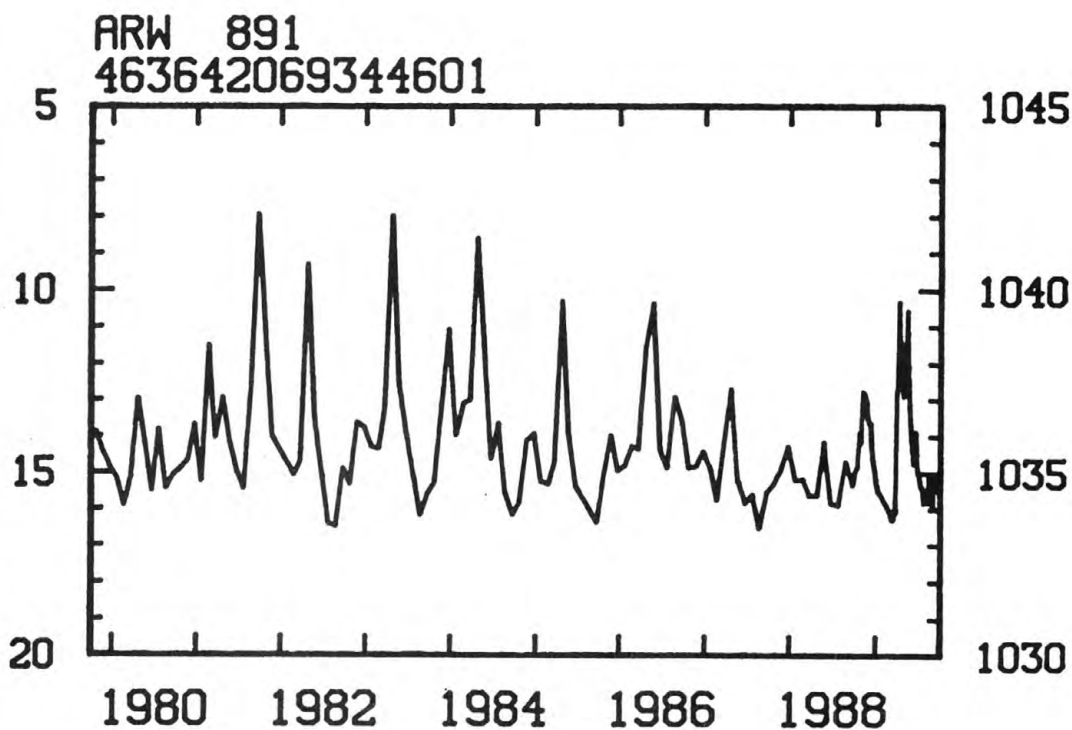
REVISED RECORDS.--WDR ME-84-1: 1980, 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.96 ft below land-surface datum, Apr. 26, 1983; lowest, 16.97 ft below land-surface datum, Sep. 07, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.96	13.07	13.66	15.35	---	16.22	12.44	11.62	14.34	15.19	15.82	15.02
10	14.87	12.77	13.66	15.51	---	16.31	10.29	12.00	14.77	15.40	15.83	15.21
15	14.81	12.87	14.19	15.56	---	16.32	11.74	10.54	14.48	15.39	15.00	15.31
20	14.38	13.00	14.66	---	---	16.02	11.44	12.33	13.87	15.59	15.47	15.37
25	13.88	13.12	14.86	---	---	16.13	12.63	13.15	14.63	15.85	15.69	15.48
EOM	14.22	13.55	15.14	---	16.09	12.87	12.94	14.03	14.99	15.65	15.96	15.66
WTR YR 1989	HIGH		9.16	APR 07	LOW		16.46	MAR 12				

WATER LEVEL, FEET BELOW LAND SURFACE



AROOSTOOK COUNTY--Continued

464234068010401. Local number, ARW 895.

LOCATION.--Lat 46°42'34", long 68°01'04", Hydrologic Unit 01010004, about 2.0 mi north of City of Presque Isle.

Owner: U.S. Geological Survey.

AQUIFER.--Ice-contact deposits of Pleistocene age.

WELL CHARACTERISTICS.--A wash-bored observation well, diameter 2 in., October 1986. Measured depth 20 ft, screened depth 15-20 ft.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 409.09 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.94 ft above land-surface datum.

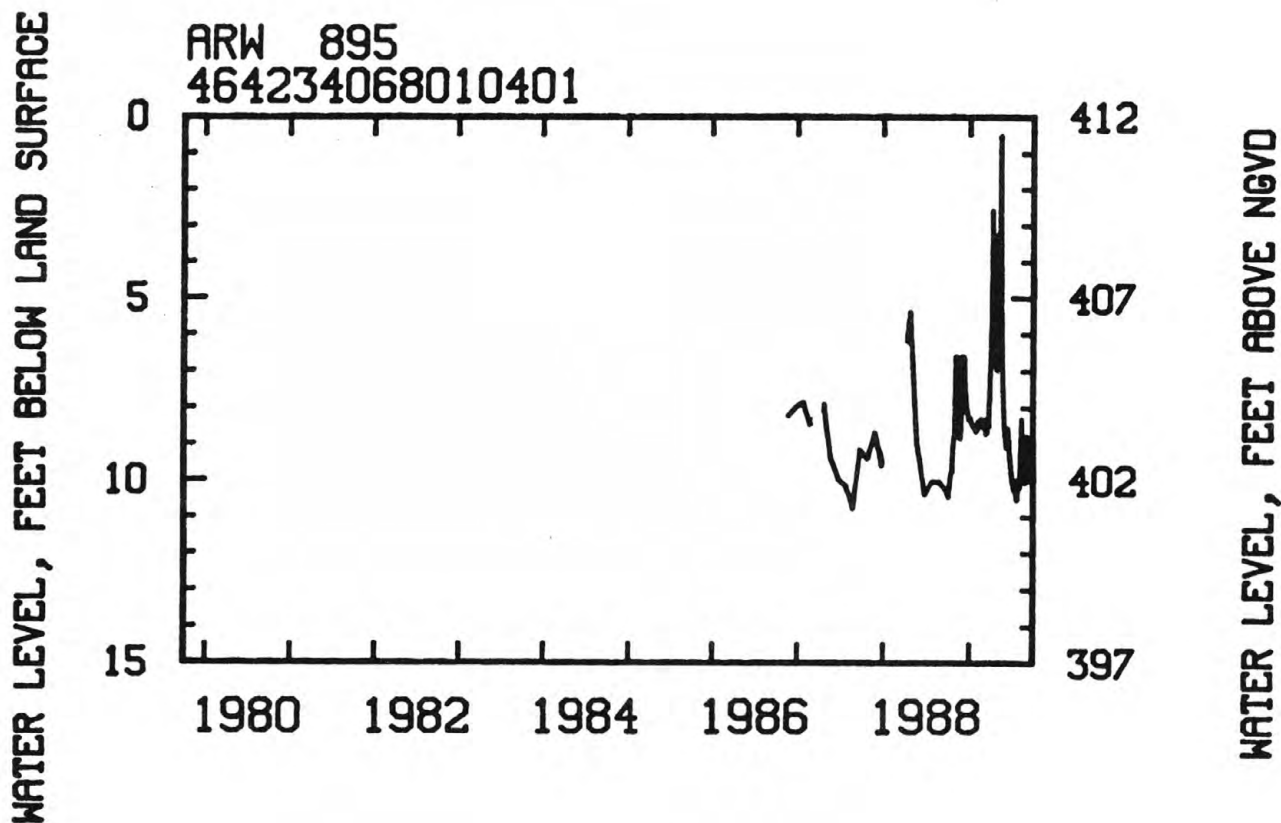
PERIOD OF RECORD.--November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 0.17 ft below land-surface datum, May 16, 1989; lowest measured 10.96 ft below land-surface datum, Sep. 8-9, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.48	6.60	6.57	8.28	8.46	8.34	6.21	3.23	8.80	10.06	10.23	8.76
10	10.16	6.62	6.66	8.43	8.36	8.31	2.57	5.41	9.13	10.27	9.16	9.56
15	9.82	7.65	7.36	8.48	8.42	8.74	5.96	0.51	8.53	10.12	8.29	9.84
20	9.75	8.14	7.81	8.56	8.30	8.51	5.43	5.39	8.87	10.37	9.35	9.85
25	9.03	8.87	8.11	8.57	8.33	8.54	6.75	7.37	9.41	10.55	9.74	9.66
EOM	8.67	8.11	8.35	8.67	8.54	7.25	6.98	8.46	9.80	10.11	10.09	9.82

WTR YR 1989 HIGH 0.17 MAY 16 LOW 10.16 JUL 27



AROOSTOOK COUNTY--Continued

464239067574401. Local number, ARW 905.

LOCATION.--Lat 46°42'39", long 67°57'44", Hydrologic Unit 01010004, about 2.6 mi east of the City of Presque Isle.
Owner: McCain Foods, Inc.

AQUIFER.--Carys Mills formation of lower Silurian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 51 ft.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 478.62 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 4.37 ft below land-surface datum.

REMARKS.--Record lost between November 1 and November 7 and January 5 and January 9, doubtful gage-height record; record lost between February 10 and March 15 because recorder stopped.

PERIOD OF RECORD.--August 1986 to current year. Records prior to October 1986 have not been published but are available in the files of the Geological Survey.

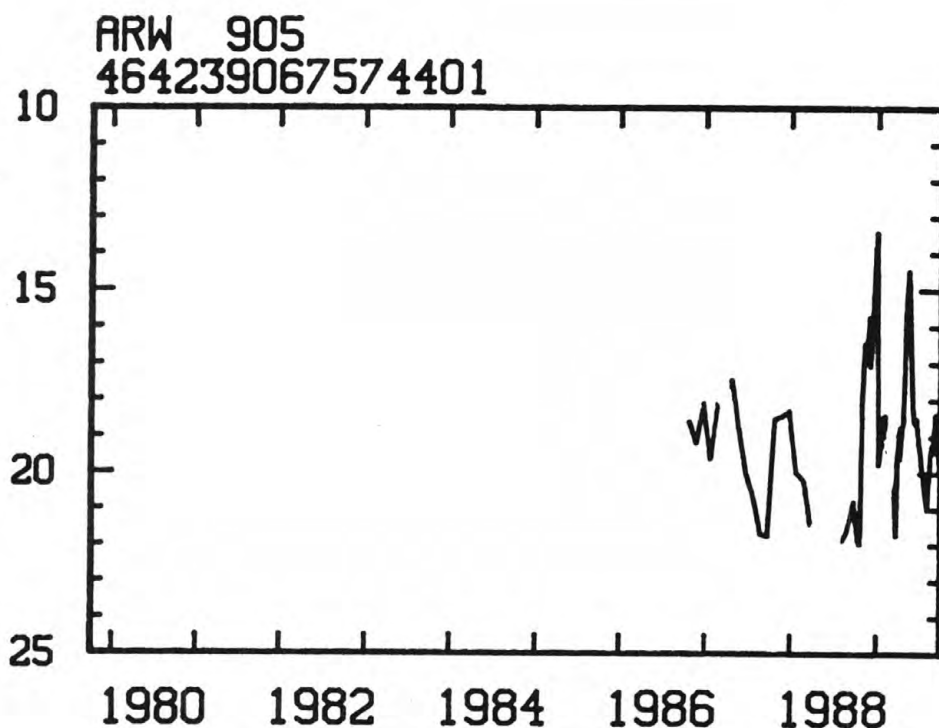
EXTREMES FOR PERIOD OF RECORD.--Highest water level 12.77 ft below land-surface datum, Jan. 04, 1989; lowest measured 22.95 ft below land-surface datum, Mar. 16, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.34	---	17.09	---	18.41	---	18.74	15.58	18.16	19.40	21.03	18.86
10	21.60	16.42	16.55	19.80	---	---	19.64	14.99	18.63	19.67	20.34	18.39
15	21.88	16.93	15.51	19.49	---	---	19.26	14.47	18.65	19.97	20.05	18.81
20	22.00	16.60	14.57	19.14	---	20.79	18.74	14.95	18.51	20.15	19.42	19.16
25	21.53	16.18	14.00	18.86	---	21.76	18.59	15.98	18.82	20.46	19.20	19.59
EOM	18.12	15.72	13.40	18.46	---	19.71	17.50	17.30	19.15	20.80	19.46	19.95

WTR YR 1989 HIGH 12.77 JAN 04 LOW 22.95 MAR 16

WATER LEVEL, FEET BELOW LAND SURFACE



468.62

463.62

458.62

453.62

WATER LEVEL, FEET ABOVE NGVD

AROOSTOOK COUNTY--Continued

464259067572901. Local number, ARW 906.

LOCATION.--Lat 46°42'59", long 67°57'29", Hydrologic Unit 01010004, approximately 3.5 mi northeast of the City of Presque Isle. Owner: U.S. Geological Survey.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--A wash-bored observation well, diameter 2 in., Oct. 1986. Measured depth 40 ft, screened depth 35-40 ft.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 430.92 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.88 ft above land-surface datum.

REMARKS.--Record lost between September 18 and September 30, doubtful gage-height record.

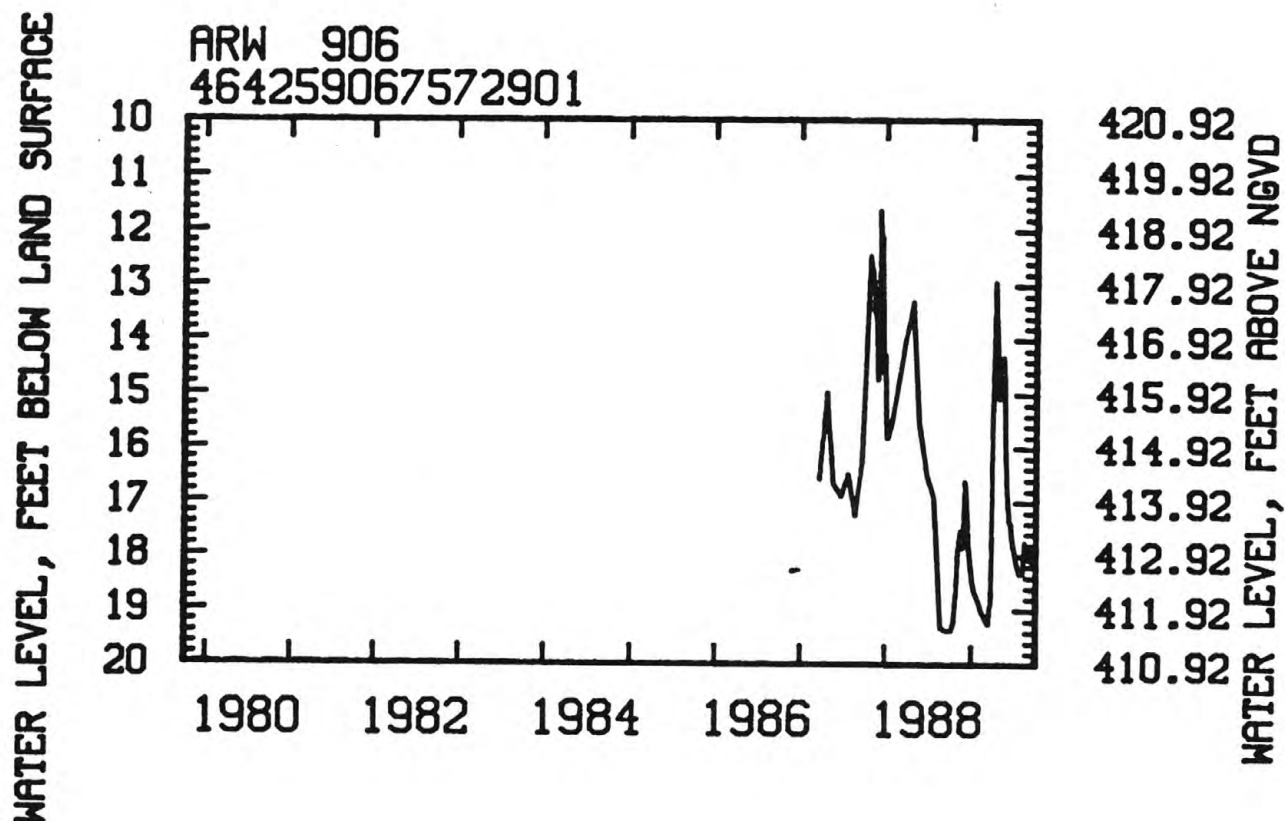
PERIOD OF RECORD.--November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 12.93 ft below land-surface datum, Apr. 10-11, 1989; lowest measured 19.38 ft below land-surface datum, Oct. 01-03, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.37	17.95	16.61	18.48	18.92	19.21	14.48	14.56	17.05	18.05	18.32	17.83
10	19.36	17.69	16.90	18.60	19.00	19.23	12.94	14.82	17.37	18.18	18.07	18.01
15	19.28	17.54	17.36	18.69	19.06	19.27	13.51	14.30	17.41	18.20	17.75	18.12
20	19.20	17.69	17.84	18.74	19.08	19.02	14.07	14.72	17.61	18.32	17.85	---
25	18.90	17.86	18.03	18.80	19.12	18.79	14.90	15.91	17.81	18.35	17.96	---
EOM	18.53	17.45	18.27	18.86	19.17	15.59	15.10	16.77	17.93	18.32	18.09	---

WTR YR 1989 HIGH 12.93 APR 10-11 LOW 19.38 OCT 01-03



AROOSTOOK COUNTY--Continued

464303067592201. Local number, ARW 907.

LOCATION.--Lat 46°43'03", long 67°59'22", Hydrologic Unit 01010004, about 2.7 mi northeast of City of Presque Isle.

Owner: U.S. Geological Survey.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--A wash-bored observation well, diameter 2 in, October 1986. Measured depth 28 ft, screened depth 18-28 ft.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 652.31 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.77 ft above land-surface datum.

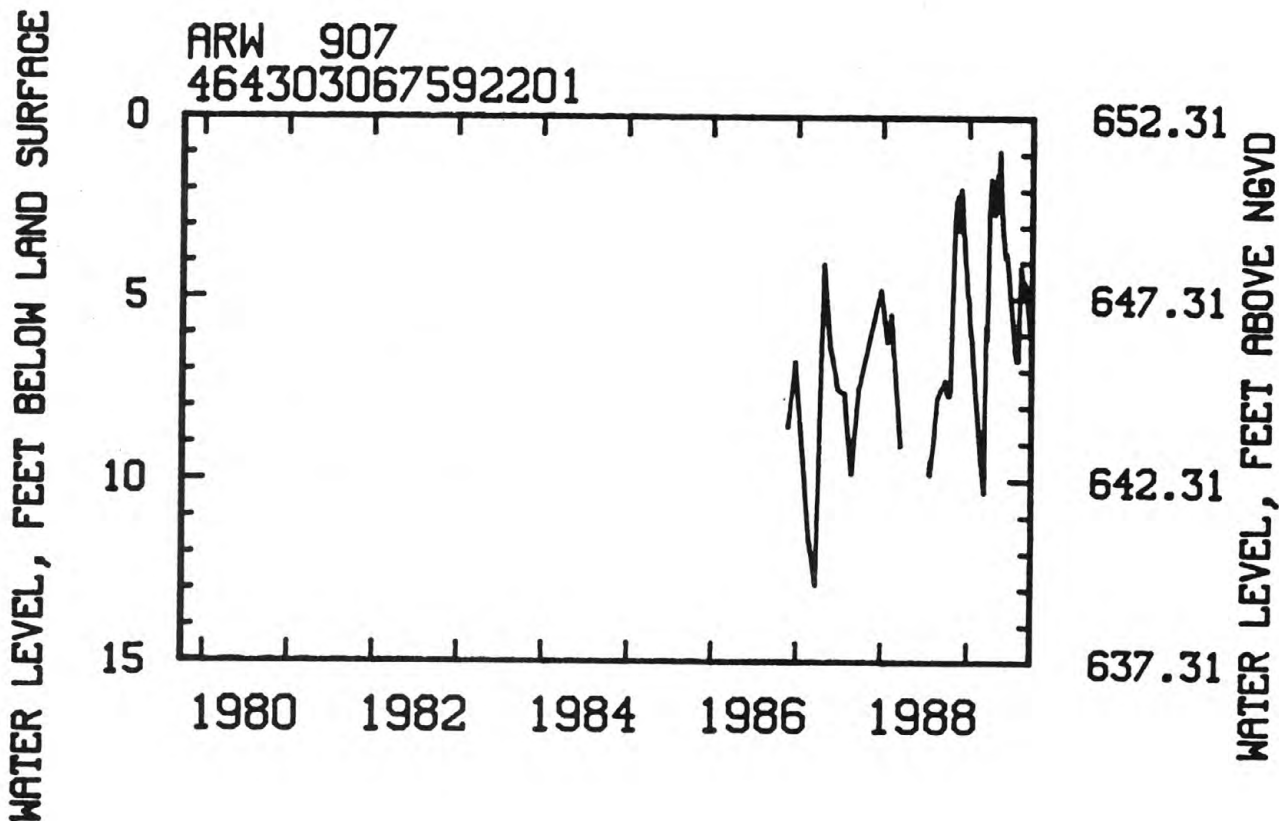
PERIOD OF RECORD.--November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 0.81 ft below land-surface datum, Apr. 07, 1989; lowest measured 12.96 ft below land-surface datum, Mar. 29, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.61	2.87	2.40	5.13	7.61	9.71	2.02	1.53	3.50	5.14	6.71	4.55
10	7.71	2.28	3.20	5.68	7.99	10.02	1.67	1.77	3.88	5.47	5.98	4.87
15	7.71	2.17	3.41	5.95	8.41	10.35	2.24	0.92	3.75	5.77	4.12	5.19
20	7.51	2.13	3.99	6.25	8.79	5.74	2.32	1.89	4.02	6.07	4.22	5.50
25	5.85	3.13	4.25	6.80	9.18	6.14	2.67	2.59	4.38	6.42	4.58	5.85
EOM	4.09	1.96	4.92	7.15	9.42	2.71	2.48	3.25	4.84	6.74	5.01	6.00

WTR YR 1989 HIGH 0.81 APR 07 LOW 10.43 MAR 15



CUMBERLAND COUNTY

435453070013601. Local number, CW 26.

LOCATION.--Lat 43°54'53", long 70°01'36", Hydrologic Unit 01060001, 0.3 mi northwest of the intersection of Durham Road and U.S. Highway 1 in 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., reported depth 101 ft in 1953, screened 81 to 101 ft. November 1982 measured depth 96 ft.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 139 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Electric tape gage index 2.93 ft above land-surface datum.

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

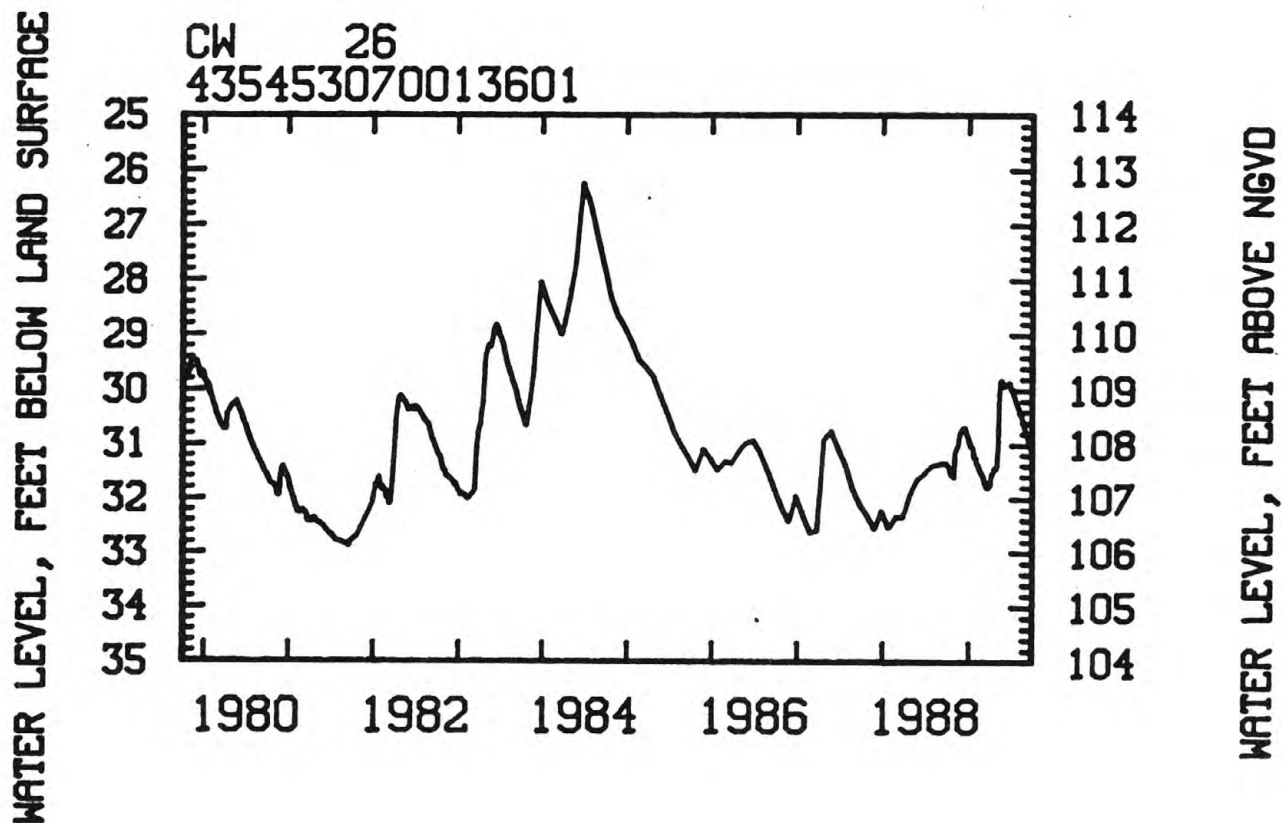
REVISED RECORDS.--WDR ME-82-1: 1978, 1981 WDR ME-83-1: 1977, WRD ME-84-1: 1980, 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 25.95 ft below land-surface datum, Jun. 9, 1984; lowest 36.41 ft below land-surface datum, Feb. 10, 1966.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.42	31.15	30.73	30.97	31.36	31.60	31.75	31.37	29.96	30.00	30.33	30.80
10	31.43	31.05	30.69	31.05	31.40	31.72	31.54	31.03	29.92	29.98	30.46	30.84
15	31.54	31.04	30.68	31.04	31.46	31.73	31.57	30.08	29.91	30.11	30.48	30.92
20	31.59	30.91	30.76	31.08	31.53	31.82	31.45	29.83	29.88	30.15	30.54	30.98
25	31.55	30.78	30.81	31.25	31.52	31.81	31.43	29.83	29.86	30.22	30.64	31.07
EOM	31.63	30.75	30.90	31.25	31.59	31.78	31.48	29.89	29.93	30.31	30.72	31.13

WTR YR 1989 HIGH 29.83 MAY 20, 25 LOW 31.90 MAR 23-24, 26



FRANKLIN COUNTY

451128070280301. Local number, FW 893.

LOCATION.--Lat 45°11'28", long 70°28'03", Hydrologic Unit 01030002, approximately 150 feet northwest of the intersection of State Highway 27 and Eustis Hill Road, Eustis. Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel.

WELL CHARACTERISTICS.--A wash-bored observation well, diameter 2 in., August 1985. Measured depth 20 ft, screened 15-20 ft.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 1169.000 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: File mark on 6" casing inside of shelter, which is 3.20 ft above the general land surface.

REMARKS.--Record lost between November 14 and January 20 and between March 6 and March 15 because recorder stopped; record lost between July 17 and July 26, doubtful gage-height record.

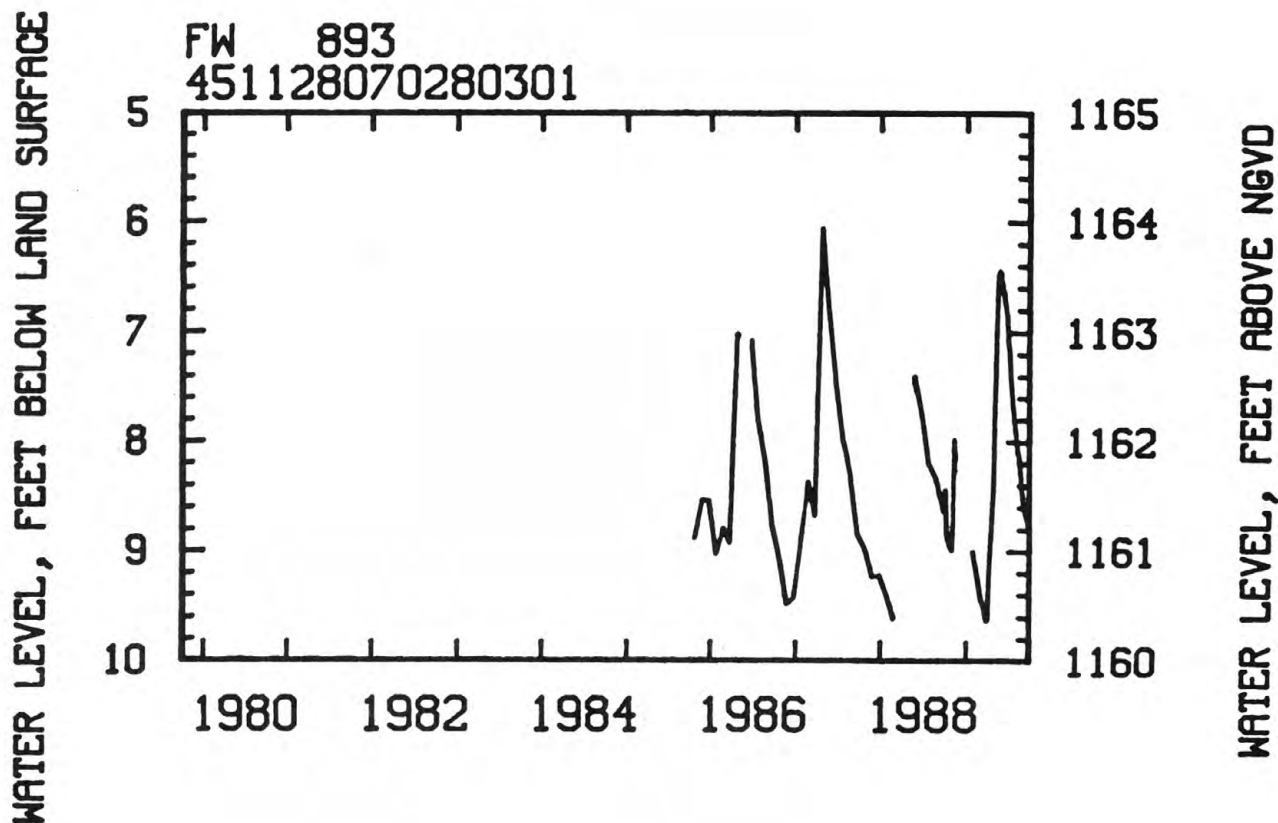
PERIOD OF RECORD.--August 1985 to current year. Records prior to October 1985 have not been published, but are available in the files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 6.00 ft below land surface datum, Apr. 23, 1987; lowest water level 9.99 ft below land surface datum, Feb. 11, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.44	8.86	---	---	9.10	9.45	9.60	7.74	6.55	7.10	7.90	8.53
10	8.85	8.32	---	---	9.15	---	9.20	7.39	6.63	7.19	8.00	8.62
15	8.90	---	---	---	9.22	---	8.98	6.82	6.65	7.41	8.11	8.67
20	8.95	---	---	---	9.27	9.53	8.79	6.48	6.74	---	8.17	8.71
25	8.97	---	---	8.94	9.34	9.61	8.57	6.45	6.79	---	8.28	8.75
EOM	9.00	---	---	9.03	9.38	9.64	8.40	6.48	6.90	7.81	8.41	8.79

WTR YR 1989 HIGH 6.45 MAY 24-28 LOW 9.67 MAR 29-30



FRANKLIN COUNTY--Continued

443831070002601. Local number, FW 901.

LOCATION.--Lat 44°38'31", long 70°00'26", Hydrologic Unit 01030003, about 0.5 mile northeast of New Sharon.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Wash-bored observation well, diameter 2 in., September 1987. Measured depth 37 feet, screened 25-35 feet, screen slot size .006-in.

INSTRUMENTATION.--Measurements with chalked tape by local observer.

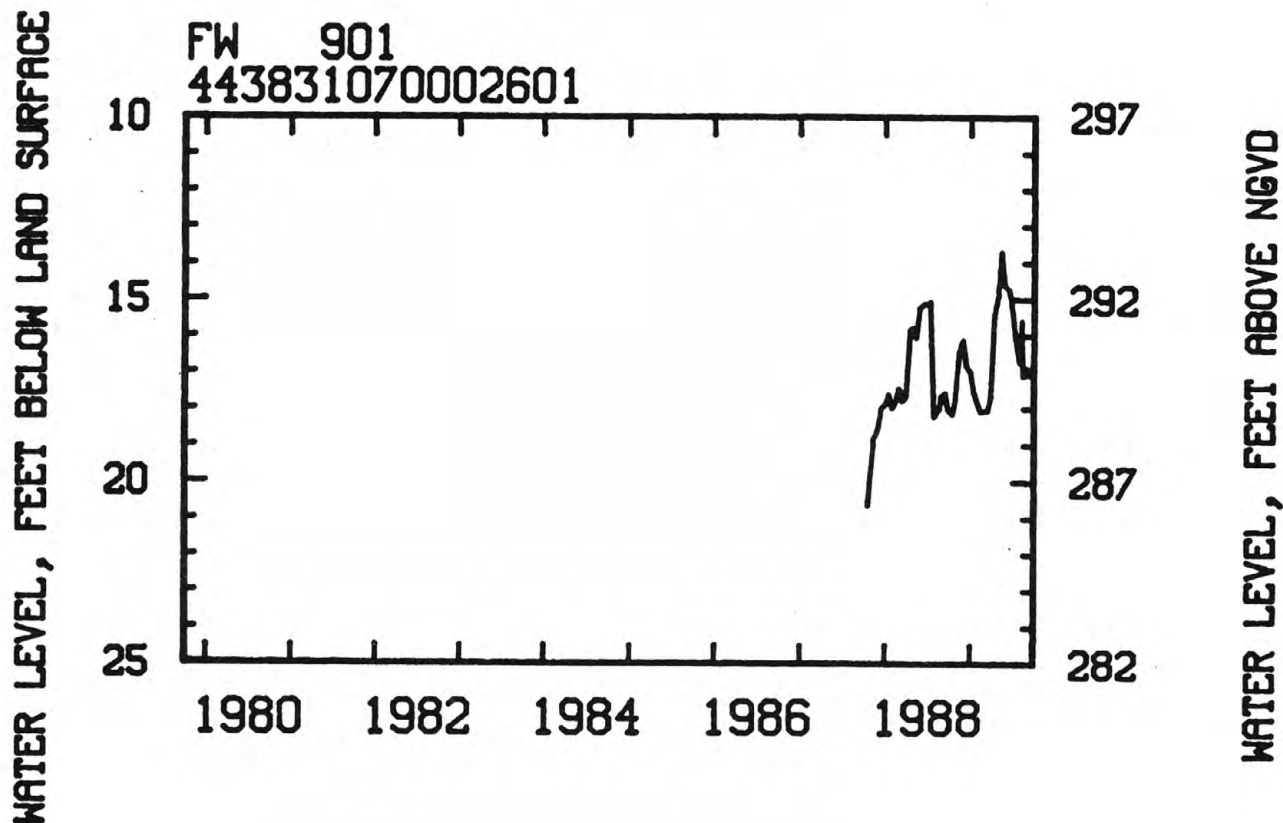
DATUM.--Elevation of land-surface datum is 307 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.13 ft above land surface datum.

PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 13.69 ft below land surface datum, May 14, 1989; lowest water level measured 20.64 ft below land surface datum, Oct. 18, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 17	18.17	Dec 16	16.87	Mar 15	18.07	Jun 15	14.75	Aug 08	16.70	Sep 15	17.10
29	17.77	31	17.01	30	17.65	29	15.20	09	15.59	30	16.77
Nov 16	16.38	Jan 15	17.56	Apr 15	15.37	Jul 15	16.11	16	17.14		
30	16.12	30	17.86	30	14.90	31	16.76	28	17.03		
		Feb 14	18.11	May 14	13.69			29	17.12		
		28	18.06	30	14.63			30	16.88		



HANCOCK COUNTY

444950068220601. Local number, HW 1.

LOCATION.--Lat 44°49'50", long 68°22'06", Hydrologic Unit 01050002, on State Highway 9, 0.25 mi west of the intersection with State Highway 181 in Amherst. Owner: Walter Jordan

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 18 in., depth 14 ft, cased with rock to 14 ft, open end.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 330 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top edge of hole in base of recorder shelter 0.65 ft below land-surface datum. It is 1.4 ft above the general land surface.

REMARKS.--Record lost between December 30 and January 6, doubtful gage-height record; record lost between February 16 and March 07 because recorder stopped.

PERIOD OF RECORD.--November 1943 to current year. Records for May 15-30, 1979; April 26-30, 1981; and the monthly summary for January 1981 are unreliable and should not be used.

REVISED RECORDS.--WDR ME-82-1: 1981, WRD ME-84-1: 1980, 1981.

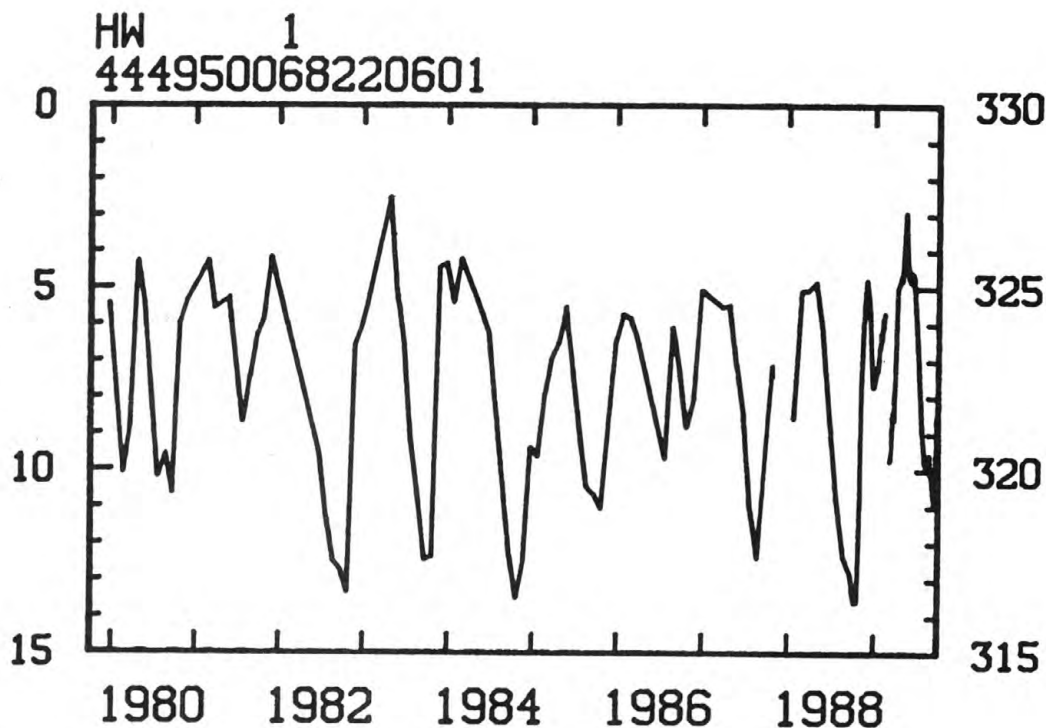
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.10 ft below land-surface datum, May 29, 1961; lowest estimated, 17.8 ft below land-surface datum Sep. 27, 1965. Well goes dry frequently.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.44	8.01	5.04	---	6.30	---	6.51	4.18	4.88	6.39	9.81	10.28
10	13.63	6.86	5.36	7.35	5.82	9.78	5.02	3.68	4.57	6.93	9.94	10.54
15	13.56	6.03	5.80	7.24	5.69	9.24	4.90	2.93	4.63	7.57	9.70	10.91
20	13.61	5.54	6.79	6.99	---	8.61	4.80	3.94	4.77	8.17	9.82	10.33
25	12.48	4.93	7.34	6.69	---	8.64	4.67	4.44	5.24	8.90	9.57	8.67
EOM	10.79	4.78	---	6.24	---	7.61	4.82	4.78	5.84	9.35	10.16	8.24

WTR YR 1989 HIGH 2.45 MAY 12 LOW 13.63 OCT 10-11, 18-20

WATER LEVEL, FEET BELOW LAND SURFACE



WATER LEVEL, FEET ABOVE NGVD

HANCOCK COUNTY-Continued

441440068182701. Local number, HW 137.

LOCATION.--Lat 44°14'40", long 68°18'27", Hydrologic Unit 01050002, Seawall Campground of Acadia National Park, 1.3 mi south of Southwest Harbor. Owner: National Park Service.

AQUIFER.--Bedrock of Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 175 ft, open hole.

INSTRUMENTATION.--Measurement with popper--by local observer.

DATUM.--Elevation of land-surface datum is 40 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of casing 1.3 ft above land-surface datum.

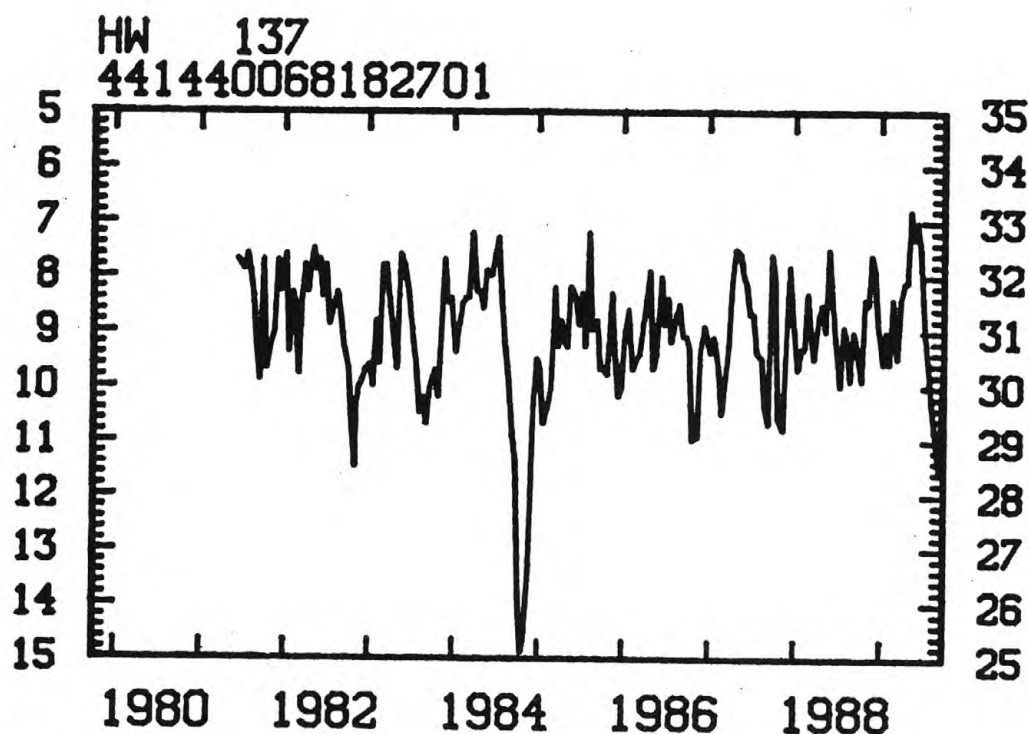
PERIOD OF RECORD.--June 1981 to current year. Water levels prior to October 1981 have not been published but are available in the files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.8 ft below land-surface datum, May 11, 1989; lowest measured, 14.9 ft below land-surface datum, Oct. 25, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 13	9.9	Dec 08	7.9	Feb 09	9.6	Apr 13	8.1	Jun 08	7.0	Aug 10	10.3
27	8.4	22	8.9	23	8.4	26	8.1	22	7.5	24	10.8
Nov 10	8.5	Jan 12	9.6	Mar 16	9.5	May 11	6.8	Jul 13	9.0	Sep 14	11.6
23	7.6	26	9.0	30	8.4	25	7.3	27	9.6	28	9.7

WATER LEVEL, FEET BELOW LAND SURFACE



WATER LEVEL, FEET ABOVE NGVD

GROUND-WATER LEVELS

KENNEBEC COUNTY

441849069442001. Local number, KW 52.

LOCATION.--Lat 44°18'49", long 69°44'20", Hydrologic Unit 01030003, on Cony Road, 0.3 mi 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., depth 22 ft, cased with rock to 22 ft, open end.

INSTRUMENTATION.--Water-level recorder from Oct. 1 through Aug. 4, Digital water-level recorder--60 minute punch installed Aug. 5.

DATUM.--Elevation of land-surface datum is 220 ft. above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of shelter house floor 0.07 ft below land-surface datum.

REMARKS.--Record lost between November 04 and November 28, February 15 and 17, and May 15 and May 26 because recorder stopped; record lost December 18 and December 28, April 21 and April 26, and June 11 and June 30, doubtful gage-height record.

PERIOD OF RECORD.--December 1960 to current year.

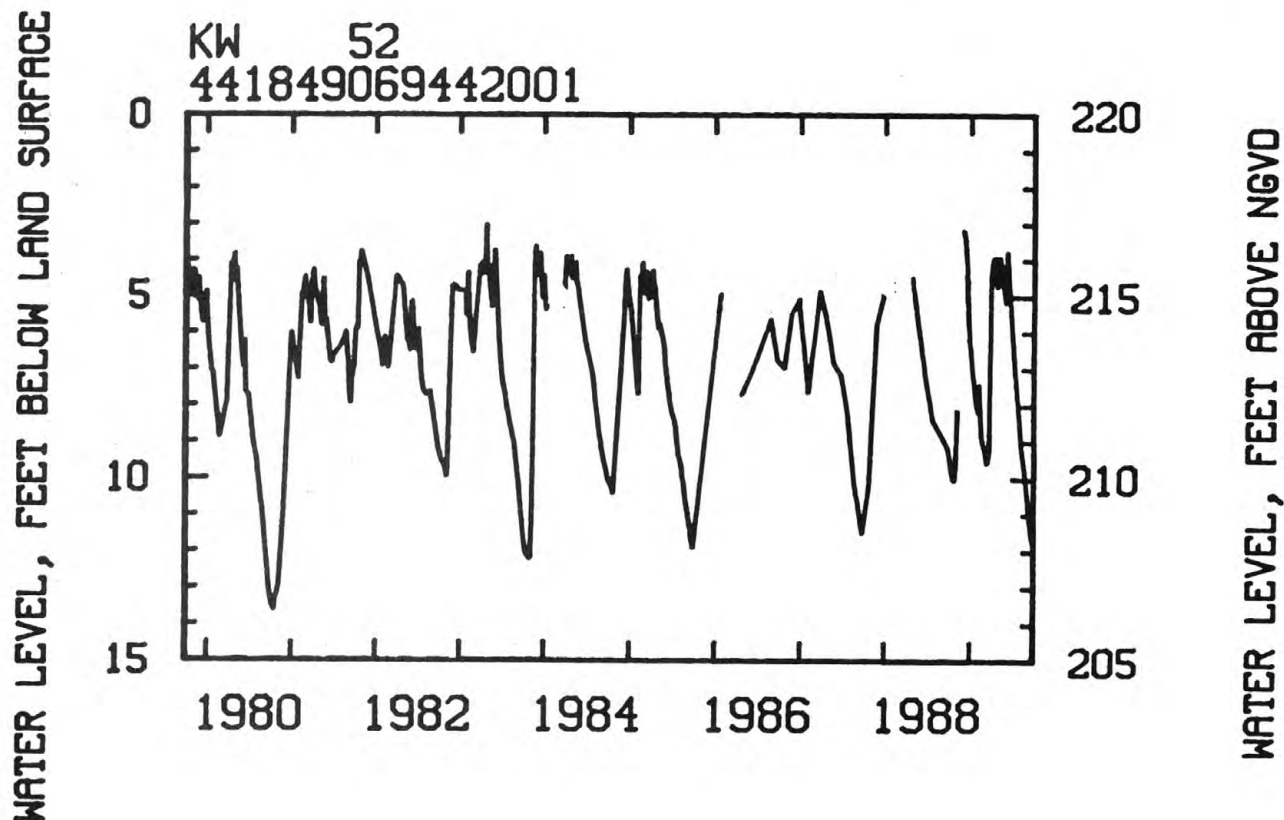
REVISED RECORDS.--WDR ME-82-1: 1978, 1979, 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.91 ft below land-surface datum, May 12, 1989; lowest, 15.61 ft below land-surface datum, Nov. 28-30, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.49	---	3.62	6.51	8.20	9.24	4.12	3.94	5.19	6.18	8.62	10.50
10	9.72	---	4.01	6.91	7.42	9.43	3.94	3.94	3.76	6.58	9.03	10.82
15	9.88	---	4.30	7.26	---	9.60	3.94	---	---	6.99	9.39	11.18
20	10.04	---	---	7.50	8.90	9.44	3.93	---	---	7.41	9.66	11.50
25	10.06	---	---	7.75	9.07	9.21	---	---	---	7.75	9.86	11.73
EOM	9.73	3.22	6.37	8.05	9.13	4.50	4.76	5.02	---	8.21	10.16	11.88

WTR YR 1989 HIGH 2.91 MAY 12 LOW 11.89 SEP 30



KENNEBEC COUNTY-Continued

440918069564001. Local number, KW 766.

LOCATION.--Lat 44°09'18", long 69°56'40", Hydrologic Unit 01030003, 690 ft northeast of the intersection of Hallowell Neck Road, Libby Road, and Plains Road, Litchfield. 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., depth 62 ft, cased to 59 ft, open end.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 300 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Floor of recorder shelter at land-surface datum, which is 2.7 ft above the general land surface.

PERIOD OF RECORD.--June 1976 to current year.

REVISIONS.--Water levels, October 1979 to September 1981, were incorrectly reported from land surface. They should be referenced from land-surface datum.

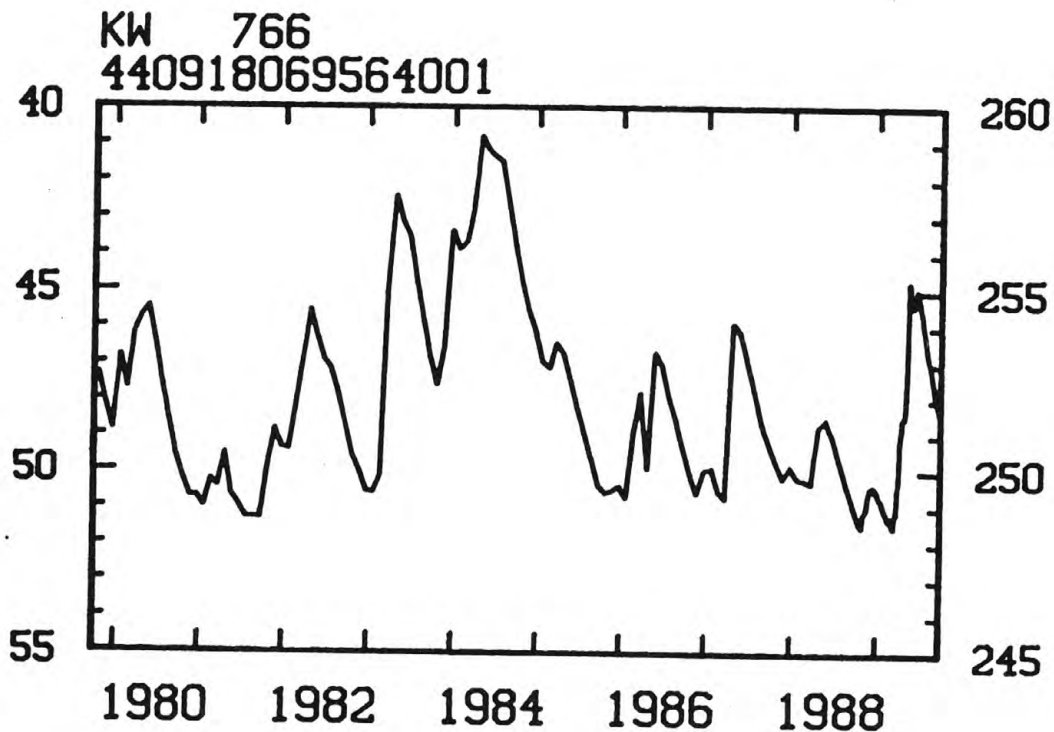
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.76 ft below land-surface datum, Jun. 02, 1984; lowest, 51.57 ft below land-surface datum, Mar. 14-15, 1989.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.18	51.15	50.42	50.59	51.08	51.38	50.23	48.15	45.45	45.48	46.71	47.75
10	51.24	51.10	50.39	50.69	51.16	51.49	49.18	47.28	45.26	45.63	46.91	47.93
15	51.35	51.03	50.40	50.76	51.25	51.54	48.94	44.71	45.05	45.87	46.98	48.08
20	51.44	50.94	50.43	50.78	51.34	51.17	48.51	44.94	44.94	46.07	47.15	48.19
25	51.44	50.66	50.46	50.89	51.21	51.13	48.47	45.19	45.09	46.24	47.34	48.31
EOM	51.53	50.51	50.53	51.00	51.26	50.51	48.50	45.31	45.28	46.52	47.56	48.42

WTR YR 1989 HIGH 44.59 MAY 16 LOW 51.57 MAR 14-15

WATER LEVEL, FEET BELOW LAND SURFACE



KENNEBEC COUNTY--Continued

440810069553601. Local number, KW 872 A.

LOCATION.--Lat 44°08'17", long 69°55'36", Hydrologic Unit 01030003, on Small Road, 0.40 mi north of State Highway 197, Litchfield. Owner: Stephen Condon.

AQUIFER.--Bedrock of Devonian age.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 404 ft, cased to bedrock, open end.

DATUM.--Elevation of land-surface datum is 220 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of casing at land-surface datum, which is 2.2 ft above the general land surface.

PERIOD OF RECORD.--November 1978 to current year.

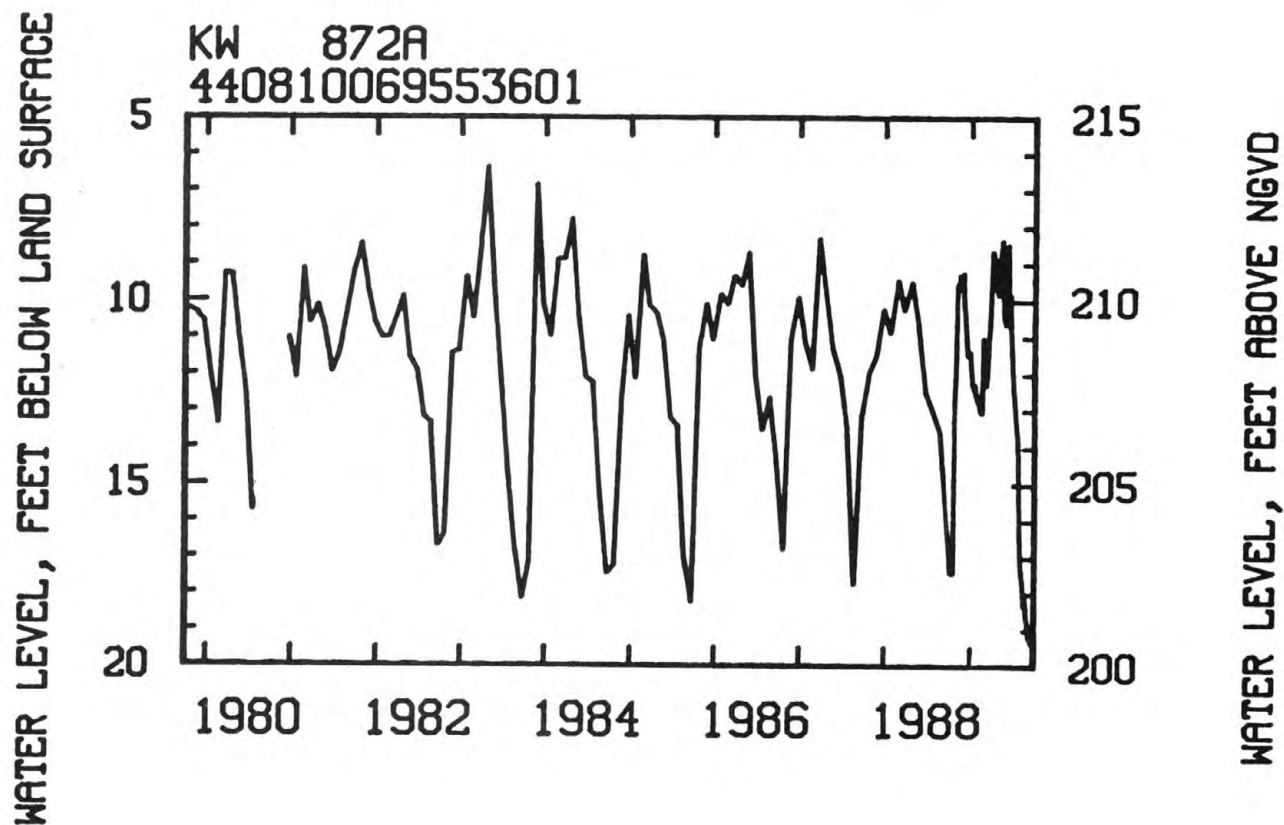
REVISED RECORDS.--WDR ME-82-1: 1980, WRD ME-84-1: 1980, 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.47 ft below land-surface datum, May 12, 1989; lowest, 19.58 ft below land-surface datum, Sep. 18, 1989.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.11	9.51	10.08	11.86	12.74	11.82	8.63	8.83	10.50	12.40	17.22	18.87
10	17.45	9.71	10.54	12.31	12.94	12.35	8.88	8.86	8.46	12.74	17.51	19.22
15	17.47	9.29	11.04	12.43	13.08	11.91	9.55	8.36	9.87	13.17	17.81	19.28
20	17.45	9.55	11.50	12.29	13.07	11.13	8.87	9.80	9.88	13.52	18.37	19.40
25	12.73	9.47	11.50	12.57	10.99	10.66	9.58	10.50	10.98	13.88	18.06	19.38
EOM	11.95	9.24	11.39	12.75	11.39	9.52	9.87	10.68	11.76	16.30	18.59	19.07

WTR YR 1989 HIGH 5.47 MAY 12 LOW 19.58 SEP 18



KENNEBEC COUNTY--Continued

441533069452401. Local number, KW 881.

LOCATION.--Lat 44°15'33", long 69°45'24", Hydrologic Unit 01030003, on unimproved road, about 0.5 mi east of State Highway 9, in Augusta. Owner: U.S. Geological Survey.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Washed-bored observation water-table well, diameter 2 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 210 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of pipe at land surface datum, which is 3.8 ft above the general land surface.

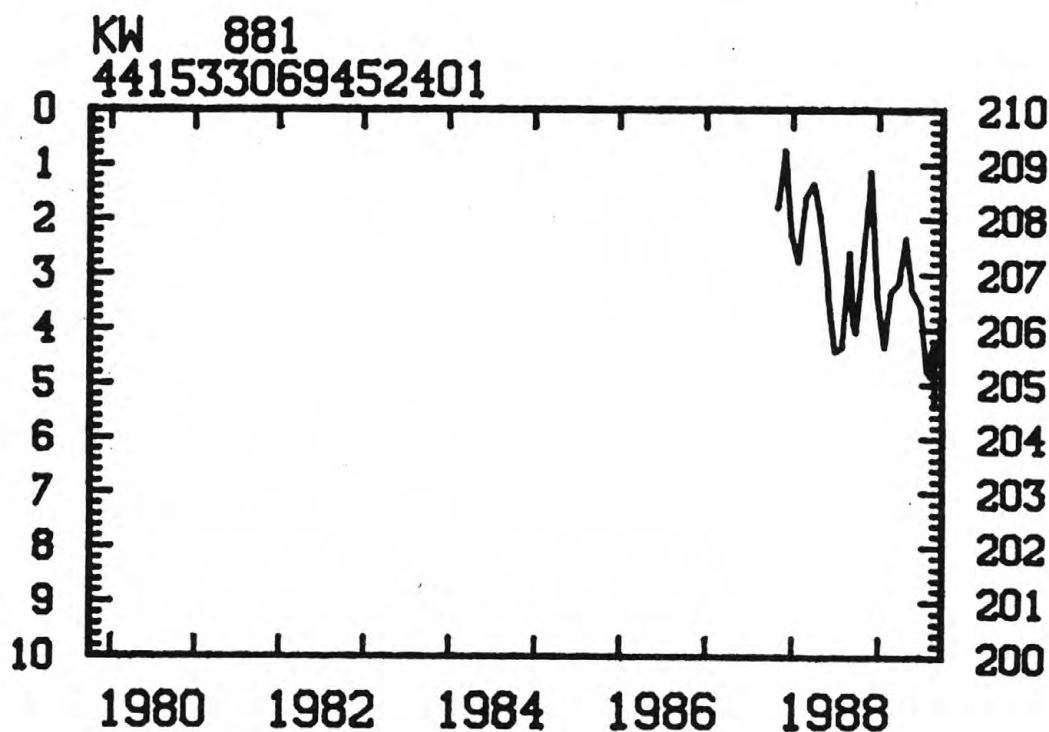
PERIOD OF RECORD.--October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.74 ft below land-surface datum, Nov. 30, 1987; lowest measured, 7.73 ft below land-surface datum, Sep. 16, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 24	2.86	Jan 25	4.34	Apr 26	2.34	Aug 10	4.87	Aug 25	4.44	Sep 11	4.62
Nov 28	1.12	Feb 23	3.30	May 25	3.31	11	4.77	26	4.47	18	4.34
Dec 27	3.50	Mar 28	3.14	Jun 30	3.60	21	4.35	27	4.49	29	3.62
				Jul 26	4.77	22	4.33	28	5.29		
						23	4.30	29	5.32		
						24	4.36	30	5.44		
								31	4.58		

WATER LEVEL, FEET BELOW LAND SURFACE



WATER LEVEL, FEET ABOVE NGVD

OXFORD COUNTY

444637070552301. Local number, OW 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., depth 15 ft, cased with concrete pipe to 15 ft, open end.

INSTRUMENTATION.--Measurement with chalked tape by well observer.

DATUM.--Elevation of land-surface datum is 1,450 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of concrete pipe 1.8 ft above land-surface datum.

REMARKS.--Prior to 1973 well was used for domestic supply.

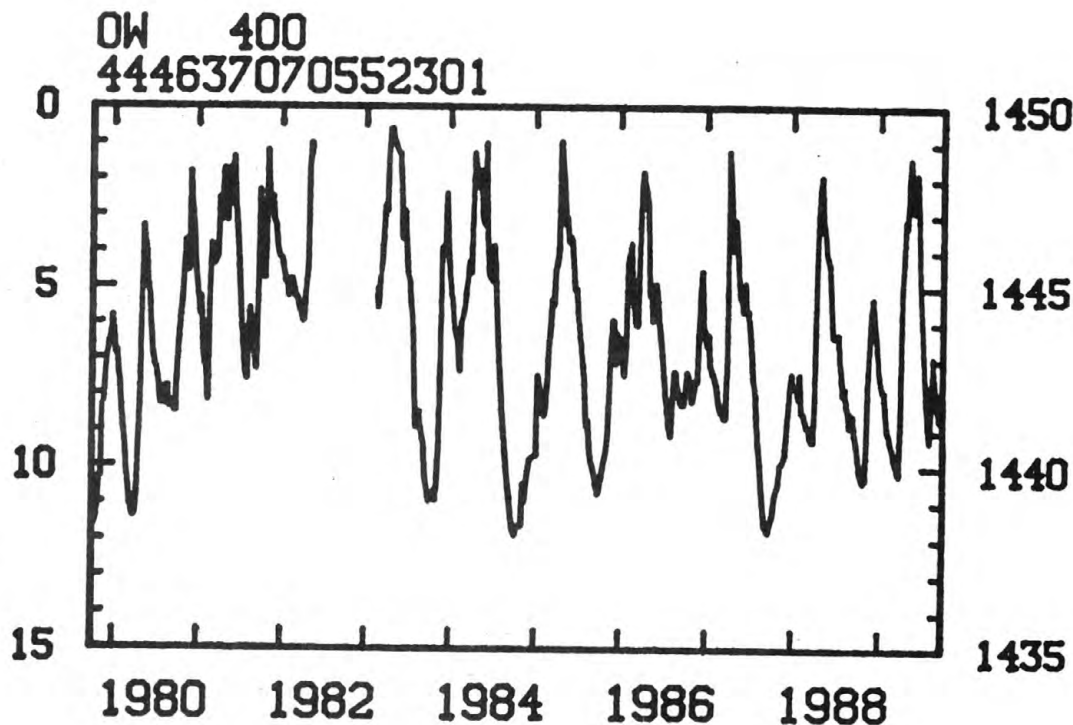
PERIOD OF RECORD.--April 1944 to current year. Records from May 16 to September 30, 1982 are unreliable and should not be used.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.4 ft above land-surface datum, Apr. 11, 1976; lowest measured, 12.2 ft below land-surface datum, Oct. 9, 16, 23, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
Oct 02	9.7	Dec 04	5.3	Feb 05	9.0	Apr 02	8.9	Jun 04	2.8	Aug 06	9.3
09	10.1	18	6.3	12	9.1	09	5.1	11	1.8	13	8.3
16	10.3	25	6.7	19	9.4	16	4.2	18	2.8	20	6.9
23	10.4	Jan 01	7.4	26	9.5	23	3.1	25	4.7	27	7.4
31	10.3	08	7.7	Mar 05	9.8	30	3.3	Jul 09	6.6	Sep 03	8.0
Nov 06	9.7	15	7.9	12	9.9	May 07	2.0	16	7.4	10	8.3
13	7.7	22	7.9	19	10.1	14	1.4	23	8.3	17	8.7
20	6.7	29	8.5	26	10.2	21	3.0	30	8.9	24	8.1
27	5.6					28	2.9				

WATER LEVEL, FEET BELOW LAND SURFACE



OXFORD COUNTY--Continued

440642070583401. Local number, OW 615.

LOCATION.--Lat 44°06'41", long 70°58'32", Hydrologic Unit 01060002, at the intersection of State Highway 113 and road to Fish Street, 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., depth 40 ft, which is screened 35 to 40 ft.

INSTRUMENTATION.--Measurement with chalked tape by local observer.

DATUM.--Elevation of land-surface datum is 390 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of casing at land-surface datum, which is 2.9 ft above the general land surface.

REMARKS.--No measurements made between October 14, 1988, and January 01, 1989; January 15, 1989, and March 18, 1989.

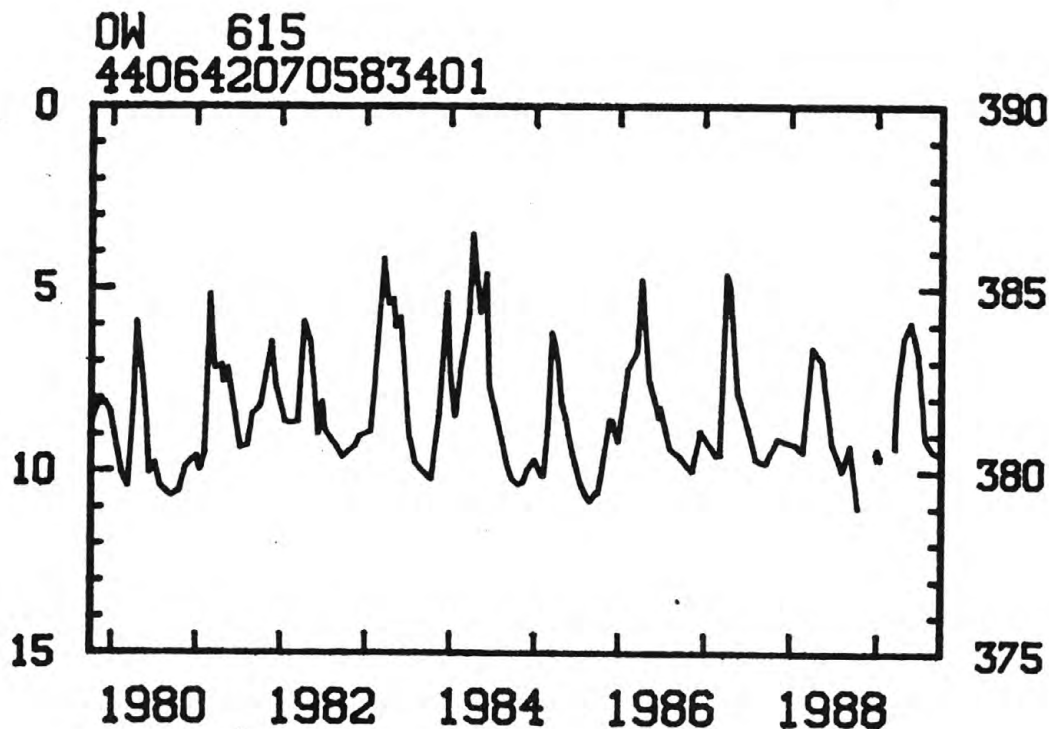
PERIOD OF RECORD.--August 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.00 ft below land-surface datum, Apr. 04, 1987; lowest measured, 11.58 ft below land-surface datum, Oct. 1, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 14	11.00	Mar 18	9.40	Apr 27	6.32	May 25	5.91	Jul 27	9.15	Sep 27	9.56
Jan 01	9.40	29	7.84			Jun 27	6.83	Aug 28	9.47		
15	9.70										

WATER LEVEL, FEET BELOW LAND SURFACE



OXFORD COUNTY--Continued

442515070481001. Local number, OW 616.

LOCATION.--Lat 44°25'15", long 70°48'11", Hydrologic Unit 01040002, at Bethel Airport, Bethel.

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., August 1978 constructed depth 21 ft, screened 16 to 21 ft. November 1982 measured depth 20 ft.

INSTRUMENTATION.--Measurements with chalked tape by local observer.

DATUM.--Elevation of land-surface datum is 650 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of casing 0.6 ft below land-surface datum, which is 2.0 ft above the general land surface.

REMARKS.--Well destroyed November 1988.

PERIOD OF RECORD.--August 1978 to October 28, 1988.

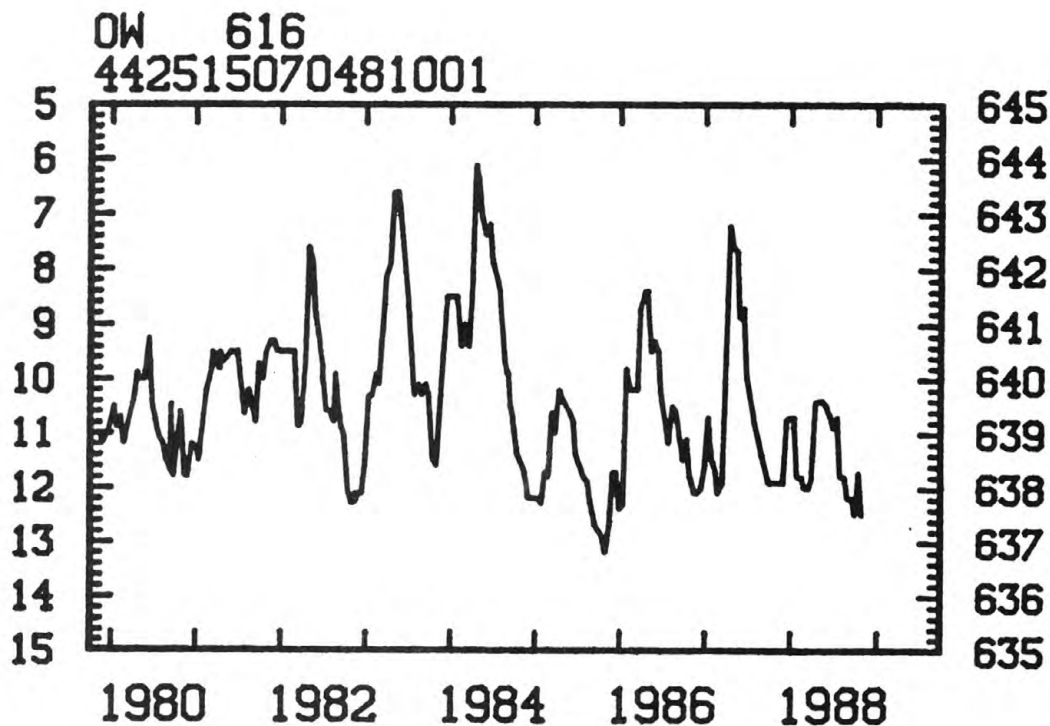
REVISED RECORDS.--WDR ME-82-1: 1979, 1980, 1981. WDR ME-83-1: 1979.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.1 ft, below land-surface datum, Apr. 15, 1984; lowest measured, 13.2 ft below land-surface datum, Oct. 30, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 15	11.71										
28	12.50										

WATER LEVEL, FEET BELOW LAND SURFACE



WATER LEVEL, FEET ABOVE NGVD

OXFORD COUNTY--Continued

440823070291501. Local number, OW 1214.

LOCATION.--Lat 44°08'23", long 70°29'15", Hydrologic Unit 01040002, on State Highway 121, about 0.1 mi east of the intersection with Skeetfield Road, in Oxford. Owner: U.S. Geological Survey.

AQUIFER.--Stratified sand (outwash) of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., September 1980 constructed depth 39 ft, cased with 6 in. steel to 35 ft, screened 35 to 39 ft. November 1982 measured depth 38 ft.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land surface datum is 334.04 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Electric tape gage index at land surface datum, which is 1.2 ft above the general land surface.

REMARKS.--Test hole adjacent to this well shows a depth to bedrock of 174 ft.

PERIOD OF RECORD.--September 1980 to current year.

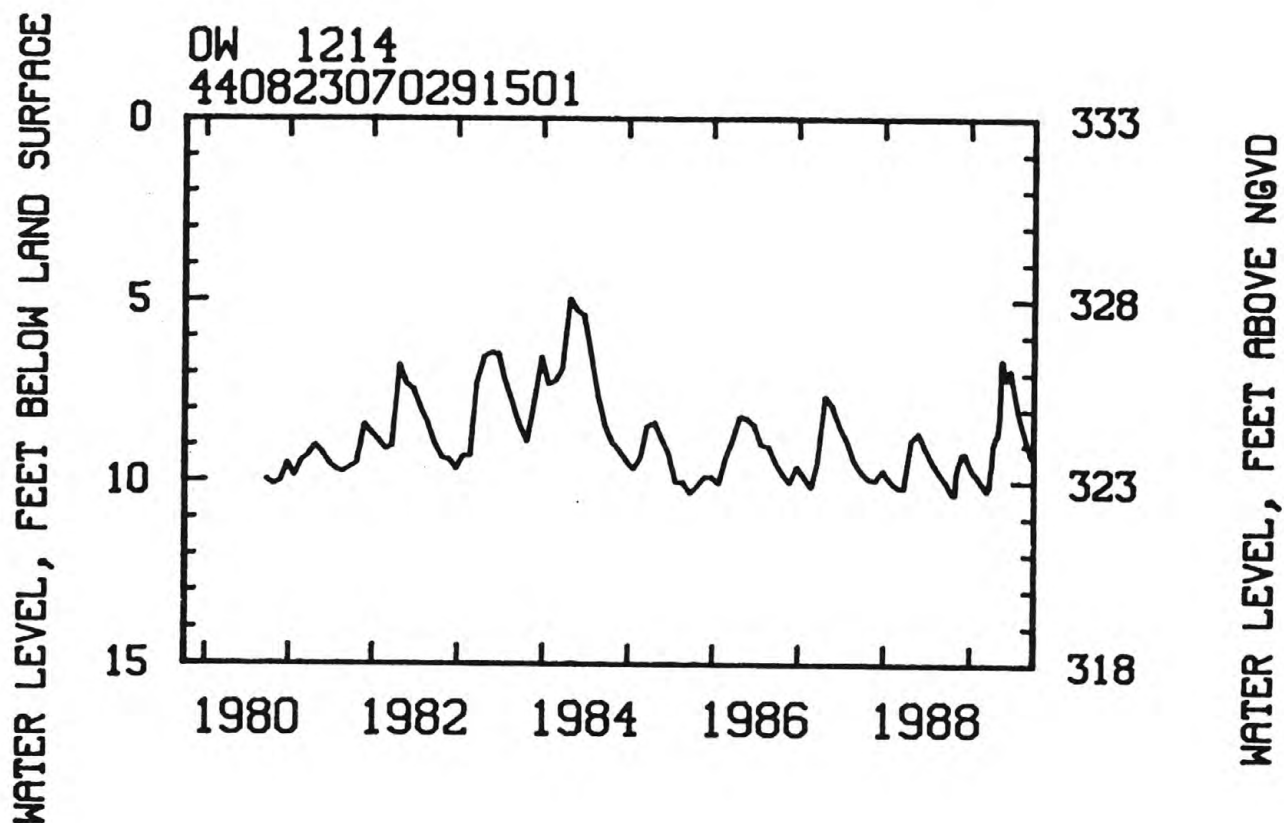
REVISED RECORDS.--WDR ME-82-1: 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.07 ft below measuring-point datum, Jun. 3, 1984; lowest, 10.37 ft below measuring-point datum, Oct. 20-22, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.20	9.75	9.21	9.64	9.92	10.17	9.52	8.39	7.18	7.39	8.33	9.03
10	10.27	9.58	9.24	9.72	9.96	10.24	8.97	8.03	7.09	7.55	8.46	9.12
15	10.32	9.46	9.32	9.76	10.02	10.26	8.90	6.62	6.97	7.73	8.56	9.24
20	10.36	9.42	9.41	9.79	10.09	10.12	8.74	6.69	6.90	7.86	8.65	9.33
25	10.34	9.27	9.48	9.83	10.09	10.14	8.70	6.88	6.98	8.06	8.77	9.34
EOM	10.35	9.21	9.58	9.87	10.13	9.66	8.71	7.01	7.23	8.21	8.92	9.37

WTR YR 1989 HIGH 6.61 MAY 15-17 LOW 10.37 OCT 20-22



PENOBSCOT COUNTY

445319068560101. Local number, PEW 456.

LOCATION.--Lat 44°53'19", long 68°56'01", Hydrologic Unit 01020005, on Kenduskeag-Levant Road, 2.5 mi 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., depth 98 ft, open hole.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 190 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Floor of fiberglass shelter 0.36 ft above land-surface datum, which is 4.3 ft above the general land surface.

REMARKS.--Record lost between October 01 and November 22 and between December 06 and March 01 because recorder stopped.

PERIOD OF RECORD.--April 1978 to current year.

REVISED RECORDS.--WRD ME-84-1: 1979, 1980, 1981.

REVISIONS.--Water levels, September 1979 to October 1981, were incorrectly reported from land surface. They should be referenced from land-surface datum.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.92 ft below land-surface datum, Apr. 26, 1983; lowest, 26.93 ft below land-surface datum, Sep. 30, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

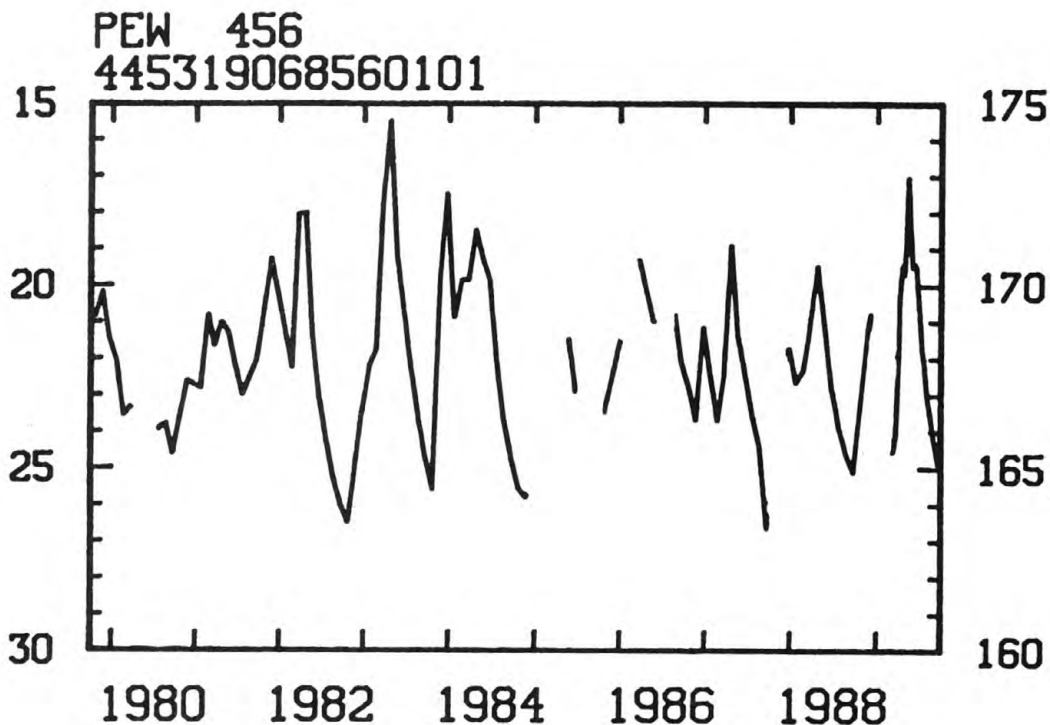
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	20.78	---	---	24.42	22.10	19.03	19.55	20.91	23.02	24.38
10	---	---	---	---	---	24.59	20.32	18.23	19.44	21.30	23.28	24.55
15	---	---	---	---	---	24.46	19.96	17.01	19.44	21.72	23.50	24.76
20	---	---	---	---	---	24.23	19.48	17.56	19.56	22.04	23.73	24.89
25	---	21.16	---	---	---	24.03	19.41	18.34	19.97	22.27	23.94	24.88
EOM	---	21.00	---	---	---	22.98	19.73	19.04	20.44	22.69	24.18	24.88

WTR YR 1989

HIGH 16.99 MAY 15

LOW 24.90 SEP 20

WATER LEVEL, FEET BELOW LAND SURFACE



PENOBSCOT COUNTY--Continued

451955068344501. Local number, PEW 457.

LOCATION.--Lat 45°19'55", long 68°34'45", Hydrologic Unit 01020005, in Lincoln about 0.2 mi, southeast of U.S. Highway 2 in South Lincoln on road toward Pollack Brook (South Lincoln Station). Owner: Lincoln Water District.

AQUIFER.--Glacial sand and gravel (ice-contact deposits) of Pleistocene age.

WELL CHARACTERISTICS.--Wash-bored observation water-table well, diameter 2.5 in., depth 39 ft, cased with iron pipe, open hole.

INSTRUMENTATION.--Measurement with chalked tape by local observer.

DATUM.--Elevation of land-surface datum is 200 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of casing 2.6 ft above land-surface datum.

REMARKS.--Water levels may be affected by pumping from nearby municipal well. No measurements made between October 19, 1988, and February 22, 1989. Station discontinued as of September 30, 1989.

PERIOD OF RECORD.--July 1982 to current year.

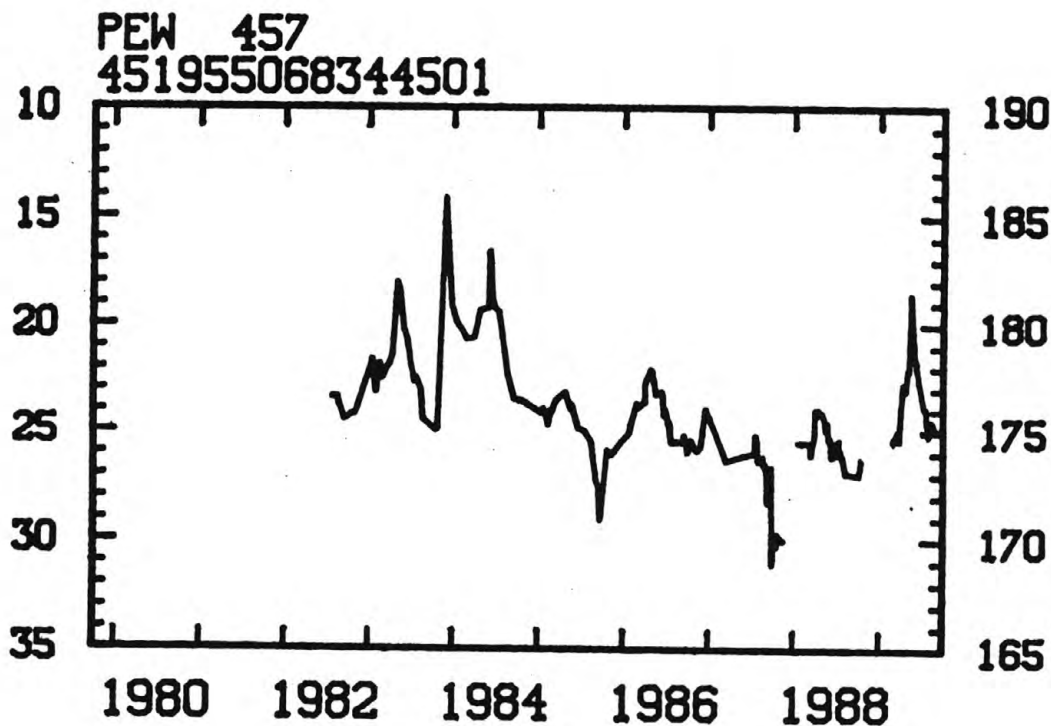
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.97 ft below land-surface datum, May 2, 1983; lowest measured, 29.62 ft below land-surface datum, Sep. 23, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 04	27.00P	Feb 22	25.54P	Apr 04	23.96	May 01	22.39P	Jun 05	21.52P	Aug 01	25.22
16	26.30P	Mar 20	24.96P	10	23.06P	04	22.00P	20	22.71P	07	24.63
19	26.20P	28	25.45P	14	22.70	09	22.15P	Jul 11	23.87P	09	24.46
				18	23.12P	11	21.03P	20	23.93P	15	24.53
				26	22.96P	16	19.25	24	24.66P	Sep 01	24.93
						17	18.55			07	24.89
										14	25.07

P=well pumping

WATER LEVEL, FEET BELOW LAND SURFACE



PISCATAQUIS COUNTY

452829069322101. Local number, PIW 2.

LOCATION.--Lat 45°28'29", long 69°32'21", Hydrologic Unit 01030001, approximately 1.0 mile north of Greenville

Junction. Owner: U.S. Geological Survey.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--A wash-bored observation well, diameter 2 in., September 1987. Measured depth 31 feet, screened depth 14-24 feet, screen slot size .006-in.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 1,087.0 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of casing 3.24 ft above land surface datum.

REMARKS.--Record lost between July 11 and July 24 because recorder stopped.

PERIOD OF RECORD.--July 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 1.27 ft below land-surface datum Apr. 10, 1989; lowest 4.13 ft below land-surface datum, Aug. 06, 1988, and Aug. 04-05, 1989.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

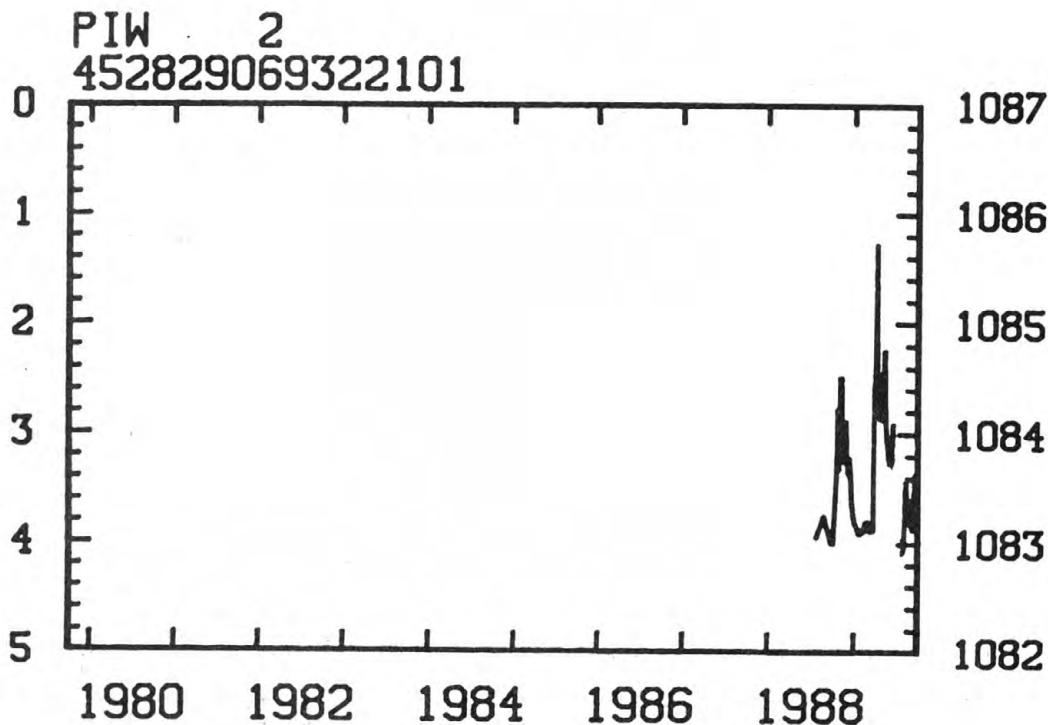
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.01	2.48	3.22	3.83	3.88	3.88	2.46	2.44	3.28	3.88	4.03	3.68
10	3.86	2.49	3.37	3.85	3.86	3.90	1.27	2.60	3.23	3.94	3.56	3.89
15	3.60	3.21	3.22	3.87	3.90	3.88	2.77	2.24	3.27	---	3.43	3.74
20	3.35	3.26	3.41	3.92	3.81	3.89	2.47	2.92	2.91	---	3.76	3.37
25	2.77	3.22	3.63	3.91	3.80	3.89	2.87	3.07	3.43	4.10	3.61	3.37
EOM	3.33	2.88	3.77	3.92	3.80	2.58	2.88	3.22	3.78	4.07	3.84	3.33

WTR YR 1989

HIGH 1.27 APR 10

LOW 4.13 JUL 28, AUG 04-05

WATER LEVEL, FEET BELOW LAND SURFACE



SOMERSET COUNTY

445148069513301. Local number, SMW 61.

LOCATION.--Lat 44°51'48", long 69°51'33", Hydrologic Unit 01030003, approximately 3.0 miles northeast of Madison.

Owner: U.S. Geological Survey.

AQUIFER.--Glaciomarine deposits of Pleistocene age.

WELL CHARACTERISTICS.--A wash-bored observation, diameter 2 in., September 1984. Measured depth 40 feet, screened depth 35-40 feet, screen slot size .010-in.

INSTRUMENTATION.--Measurement with chalked tape by local observer.

DATUM.--Elevation of land-surface datum is 280 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing 3.50 ft above land-surface datum.

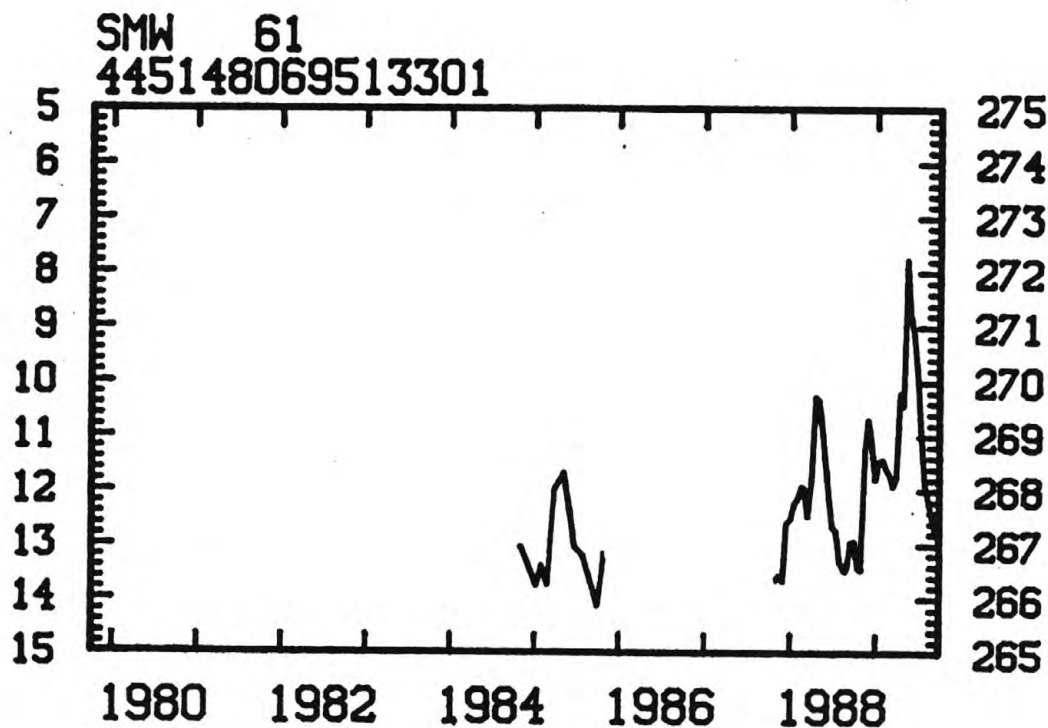
PERIOD OF RECORD.--January 1985 to November 1985 and October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 7.75 ft below land-surface datum, May 14, 1989; lowest measured, 14.16 ft below land-surface datum, Oct. 04, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 17	13.44	Dec 16	11.16	Feb 12	11.59	Apr 15	10.19	Jun 15	9.18	Aug 16	12.24
29	13.48	31	11.81	28	11.72	30	10.45	29	9.79	30	12.49
Nov 16	11.27	Jan 15	11.45	Mar 15	11.93	May 14	7.75	Jul 15	10.91	Sep 15	12.77
30	10.69	30	11.43	30	11.72	30	8.79	31	11.90	30	12.94

WATER LEVEL, FEET BELOW LAND SURFACE



WASHINGTON COUNTY

450713067162801. Local number, WW 796.

LOCATION.--Lat 45°07'13", long 67°16'28", Hydrologic Unit 01050001, in Calais, on Charlotte Road, about 2.25 mi south of U.S. Highway 1. Owner: U.S. Government (Moosehorn National Wildlife Refuge).

AQUIFER.--Bedrock of Devonian age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., September 1967 reported depth 150 ft, cased with steel to 21 ft, open hole. November 1982 measured depth 146 ft.

INSTRUMENTATION.--Measurement with chalked tape by local observer.

DATUM.--Elevation of land-surface datum is about 130 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of casing at land-surface datum, which is 0.8 ft above the general land surface.

REMARKS.--No measurements made between May 28, 1989, and July 18, 1989.

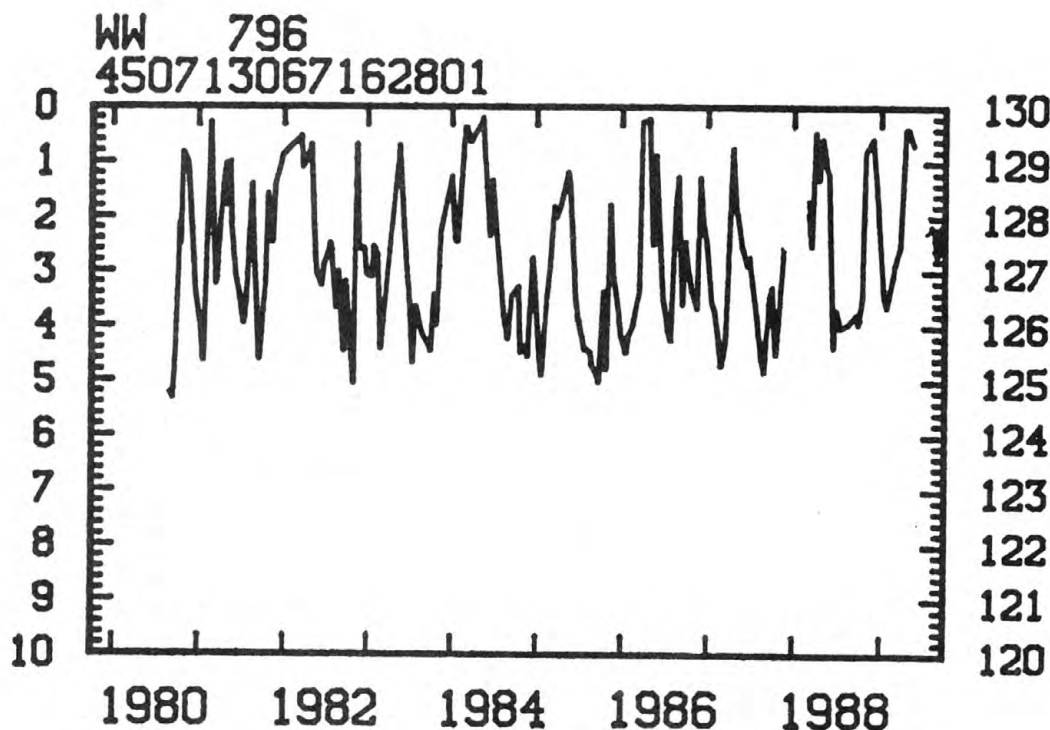
PERIOD OF RECORD.--September 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, overflowed Feb. 14, Sep. 25, and Dec. 16, 1981, Apr. 16, 1982, Mar. 20 and 26, Apr. 22 and 28, May 4, Jun. 1, Dec. 14 and 15, 1983, Apr. 3, 15, and 28, 1984; lowest measured, 5.34 ft below land-surface datum, Sep. 16, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 16	3.44	Dec 16	1.42	Feb 19	3.16	Apr 18	0.38	Jul 18	2.28	Sep 19	2.14
29	0.78	Jan 16	3.49	Mar 02	2.88	26	0.42	Aug 03	2.16	28	2.06
Nov 19	0.64	26	3.67	26	2.53	May 19	0.98	18	2.28		
28	0.56					28	0.77	30	2.74		
								31	2.70		

WATER LEVEL, FEET BELOW LAND SURFACE



WASHINGTON COUNTY--Continued

445227067520101. Local number, WW 797.

LOCATION.--Lat 44°52'27", long 67°52'01", Hydrologic Unit 01050002, about 0.35 mi south of State Highway 9 in Township T24MD, Hadley Lakes. Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel.

WELL CHARACTERISTICS.--A wash-bored observation well, diameter 2 in., September 1985. Measured depth 30 ft, screened depth 25-30 ft.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 250.00 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: V-notch on top of casing, northside of shelter which is 3.42 ft above the general land surface.

REMARKS.--Record lost between March 07 and May 05 because recorder stopped.

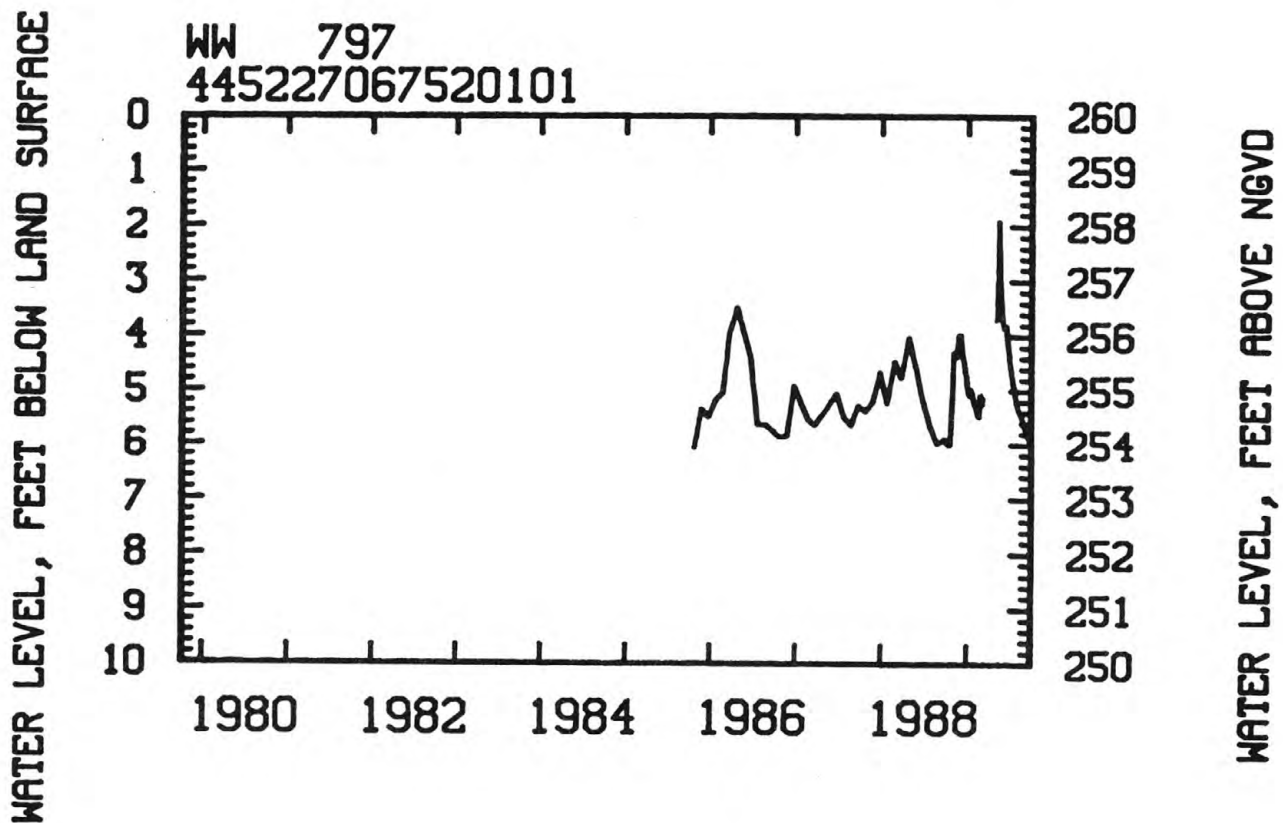
PERIOD OF RECORD.--September 1985 to current year. Records prior to October 1985 have not been published, but are available in the files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 1.84 ft below land surface datum, May 14-15, 1989; lowest water level 7.29 ft below land surface datum, Aug. 19, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.99	4.29	4.01	5.04	5.29	5.28	---	---	3.86	4.59	5.35	5.71
10	6.02	4.40	4.24	5.11	5.38	---	---	3.64	3.82	4.74	5.40	5.78
15	6.02	4.39	4.42	4.97	5.47	---	---	1.91	3.81	4.88	5.44	5.85
20	6.02	4.28	4.53	5.06	5.50	---	---	2.73	3.97	4.99	5.50	5.89
25	5.67	4.00	4.68	5.15	5.07	---	---	3.28	4.15	5.12	5.56	5.94
EOM	5.16	3.97	4.86	5.28	5.12	---	---	3.62	4.38	5.27	5.64	5.96

WTR YR 1989 HIGH 1.84 MAY 14-15 LOW 6.03 OCT 11-14



WASHINGTON COUNTY--Continued

444500068011601. Local number, WW 921.

LOCATION.--Lat 44°45'00", long 68°01'16", Hydrologic Unit 01050002, about 0.5 mile west of DeBlois. Owner: U.S. Geological Survey.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--A wash-bored observation well, diameter 2 in., September 1987. Measured depth 32 feet, screened 22-32 feet, screen slot size .006-in.

INSTRUMENTATION.--Measurement with chalked tape by local observer.

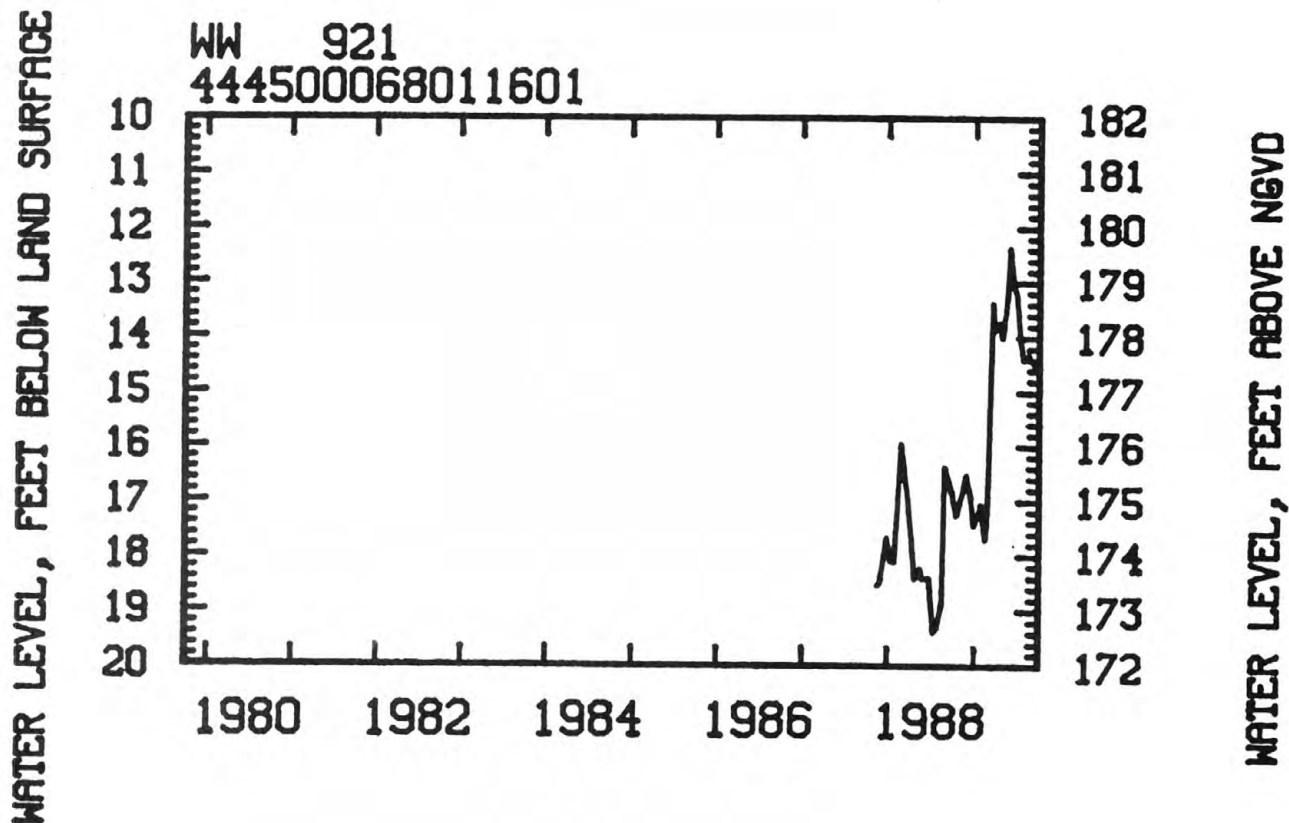
DATUM.--Elevation of land-surface datum is about 192 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.61 ft above land-surface datum.

PERIOD OF RECORD.--November 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 12.35 ft below land-surface datum May 29, 1989; lowest measured 19.39 ft below land-surface datum Jul. 15, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 18	17.27	Dec 17	16.93	Feb 18	17.71	Apr 17	13.73	Jun 18	13.10	Aug 19	14.31
28	17.07	30	17.47	27	17.06	28	14.02	29	13.28	27	14.41
Nov 18	16.70	Jan 29	17.05	Mar 18	13.36	May 19	13.28	Jul 16	14.10	Sep 16	14.53
26	16.52			26	13.88	29	12.35	27	14.42	27	14.51



WASHINGTON COUNTY--Continued

444526068013301. Local number, WW 922.

LOCATION.--Lat 44°45'26", long 68°01'53", Hydrologic Unit 01050002, about 1.0 mile north of Deblois. Owner: U.S. Geological Survey.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--A wash-bored observation well, diameter 2 in., September 1987. Measured depth 42 feet, screened 25-40 feet, screen slot size .006-in.

INSTRUMENTATION.--Measurement with chalked tape by local observer.

DATUM.--Elevation of land-surface datum is about 240 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 3.00 ft above land-surface datum.

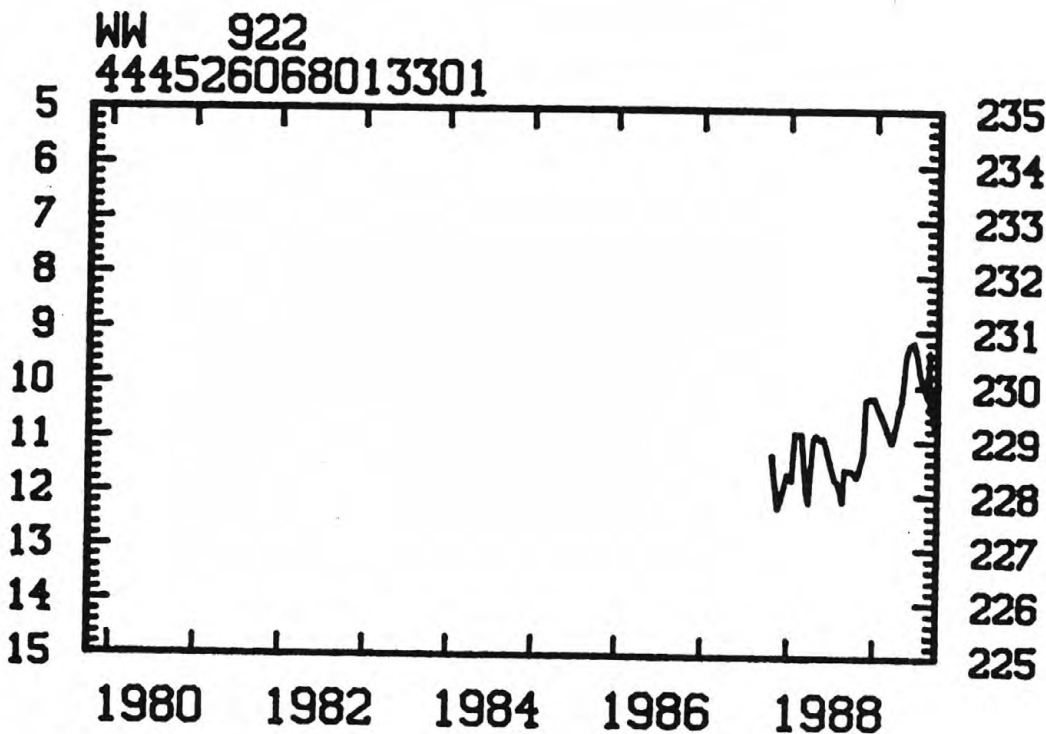
PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 9.18 ft below land-surface datum Jun. 18, 1989; lowest measured 12.26 ft below land-surface datum Nov. 19, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 18	11.68	Dec 17	10.21	Feb 18	10.71	Apr 17	10.42	Jun 18	9.18	Aug 19	10.19
28	11.55	30	10.23	27	10.83	28	10.24	29	9.35	27	9.34
Nov 18	11.19	Jan 29	10.52	Mar 18	11.04	May 19	9.40	Jul 16	9.77	30	10.46
26	10.23			26	10.90	29	9.24	27	9.94	31	10.03
										Sep 16	10.67
										27	10.78

WATER LEVEL, FEET BELOW LAND SURFACE



YORK COUNTY

432310070393301. Local number, YW 807.

LOCATION.--Lat 43°23'10", long 70°39'33", Hydrologic Unit 01060003, about 4.5 miles southeast of South Sanford.

Owner: U.S. Geological Survey.

AQUIFER.--Ice contact glaciofluvial deposits of Pleistocene age.

WELL CHARACTERISTICS.--A wash-bored observation well, diameter 2 in., measured depth 39 ft, screened depth 34 to 39 feet, screen slot size .010-in.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Elevation of land-surface datum is 202.0 ft above National Geodetic Vertical Datum of 1929, from topographic maps. Measuring point: Top of casing 2.9 ft above land-surface datum.

REMARKS.--Record lost between April 28 and May 24, doubtful gage-height record.

PERIOD OF RECORD.--July 1988 to current year.

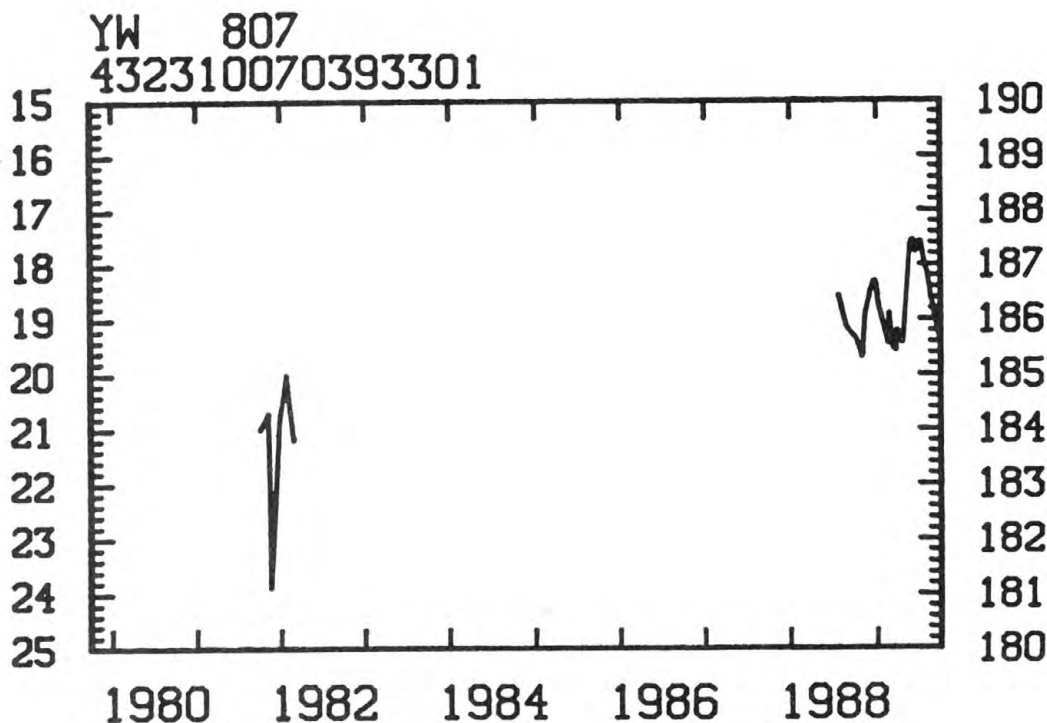
EXTREMES FOR PERIOD OF RECORD.--Highest water level 17.55 ft below land surface datum, Jun. 01-07, 1989; lowest measured 19.76 ft below land-surface datum, Nov. 03-04, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.37	19.65	18.48	18.57	19.21	19.28	19.33	---	17.55	17.58	18.15	18.93
10	19.40	19.09	18.40	18.77	19.29	19.49	19.40	---	17.61	17.58	18.27	19.01
15	19.46	18.86	18.34	18.85	19.38	19.56	19.42	---	17.78	17.73	18.40	19.14
20	19.54	18.77	18.31	18.94	19.47	19.45	19.44	---	17.80	17.85	18.58	19.23
25	19.60	18.69	18.32	19.04	18.89	19.59	19.44	17.63	17.72	17.98	18.68	19.33
EOM	19.72	18.62	18.41	19.12	19.04	19.19	---	17.57	17.61	18.10	18.78	19.43

WTR YR 1989 HIGH 17.55 JUN 01-07 LOW 19.76 NOV 03-04

WATER LEVEL, FEET BELOW LAND SURFACE



WATER LEVEL, FEET ABOVE NGVD

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

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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