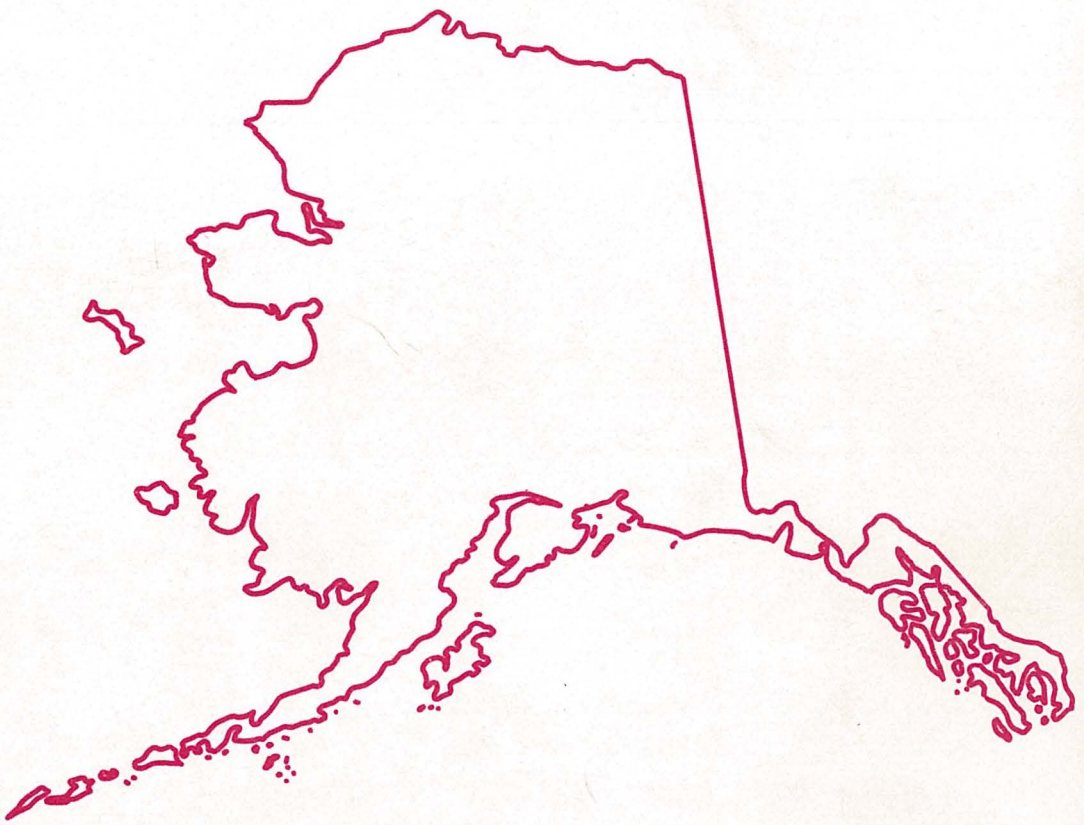
Water Resources Data
Alaska
Water Year 1982



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AK-82-1
Prepared in cooperation with the State of Alaska
and with other agencies

CALENDAR FOR WATER YEAR 1982

1981

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1982

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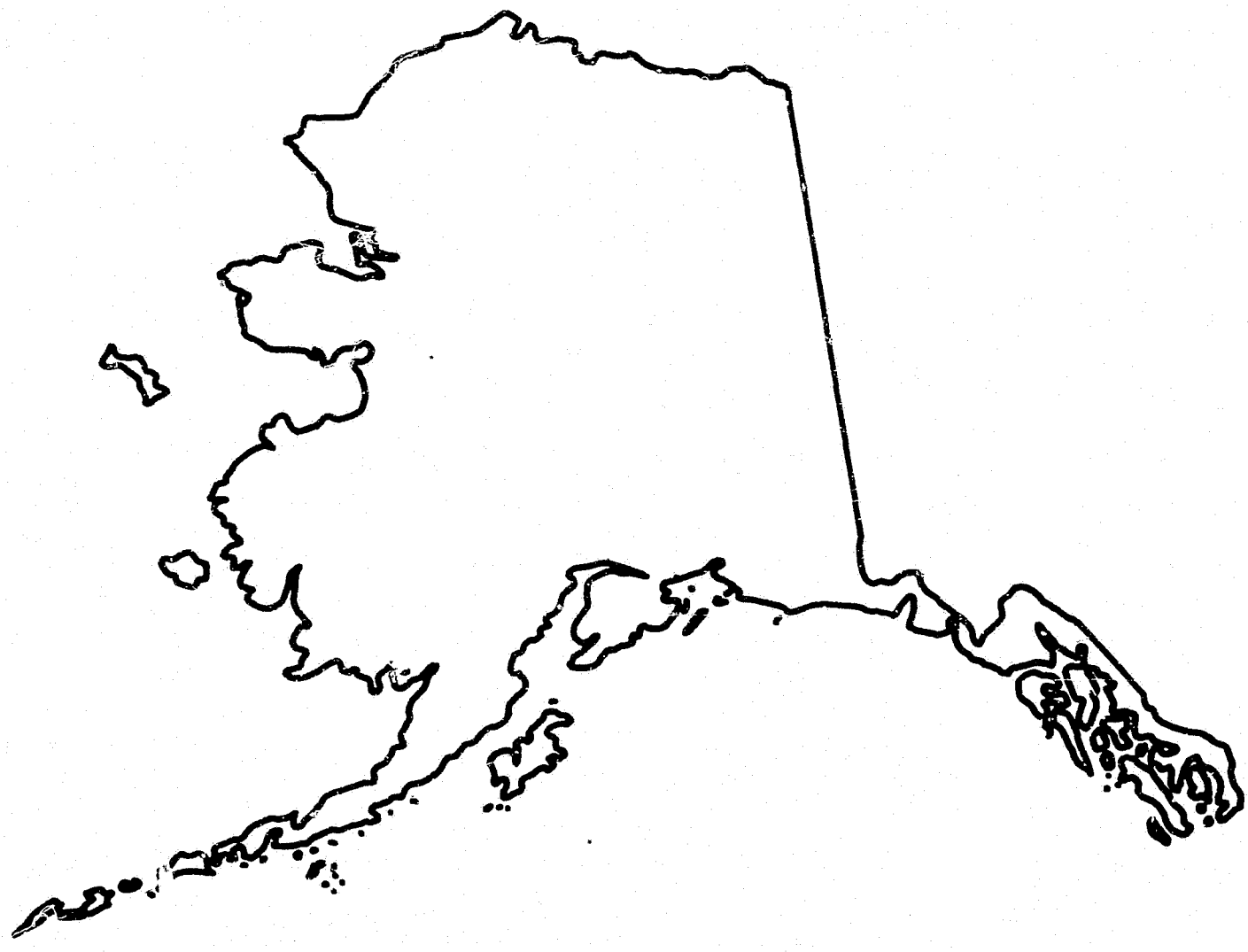
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Water Resources Data
Alaska
Water Year 1982

by R.D. Lamke, P.J. Still, B.B. Bigelow, H.R. Seitz, and J.E. Vaill



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AK-82-1
Prepared in cooperation with the State of Alaska
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas Peck, Director

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey
1515 East Thirteenth Avenue
Anchorage, Alaska 99501

1983

PREFACE

This report was prepared by personnel of the Alaska district of the Water Resources Division of the U.S. Geological Survey, under the supervision of Philip A. Emery, District Chief and J. D. Bredehoeft, Regional Hydrologist, Western Region. It was done in cooperation with the State of Alaska and with other agencies.

This report is one of a series issued by state. General direction for the series is by Philip Cohen, Chief Hydrologist, U.S. Geological Survey, and J. E. Biesecker, Assistant Chief Hydrologist for Scientific Publications and Data Management.

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Water resources data for the 1982 water year for Alaska consists of records of stage, discharge, and water quality of streams; stage and water quality of lakes; and water levels and water quality in wells and springs. This report contains discharge records for 108 gaging stations; stage only record for 1 gaging station; water quality for 49 stations; and water levels for 28 observation wells. Also included are 43 low-flow, 67 crest-stage, and 40 water-quality partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements of discharge, lake stage, or water quality. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Alaska.

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GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

[Letter after station name designates type of data: (d) discharge, (c) chemical, (m) microbiological, (t) water temperature, (s) sediment]

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GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

[Letter after station name designates type of data: (d) discharge, (c) chemical, (m) microbiological, (t) water temperature, (s) sediment]

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INTRODUCTION

Water resources data for the 1982 water year for Alaska consist of records of stage, discharge, and water quality of streams; stage and water quality of lakes; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 108 gaging stations; stage only at 1 gaging station; water quality at 49 gaging stations; and water levels for 28 observation wells. Also included are data for 43 low-flow, 67 crest-stage, and 48 water-quality partial-record stations and 23 lakes. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Alaska.

Records of discharge and stage of streams, stage of lakes, chemical quality, water temperatures, and suspended sediment were first published in U.S. Geological Survey water-supply papers. Through September 30, 1960, these data were published in seven water-supply papers entitled, "Quantity and Quality of Surface Waters of Alaska" (through 1950, 1951-53, 1954-56, 1957, 1958, 1959, 1960). Since 1960, streamflow records and related data were published in a five-year series of water-supply papers for 1961-65 and 1966-70 entitled, "Surface Water Supply of the United States." Water-quality records were published in a water-supply paper entitled "Quality of Surface Waters of Alaska, 1961-63" and after then until 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1949 to 1974 in a series of water-supply papers entitled, "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 604 South Pickett Street, Alexandria, Virginia 22304.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report AK-82-1." 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.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (907) 271-4138.

COOPERATION

The U.S. Geological Survey and organizations of the State of Alaska have had cooperative agreements since 1958 for the systematic collection of streamflow records, water-quality records, and ground-water levels. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Alaska Department of Natural Resources
Alaska Power Authority
Alaska Department of Fish and Game
Alaska Department of Transportation and Public Facilities in cooperation with the Federal Highway Administration, U.S. Department of Transportation
Alaska Department of Environmental Conservation
Municipality of Anchorage
Fairbanks North Star Borough
Matanuska-Susitna Borough
Kenai Peninsula Borough

Assistance in the form of funds or services was given by the following federal agencies for information published in this report: Corps of Engineers, U.S. Army, for 21 gaging stations and 3 water-quality stations; Forest Service, U.S. Department of Agriculture, for 11 gaging stations and 10 water-quality stations.

Organizations that supplied data are acknowledged in station descriptions.

ACKNOWLEDGMENTS

This report is the culmination of a concerted effort by many dedicated employees of the Alaska District who collected -- often under adverse conditions -- compiled, analyzed, and verified the data. 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, those who contributed significantly to the preparation of the report -- organization of the data, typing, editing, and assembly of the manuscript -- include Karen V. Kindgren, Lisa D. Tennison, and Robert F. Gilmore.

HYDROLOGIC CONDITIONS

Streamflow in Alaska for the 1982 water year was generally in the normal range. Flow at about 15 percent of the long-term gaging stations (those with 10 or more years of record) was deficient (in the lowest 25 percent for the period of record). These stations were mainly in Southeast Alaska. Runoff was the second lowest of record for a water year in Harding River near Wrangell, Mendenhall River near Juneau, and Fish Creek near Ketchikan which have 31, 17, and 64 years of record respectively. Flow was excessive (in the highest 25 percent for the period of record) at about 25 percent of the long-term gaging stations. These stations were scattered throughout western Alaska. The discharge for the 1982 water year was the highest of record in the Kuparuk and Putuligayuk Rivers near Deadhorse on the Arctic Slope which have 11 and 10 years of record, respectively.

Streams in Southeastern Alaska generally had below normal or deficient flows during October 1981. Storms in November resulted in above normal or excessive streamflows. Generally, runoff was deficient during February through April. Most streams in Southeast Alaska had an above normal or excessive period of streamflow during May or June. After June, the runoff was generally below normal or deficient. Streamflow during August was the lowest of record in Harding River.

The two notable seasonal streamflow trends in South-central Alaska were that the runoff was deficient or below normal during the snowmelt period and excessive during September. September flows were the highest of record at the long-term stations: Bradley, Anchor, and Ninilchik Rivers in the lower Kenai Peninsula, Campbell Creek at Anchorage, and Skwentna River northwest of Anchorage. Many other shorter term stations had record September flows. Notable peak flows (the highest for the period of record) occurred at the gage on Chuitna River near Tyonek and at the crest-stage gage on Spruce Creek near Seward.

The period of higher than normal September precipitation affected runoff in other streams in western Alaska such as Myrtle Creek near Kodiak, Nuyakuk River near Dillingham, and Koyukuk River near Hughes. These streams also experienced above normal flows in June and July.

The only discernable seasonal trend at the long-term stations in the Tanana River basin was that runoff in June was above normal or excessive because of widespread general rains in the last half of the month. Streamflow in June was the highest and second highest of record, respectively, at the two gaging stations on the Arctic Slope near Deadhorse on the Kuparuk and Putuligayuk Rivers.

Monthly and annual mean discharge for 1982 is compared with median monthly and annual discharge for the period of record in figure 3 at six representative gaging stations throughout the state.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined as follows. See also the table for converting English Units to International System of units (SI) 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 level 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, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

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

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 water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

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

Bottom material: See Bed material.

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

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. 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 in bottom material".

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

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,447 cubic meters.

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

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

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

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

Cubic foot per second (FT^3/S, or 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 approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

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

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

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

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

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

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

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

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

Hydrologic unit is a geographic area representing part 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 8-digit number.

Micrograms per liter (UG/L, ug/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 sediment per liter of water-sediment mixture.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content in the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). 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.

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

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

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

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

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

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

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

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. 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 determines all of the constituent in the sample.)

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

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 15303600, which appears just to the left of the station name, includes the 2-digit part number "15" plus the 6-digit downstream order number "303600."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

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

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

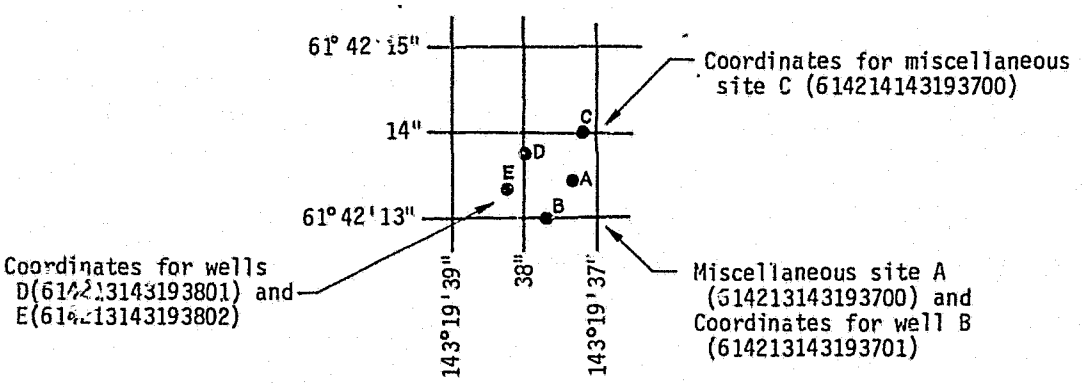


Figure 1. – System for numbering wells and miscellaneous sites (latitude and longitude).

SPECIAL NETWORKS AND PROGRAMS

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

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

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

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

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams and stage of lakes. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data in determining the daily flow. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter,

using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

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

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

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

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams a table showing the daily discharge and monthly and yearly discharge is given. Tables of daily mean gage heights are included for some streamflow stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging stations gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

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

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 5.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; It is not given for stations having fewer than 5 complete years of record. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge, it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of

occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

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

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

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations. Lake-level data collected at miscellaneous selected lakes are tabulated also.

Accuracy of field data and computed results

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

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

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

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, flow from springs, 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 or for other changes incident to use and control.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is filed in the subdistrict offices at Anchorage, Fairbanks, and Juneau for their areas of responsibility. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

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

EXPLANATION OF WATER QUALITY RECORDS

Collection and examination of data

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

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

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

Water analysis

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

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

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

Water temperature

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

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

Sediment

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

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

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

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

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network consists of observation wells located in the most important aquifers, and therefore the most significant data are obtained from the fewest wells. (See figure 1.)

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

The local number used herein is partly based on the rectangular subdivision of public lands. The first two letters indicate the principal meridian and the quadrant formed by the intersection of the base line and the principal meridian. The first three digits indicate the township in which the

well is located, the next three digits the range, and the following two digits the section. Letters following the section number indicate the quarter section, the quarter-quarter section, and so forth to the fourth order subdivision. Each of these subdivisions is lettered counter-clockwise, from the northeast corner. Each well within the smallest order of subdivision is then given a sequential number. Finally, each well within a section is assigned a sequential map number using the last three digits. Thus, SB00601115BCAD1 indicated the Seward meridian (S), the northwest quadrant (B), township 6 north, range 11 west, section 15; and the well is in the SE¼ of the NE¼ of the SW¼ of the NW¼ of the section (BCAD). It was the first well in the 2.5 acre "D" subdivision assigned a sequential number (1). The next three digits, 001, indicate the sequence in which a well was located on a map. Thus 001 indicates it was the first well plotted in the one square mile section. The next space is left blank. The last five numbers, such as 00114, are the Alaska register number, that is provided for continuity with older reports. The use of this number, for new well sites, was discontinued in 1981. Therefore, the local number, for well sites established prior to 1981 is SB00601115BCAD1001 00114 and the number for new sites established beginning in 1981 is SB00601115BCAD1 001.

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

Water-level measurements in this report are given in feet referred to either National Geodetic Vertical Datum (NGVD) or land-surface datum (lsd). National Geodetic Vertical Datum is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude 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). Daily water levels are reported for a few wells that may have significant fluctuations between every fifth day. The extreme water levels recorded during the year are reported as the highest water level (HWL) and as the lowest water level (LWL).

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 or if an electric water sensor must be used, the error in determining the absolute value of the total depth to water may be five or more hundredths of a foot. However, 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. Accordingly, most measurements are reported to a hundredth of a foot, but a few are given only to a tenth of a foot.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-seven manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering 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-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.

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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.

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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.

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

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 and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 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-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 programed text 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-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.
4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
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. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
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5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
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-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.

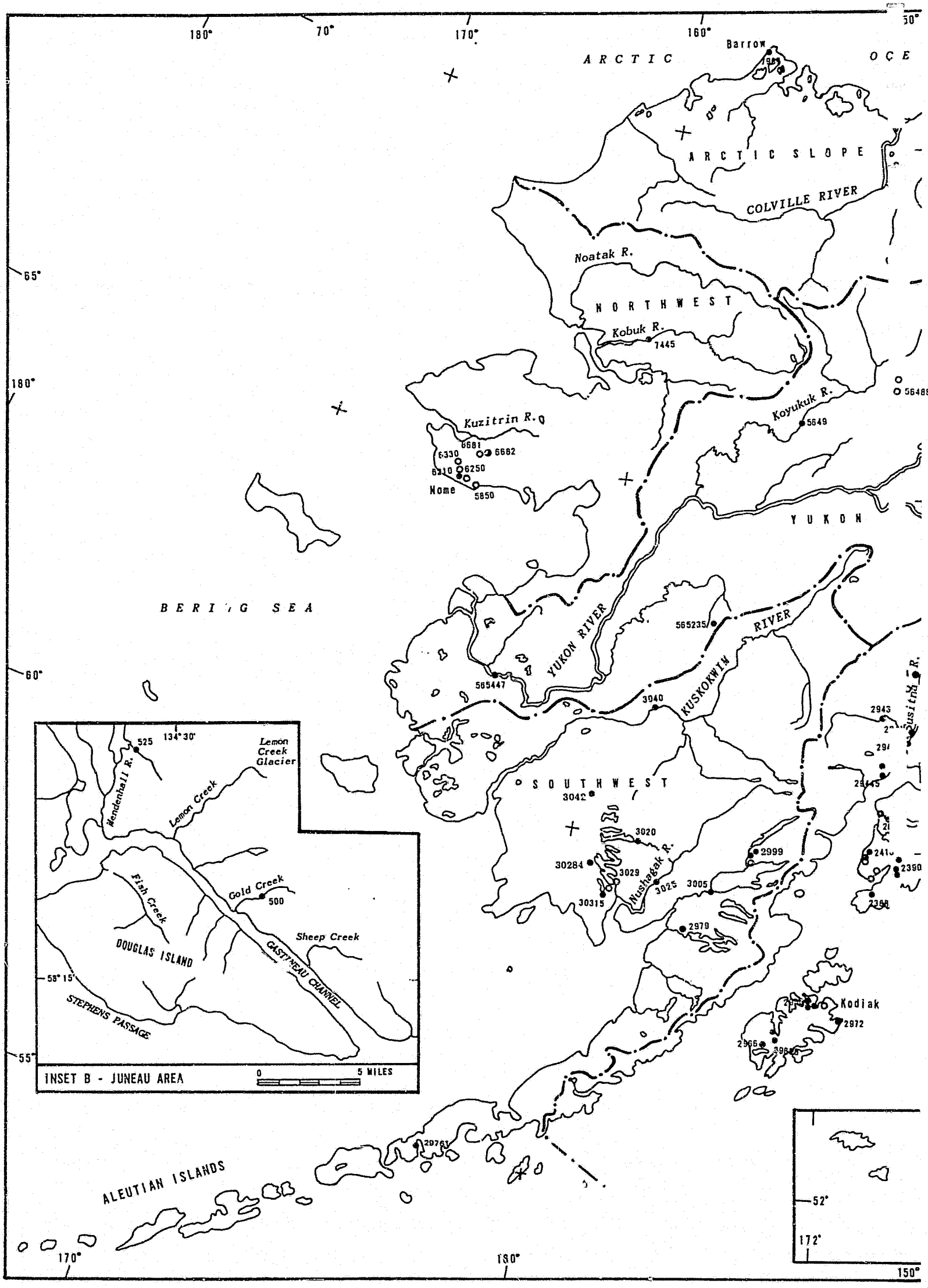


Figure 2. – Locations of gaging stations.

ALASKA

100 0 100 MILES

100 0 100 KILOMETRES

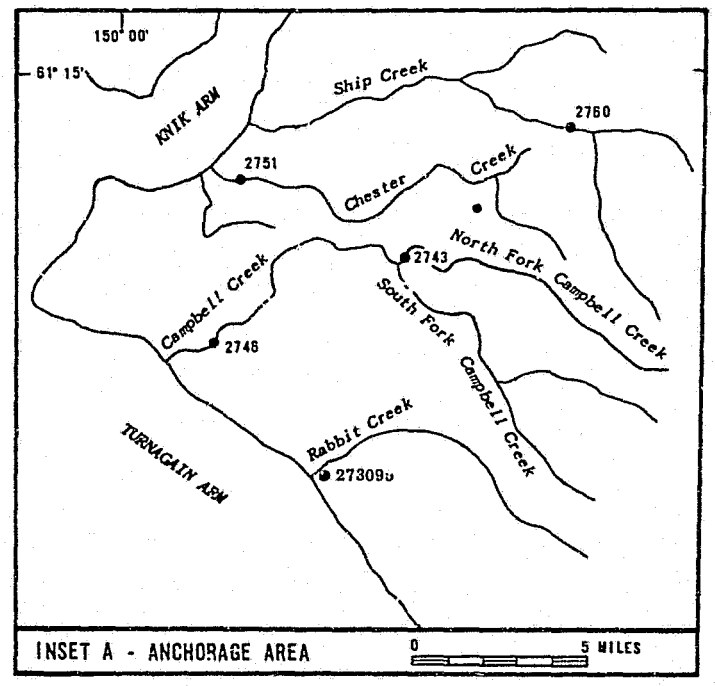
EXPLANATION

90 ● Gaging station

2979 ○ Partial record crest-station

—·— Boundary of hydrologic subregions

Enough station numbers are shown to demonstrate the downstream order numbering system explained on page 8. Essential parts of the 6-digit number such as 008000 and 564875 are shown as 80 and 564875, respectively. Water-quality records were collected at many of the gaging stations.



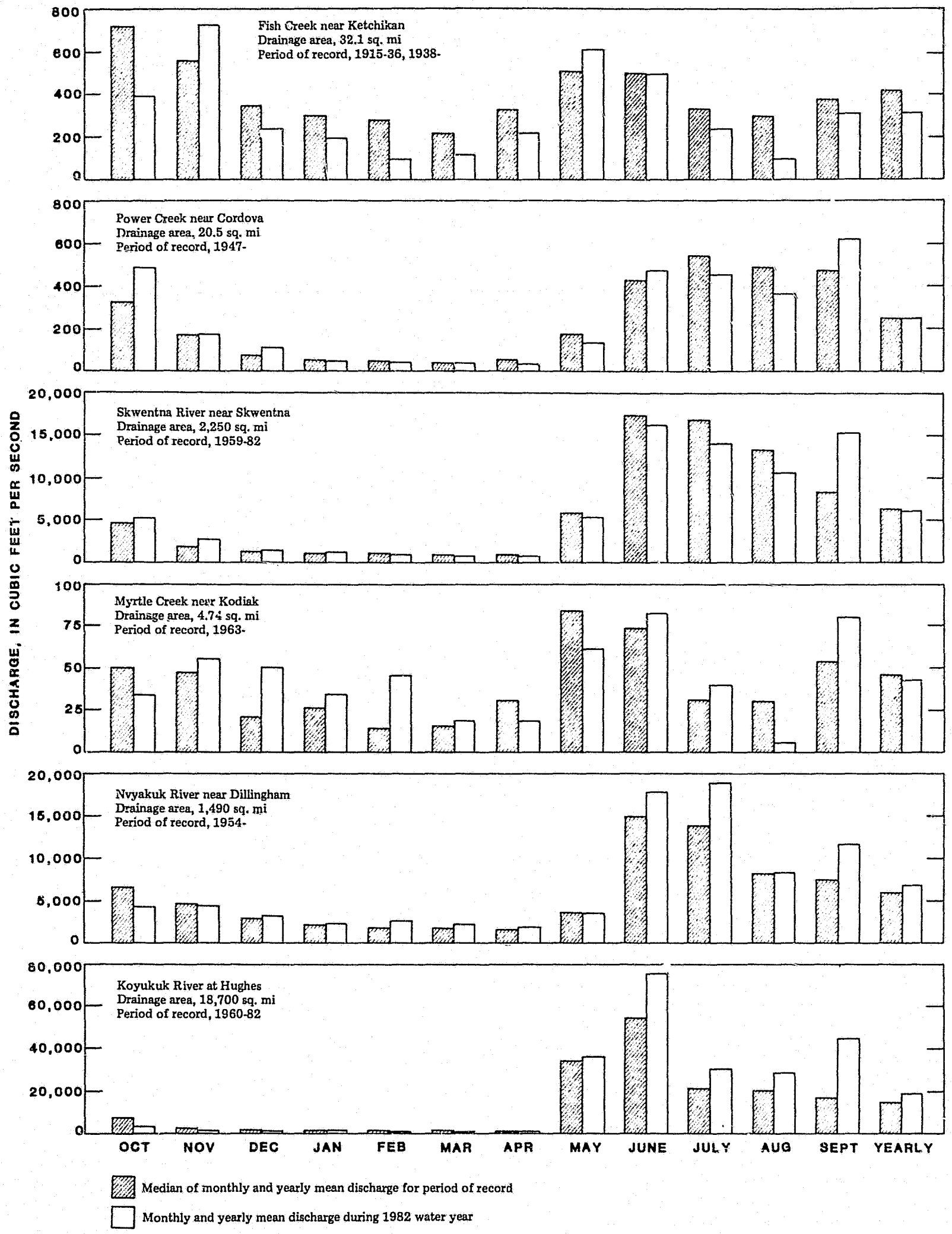


Figure 3. – Discharge during 1982 water year compared with mean discharge for period of record for six long-term gaging stations.

SOUTHEAST ALASKA

15011870 WHITE CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°24'51", long 130°27'38", in NW¼NW¼ sec.36, T.74 S., R.98 E., Hydrologic Unit 1906000, in Tongass National Forest, on left bank 0.5 mi (0.8 km) upstream from mouth and 45 mi (72 km) east of Ketchikan.

DRAINAGE AREA.--2.70 mi² (11.25 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 1,250 ft (380 m), from topographic map.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--5 years, 27.3 ft³/s (0.773 m³/s), 137.31 in/yr (3,488 mm/yr), 19,780 acre-ft/yr (24.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 570 ft³/s (16.1 m³/s) Nov. 5, 1981, gage height, 3.72 ft (1.134 m), from rating curve extended above 330 ft³/s (9.3 m³/s); minimum daily (revised), 2.0 ft³/s (0.057 m³/s) Feb. 24-26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 570 ft³/s (16.1 m³/s) Nov. 5, gage height, 3.72 ft (1.134 m); minimum, 2.4 ft³/s (0.068 m³/s) Mar. 5-7, gage height 0.69 ft (0.210 m).

Peak discharges above base of 300 ft³/s (8.5 m³/s) for the period of daily record were computed and are shown below. Annual maximums (*) are also shown.

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 11, 1977	2300	*503	14.2	*3.53	1.076
Oct. 17, 1977	0200	451	12.8	3.40	1.036
Oct. 22, 1977	0900	424	12.0	3.33	1.015
Nov. 1, 1978	Unknown	*aUnknown		*Unknown	
Oct. 10, 1979	Unknown	Unknown		Unknown	
Nov. 21, 1979	Unknown	Unknown		Unknown	
Dec. 5, 1979	1500	308	8.72	2.93	0.893
Dec. 26, 1979	1700	*a343	9.71	*3.04	0.927
Oct. 2, 1980	0045	381	10.8	3.20	0.975
Oct. 5, 1980	1145	328	9.29	3.00	0.914
Oct. 28, 1980	1230	*433	12.3	*3.38	1.030
Sept. 9, 1981	0245	376	10.6	3.19	0.972
Sept. 15, 1981	0015	308	8.72	2.95	0.399
Sept. 30, 1981	1515	398	11.3	3.35	1.021
Nov. 5, 1981	1530	*570	16.1	*3.72	1.134
Sept. 6, 1982	1900	356	10.1	3.07	0.936

a Revised.

REVISIONS.--Revised figures of discharge for the water year 1979, superseding those published in the report for 1979 are given herein. The maximum discharge for the water year 1980 has been revised, as shown herein, superseding figures in report for 1980.

EXTREMES FOR 1979 WATER YEAR.--Maximum daily discharge, 165 ft³/s (4.67 m³/s) Nov. 1; minimum daily, 2.0 ft³/s (0.057 m³/s) Feb. 24-26.

15011870 WHITE C NR KETCHIKAN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	165	17	5.0	3.6	3.2	5.5	46	41	27	40	5.4
2	43	150	32	4.8	3.4	11	5.2	45	44	24	24	16
3	55	45	36	4.7	3.4	63	5.1	53	47	23	21	12
4	40	28	22	4.5	5.6	46	5.9	51	55	21	18	9.6
5	32	60	18	4.5	5.7	112	10	47	62	20	16	11
6	25	90	14	4.5	5.3	97	13	44	56	18	16	12
7	27	77	13	4.4	4.9	53	15	38	48	17	15	9.4
8	32	45	24	4.3	4.4	23	14	43	43	16	13	8.5
9	39	21	24	4.4	4.1	15	12	36	35	15	12	17
10	44	17	16	4.2	4.0	12	9.8	40	31	14	12	29
11	36	15	13	4.1	3.8	14	8.8	50	29	17	10	15
12	48	13	14	4.1	3.4	17	8.5	32	27	16	10	40
13	75	12	35	3.9	3.2	13	5.6	31	29	15	9.6	35
14	92	12	15	4.2	3.1	12	7.8	31	33	14	9.5	32
15	60	27	13	4.6	2.9	13	7.8	30	37	13	8.5	22
16	34	16	11	4.5	2.7	11	7.7	32	39	13	7.6	36
17	31	12	9.5	4.8	2.6	9.4	7.7	45	36	13	7.3	45
18	75	9.7	8.7	4.9	2.5	8.1	7.7	41	31	16	7.2	39
19	94	9.3	8.5	4.4	2.4	8.8	7.8	37	28	22	7.1	22
20	66	8.8	8.2	4.2	2.3	9.0	8.3	37	26	31	6.8	14
21	42	7.5	7.9	4.1	2.2	9.5	9.5	37	24	43	6.9	12
22	57	7.1	7.6	4.7	2.1	10	13	44	22	44	6.5	9.8
23	72	8.4	7.2	6.0	2.1	12	15	50	20	35	6.0	8.7
24	39	18	6.8	5.7	2.0	13	20	65	20	27	5.7	17
25	45	27	6.7	4.8	2.0	3.2	26	80	19	25	5.4	26
26	38	32	6.5	4.7	2.0	9.6	30	92	19	23	5.5	29
27	30	62	6.3	4.3	2.1	8.1	40	74	20	22	5.4	46
28	26	42	6.0	4.0	2.4	7.3	48	50	23	19	4.9	48
29	20	26	5.8	4.0	---	6.3	50	43	27	15	4.7	32
30	50	20	5.5	3.9	---	5.9	49	36	29	22	4.3	42
31	145	---	5.3	3.8	---	5.4	---	35	---	35	4.6	---
TOTAL	1547	1082.8	423.5	139.0	90.2	640.8	473.7	1415	1000	675	330.5	700.4
MEAN	49.9	36.1	13.7	4.48	3.22	20.7	15.8	45.6	33.3	21.8	10.7	23.3
MAX	145	165	36	6.0	5.7	112	50	92	62	44	40	48
MIN	20	7.1	5.3	3.8	2.0	3.2	5.1	30	19	13	4.3	5.4
CFSM	18.5	13.4	5.07	1.66	1.19	7.67	5.85	16.9	12.3	8.07	3.96	8.63
IN.	21.31	14.91	5.83	1.91	1.24	8.83	6.52	19.49	13.77	9.30	4.55	9.65
AC-FT	3070	2150	840	276	179	1270	940	2810	1980	1340	656	1390

CAL YR 1978	TOTAL	9623.1	MEAN 26.4	MAX 300	MIN 2.2	CFSM 9.78	IN 132.54	AC-FT	19090	
WTR YR 1979	TOTAL	8517.9	MEAN 23.3	MAX 165	MIN 2.0	CFSM 8.63	IN 117.31	AC-FT	16900	
CAL YR 1979	TOTAL	8716.9	MEAN 23.9	MAX 284	MIN 2.0	CFSM 8.85	IN 120.06	AC-FT	17290	

15011870 WHITE C NR KETCHIKAN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	38	15	4.0	4.3	2.7	3.5	26	121	52	9.0	66
2	51	27	13	4.8	4.2	2.7	3.5	15	107	48	8.0	66
3	35	24	11	4.6	4.0	2.6	3.5	12	86	44	7.6	33
4	28	115	11	4.4	4.0	2.7	3.5	11	75	41	7.1	21
5	23	310	9.7	4.3	4.1	2.6	3.5	21	81	32	6.9	27
6	22	70	9.1	4.2	4.2	2.4	3.5	39	83	31	9.0	114
7	20	36	8.5	4.2	4.2	2.4	3.8	35	85	30	9.1	63
8	23	64	8.1	4.2	4.2	3.4	4.1	29	83	27	7.7	42
9	20	115	7.5	4.5	4.2	3.5	5.0	28	85	27	7.2	28
10	19	61	7.2	6.2	4.1	3.4	5.0	29	95	31	13	31
11	17	123	7.2	7.2	4.0	3.3	4.9	49	104	24	22	69
12	16	55	7.0	6.5	3.9	3.1	4.5	39	118	22	27	46
13	14	35	6.7	20	3.6	3.1	4.2	26	101	42	16	26
14	13	27	6.5	90	3.4	3.1	4.2	23	91	32	11	18
15	90	22	6.3	20	3.3	3.1	4.5	24	76	27	9.6	15
16	55	19	6.2	13	3.3	3.1	4.5	35	77	23	8.3	13
17	34	16	5.9	10	3.3	3.1	4.5	54	83	22	7.8	11
18	77	14	9.0	8.9	3.3	3.1	4.1	49	93	31	7.8	9.8
19	39	17	14	8.1	3.3	3.1	4.4	47	92	41	7.4	8.8
20	28	17	15	7.4	3.3	3.1	15	54	86	26	6.5	8.0
21	21	16	10	6.8	3.1	3.1	12	44	72	21	6.0	7.4
22	18	16	8.2	6.3	3.1	3.0	11	44	62	20	5.6	7.0
23	17	14	7.6	5.9	3.1	3.1	9.7	40	60	18	5.6	6.5
24	20	12	7.2	5.6	3.0	3.2	8.5	89	69	17	5.5	5.9
25	55	12	6.8	5.3	2.9	3.3	7.2	56	83	16	5.3	6.2
26	37	10	6.6	5.1	2.9	3.3	7.2	47	75	15	5.0	5.8
27	30	9.5	6.2	5.0	2.7	3.3	10	54	80	14	5.1	5.6
28	26	51	5.9	4.8	2.7	3.3	15	66	68	12	5.3	5.6
29	24	26	5.8	4.7	---	3.3	12	79	65	11	5.3	5.3
30	46	17	5.4	4.7	---	3.3	21	84	56	9.9	5.1	40
31	41	---	5.2	4.5	---	3.5	---	102	---	9.3	7.0	---
TOTAL	1047	1388.5	258.8	295.2	99.7	95.3	207.3	1350	2510	816.2	268.8	810.9
MEAN	33.8	46.3	8.35	9.52	3.56	3.07	6.91	43.5	83.7	26.3	8.67	27.0
MAX	90	310	15	90	4.3	3.5	21	102	121	52	27	114
MIN	13	9.5	5.2	4.0	2.7	2.4	3.5	11	56	9.3	5.0	5.3
CFSM	12.5	17.1	3.09	3.53	1.32	1.14	2.56	16.1	31.0	9.74	3.21	10.0
IN.	14.42	19.12	3.56	4.07	1.37	1.31	2.86	18.59	34.57	11.24	3.70	11.17
AC-FT	2080	2750	513	586	198	189	411	2680	4980	1620	533	1610

CAL YR 1981 TOTAL 11428.1 MEAN 31.3 MAX 310 MIN 4.6 CFSM 11.6 IN 157.40 AC-FT 22670
WTR YR 1982 TOTAL 9147.7 MEAN 25.1 MAX 310 MIN 2.4 CFSM 9.30 IN 125.99 AC-FT 18140

15011870 WHITE CREEK NEAR KETCHIKAN--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1978 to January 1980, October 1980, and May 1981 to September 1982.
WATER TEMPERATURES: February to April 1978, September 1978 to September 1979, August to October 1980, and August 1981 to September 1982.

INSTRUMENTATION.--Water-quality monitor since Feb. 2, 1978.

REMARKS.--Record fair. No record Jan. 5-13 due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 98 micromhos/cm Nov. 14 1979, but may have been higher during periods of missing record; minimum recorded, 5 micromhos/cm Dec. 26-27, 1979 and Aug. 5, 1981, but may have been lower during periods of missing record.
WATER TEMPERATURES: Maximum recorded, 16.0°C July 31 and Aug. 3, 1979, but may have been higher during periods of missing record; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum 70 micromhos/cm Mar. 5-8; and minimum 10 micromhos/cm Nov. 5.
WATER TEMPERATURES: Maximum recorded, 11.0°C Aug 8, 21, 23, 26 and Sept. 6, minimum recorded, 0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 29...	1030	24	30	39	6.3	5.0	10	10.7	17	13	6.8
JAN 14...	1300	41	18	20	4.9	.0	10	12.6	12	9	4.6
MAR 04...	1130	2.9	138	150	6.5	.0	0	--	60	--	23

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 29...	.2	1.0	.4	4	10	.8	.1	4.8	30	27	2.3
JAN 14...	.2	.7	.2	3	6.0	2.6	.1	3.0	15	20	<.09
MAR 04...	.8	1.6	.4	--	53	.7	.2	7.2	98	--	<.09

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT 29...	.14	<.060	<.060	.14	.16	.36	.08	.28	2.6	.42	<.010
JAN 14...	<.09	--	.110	--	.17	--	--	.28	--	--	<.010
MAR 04...	<.09	--	<.060	--	--	--	--	.49	--	--	.010

15011870 WHITE CREEK NEAR KETCHIKAN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT 29...	<.010	2.9	.1	<1	<1	<1	<1	<10	4	3	1
JAN 14...	.010	--	--	<1	<1	<1	<1	<10	2	--	<1
MAR 04...	<.010	1.3	.0	<1	<1	<1	<1	<10	7	5	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)
OCT 29...	160	90	66	4	0	5	10	0	11	.1	--
JAN 14...	110	20	91	2	--	<1	20	2	18	<.1	--
MAR 04...	--	0	--	2	0	2	20	6	14	.3	.1

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 29...	<.1	18	<10	<1	<1	20	5	15	1	.07
JAN 14...	.1	13	--	<1	<1	8	0	8	--	--
MAR 04...	.2	34	--	1	<1	30	8	22	--	--

15011870 WHITE CREEK NEAR KETCHIKAN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	29	24	30	25	27	25	49	47	56	51	67	64
2	38	29	39	27	29	26	53	49	57	49	68	66
3	43	36	40	34	33	28	55	53	55	47	68	62
4	48	43	38	16	33	32	55	54	54	43	67	54
5	52	47	17	10	33	31	---	---	52	42	70	65
6	52	49	19	13	35	34	---	---	44	40	70	68
7	54	50	23	19	37	35	---	---	43	41	70	57
8	51	48	23	12	39	37	---	---	53	43	70	56
9	54	50	15	11	39	37	---	---	58	48	60	48
10	56	52	16	14	41	38	---	---	59	56	61	52
11	60	56	14	11	42	40	---	---	60	59	53	48
12	63	58	18	14	42	41	---	---	61	59	54	44
13	65	62	21	18	43	41	---	---	61	48	58	53
14	66	64	22	20	45	42	26	14	60	50	59	56
15	65	23	24	22	46	44	27	21	63	57	60	57
16	39	28	25	23	47	46	31	27	60	50	60	58
17	43	37	30	25	48	45	34	31	61	57	61	59
18	35	23	32	28	46	29	37	34	62	53	63	32
19	42	35	32	24	32	20	39	37	57	52	52	42
20	48	43	29	27	27	20	41	38	58	54	59	51
21	51	47	30	28	32	27	43	39	61	57	66	59
22	55	51	30	28	36	32	47	42	62	58	62	57
23	55	49	30	28	38	35	48	46	61	58	59	56
24	49	46	33	29	41	37	49	42	60	51	59	53
25	46	26	32	30	42	39	50	44	59	50	55	32
26	37	32	37	32	44	41	52	49	55	47	40	32
27	42	34	37	31	47	44	53	51	56	49	50	34
28	42	36	35	11	48	46	52	44	64	54	49	42
29	39	36	23	16	49	44	50	43	---	---	54	45
30	31	19	26	23	49	46	54	50	---	---	52	46
31	34	24	---	---	48	45	55	51	---	---	54	45
MONTH	66	19	40	10	49	20	55	14	64	40	70	32

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	53	45	31	21	25	22	37	35	60	58	56	4
2	59	51	34	31	26	18	39	37	61	59	43	4
3	58	53	34	32	28	25	39	38	63	61	42	4
4	59	52	35	33	29	27	40	38	63	62	49	4
5	62	50	35	27	29	25	42	40	63	63	49	4
6	60	52	27	24	30	26	43	42	59	56	45	3
7	61	43	29	25	29	26	43	42	59	57	42	3
8	64	54	30	24	30	27	44	43	62	59	43	4
9	56	47	30	26	30	26	46	44	63	61	46	4
10	48	45	30	26	30	26	44	43	62	48	46	4
11	55	46	26	23	30	26	48	44	52	48	41	38
12	59	52	28	24	29	26	47	45	48	47	43	39
13	53	42	32	28	30	27	46	40	52	49	45	43
14	58	43	33	30	30	28	44	42	55	52	51	46
15	59	50	33	29	33	30	46	44	57	55	50	48
16	56	45	30	24	33	29	49	47	59	57	51	49
17	64	57	26	22	33	28	49	48	59	58	54	52
18	67	44	26	23	33	27	49	42	59	58	55	54
19	68	42	27	24	33	28	44	41	60	58	56	54
20	48	25	26	24	33	29	48	45	62	60	56	55
21	32	26	28	25	33	30	49	48	63	62	58	56
22	35	28	28	25	35	31	50	48	65	63	59	57
23	40	32	29	25	36	30	52	50	65	64	60	58
24	40	33	26	23	35	31	52	51	66	65	61	60
25	43	40	26	24	34	31	53	52	66	65	65	60
26	44	40	28	25	34	32	54	52	67	65	62	60
27	42	31	28	23	34	32	56	54	67	63	63	59
28	32	29	27	23	35	33	54	53	65	63	61	60
29	33	32	26	23	36	34	55	54	65	64	62	60
30	32	22	27	25	37	35	57	56	69	65	40	39
31	---	---	27	23	---	---	59	57	68	57	---	---
MONTH	68	22	35	21	37	18	59	35	69	47	65	36
YEAR	70	10										

15011870 WHITE CREEK NEAR KETCHIKAN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.0	.5	1.5	.5	2.5	1.5	6.0	5.0	8.5	7.5	10.5	9.5
2	1.0	.5	2.0	1.5	3.0	2.0	6.0	5.0	9.0	7.5	10.5	9.5
3	1.5	.5	2.0	1.0	3.0	2.5	7.5	5.0	8.5	7.5	10.0	8.5
4	1.5	.0	2.5	1.0	3.0	2.5	6.5	5.5	9.0	7.5	9.5	9.0
5	2.0	.5	1.5	1.0	3.5	2.5	7.0	4.5	9.5	7.5	10.0	9.5
6	2.0	.0	1.0	1.0	4.0	2.5	7.0	5.5	9.5	8.0	11.0	9.0
7	2.5	.5	2.0	1.0	3.5	2.5	7.0	5.5	10.5	7.5	9.5	8.5
8	2.5	1.0	2.5	1.5	3.5	2.5	6.0	5.5	11.0	8.0	9.5	8.5
9	2.0	1.0	2.5	1.0	4.0	2.5	7.5	5.5	10.0	8.5	9.0	8.0
10	2.0	1.0	2.0	1.0	4.5	2.5	7.5	6.0	10.0	8.0	9.0	8.5
11	2.5	1.0	1.0	.5	4.5	3.0	7.0	5.5	9.5	8.5	9.0	8.0
12	2.0	1.0	2.0	1.0	4.5	3.0	7.0	6.0	9.5	8.5	9.5	8.5
13	2.5	1.0	2.5	1.5	5.0	3.0	9.0	6.5	10.0	8.0	9.0	8.0
14	2.5	1.0	2.5	1.5	4.0	3.0	7.0	6.5	9.5	8.5	9.0	8.0
15	2.0	1.0	2.5	1.5	4.5	3.0	8.0	6.5	9.0	8.5	9.5	8.5
16	1.5	.5	2.5	1.0	5.0	3.0	7.0	6.5	9.0	7.5	9.5	8.0
17	2.0	1.0	2.0	1.0	5.5	3.0	7.5	6.5	9.0	8.0	10.0	8.5
18	2.0	.5	2.0	1.0	5.5	3.5	8.0	6.5	9.0	8.0	9.5	8.0
19	1.5	.5	2.0	1.0	5.0	3.5	8.0	6.5	10.0	7.0	10.0	8.0
20	1.0	.5	1.5	1.0	5.0	3.5	8.5	6.5	10.5	7.5	9.5	8.0
21	1.0	.5	1.5	1.0	6.0	3.5	9.5	6.5	11.0	7.5	9.0	8.5
22	1.5	.5	2.0	1.5	6.0	3.5	7.5	7.0	9.0	8.0	9.0	8.0
23	1.5	1.0	1.5	1.0	6.5	3.5	8.0	6.5	11.0	8.5	9.5	7.5
24	1.5	1.0	1.5	.5	6.5	3.5	9.5	7.0	10.0	8.5	9.0	7.5
25	2.5	1.0	2.0	1.0	6.0	4.0	10.0	7.0	10.5	8.5	9.5	8.0
26	2.5	1.0	3.0	1.5	5.5	4.0	10.0	7.0	11.0	8.5	9.0	8.5
27	1.5	1.0	2.5	1.5	6.0	4.5	10.5	7.5	10.0	9.0	9.0	8.0
28	1.5	1.0	2.5	1.5	6.0	4.5	10.5	7.5	10.0	8.0	8.0	6.5
29	1.5	.5	2.5	1.5	7.5	4.5	10.5	7.5	10.0	7.5	8.5	6.5
30	1.5	.5	2.5	1.5	7.5	4.5	10.5	7.5	9.0	8.0	10.0	8.0
31	---	---	2.5	1.5	---	---	9.0	8.0	10.0	8.5	---	---
MONTH	2.5	.0	3.0	.5	7.5	1.5	10.5	4.5	11.0	7.0	11.0	6.5
YEAR	11.0	.0										

15011880 KETA RIVER NEAR KETCHIKAN

LOCATION.--Lat 55°21'13", long 130°26'56", in SW¼NE¼ sec.24, T.75 S., R.98 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 1.6 mi (2.6 km) upstream from mouth at head of Boca de Quadra and 45 mi (72 km) east of Ketchikan.
DRAINAGE AREA.--74.2 mi² (193 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1977 to current year.
GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.
REMARKS.--Water-discharge records good except those for October and January, which are fair.
AVERAGE DISCHARGE.--5 years, 773 ft³/s (21.89 m³/s), 136.33 in/yr (3,460 mm/yr), 560,000 acre-ft/yr (690 hm³/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,300 ft³/s (858 m³/s) Oct. 31, 1978, gage height, 8.80 ft (2.682 m) from rating curve extended above 3,200 ft³/s (91 m³/s) on basis of slope-conveyance study at gage height 6.23 ft (1.899 m); minimum daily, 46 ft³/s (1.30 m³/s) Feb. 28, 1979.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,500 ft³/s (524 m³/s) Nov. 5, gage height, 7.44 ft (2.268 m), from rating curve extended as explained above; minimum, 41 ft³/s (1.16 m³/s) Mar. 4, gage height, 1.38 ft (0.421 m).

Peak discharges above base of 10,000 ft³/s (283 m³/s) for the period of daily record were computed and are shown below. Annual maximums (*) are also shown.

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 11, 1977	1500	*17,000	481	*7.58	2.310
Oct. 22, 1977	1130	13,400	379	7.12	2.170
Oct. 13, 1978	1900	16,100	456	7.46	2.274
Oct. 18, 1978	2115	15,600	442	7.40	2.256
Oct. 31, 1978	Unknown	*30,300	858	*8.80	2.682
Oct. 10, 1979	1500	11,700	331	6.84	2.094
Dec. 27, 1979	0630	*14,600	413	*7.28	2.219
Oct. 2, 1980	0245	12,600	357	6.94	2.115
Oct. 5, 1980	0430	13,700	388	7.09	2.161
Oct. 28, 1980	1500	*21,000	595	*7.93	2.417
Dec. 15, 1980	0815	12,300	348	6.93	2.112
Sept. 8, 1981	2030	20,700	586	7.97	2.429
Nov. 5, 1981	1800	*18,500	524	*7.74	2.359
Sept. 6, 1982	2030	10,900	309	6.73	2.051

REVISIONS.--Revised figures of daily discharge for the water year 1979, superseding those published in the report for 1979 are given herein.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1240	6880	600	160	110	56	150	1000	1250	790	1200	449
2	2080	1380	900	150	105	500	145	1250	1350	730	1000	800
3	4940	1100	1030	145	150	800	150	1400	1500	670	820	306
4	1020	1050	670	140	220	1600	175	1500	1700	650	700	526
5	603	1250	540	135	250	1400	250	1150	1900	590	660	502
6	627	2900	430	135	120	2000	380	900	1700	550	630	601
7	520	2400	400	135	160	2800	420	720	1450	510	600	462
8	1490	950	1100	1[illegible]	170	1000	410	800	1250	470	590	483
9	1860	580	570	130	130	400	370	900	1100	440	580	765
10	2620	520	450	130	110	360	320	1100	950	460	560	1270
11	1620	440	390	125	105	350	285	1130	900	480	550	609
12	938	400	430	125	95	400	260	1030	850	460	540	1290
13	8560	350	620	120	89	430	250	960	860	430	540	1270
14	2510	340	500	120	80	340	240	920	1000	420	620	1130
15	1080	700	410	130	78	350	230	920	1100	400	580	691
16	663	520	340	135	70	330	230	980	1200	390	550	1020
17	971	400	290	140	67	290	230	1250	1150	380	550	2080
18	5750	320	265	145	62	260	230	1300	1050	550	510	1320
19	4480	270	260	140	58	230	230	1200	950	770	470	683
20	1290	250	250	130	57	240	240	1110	850	950	430	496
21	799	230	240	130	54	260	250	1100	750	1150	380	401
22	1740	210	230	140	53	270	260	1210	700	1150	330	346
23	3190	220	220	155	52	300	300	1480	650	1100	310	153
24	2500	350	210	170	51	320	450	1800	620	920	280	600
25	1500	550	200	180	49	340	600	2300	590	780	260	1180
26	800	880	195	150	48	300	720	2750	590	700	240	1120
27	620	1200	190	140	47	260	840	2500	620	650	228	1590
28	540	1650	185	130	46	230	950	1750	680	755	222	1670
29	420	900	180	120	---	200	1100	1450	760	950	218	1040
30	3100	520	170	120	---	170	750	1250	810	1120	208	2510
31	8760	---	165	115	---	160	---	1100	---	1200	212	---
TOTAL	68831	29710	12650	4255	2686	16946	11415	40210	30830	[illegible]565	15568	27363
MEAN	2220	990	408	137	95.9	547	381	1297	1028	696	502	912
MAX	8760	6880	1100	180	250	2800	1100	2750	1900	1200	1200	2510
MIN	420	210	165	115	46	56	145	720	590	380	208	153
CFSM	29.9	13.4	5.50	1.85	1.29	7.38	5.14	17.5	13.9	9.39	6.77	12.3
IN.	34.53	14.90	6.35	2.13	1.35	8.50	5.73	20.17	15.47	10.82	7.81	13.73
AC-FT	136500	58930	25090	8440	5330	33610	22640	79760	61150	42770	30880	54270

CAL YR 1978 TOTAL 270124 MEAN 740 MAX 8760 MIN 76 CFSM 9.98 IN 135.52 AC-FT 535800
WTR YR 1979 TOTAL 282029 MEAN 773 MAX 8760 MIN 46 CFSM 10.4 IN 141.49 AC-FT 559400
CAL YR 1979 TOTAL 253785 MEAN 695 MAX 11700 MIN 46 CFSM 9.37 IN 127.32 AC-FT 503400

15011880 KETA RIVER NEAR KETCHIKAN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1600	993	489	110	101	55	105	886	2200	1420	510	2610
2	850	597	381	103	113	53	103	437	2500	1420	413	2570
3	550	492	279	98	124	53	97	371	2150	1120	380	988
4	350	1550	234	94	115	52	91	362	1700	1150	336	510
5	305	10000	234	91	110	51	86	564	1710	849	360	669
6	295	2040	239	89	119	51	86	1050	1820	788	594	3700
7	285	701	209	90	113	57	93	938	1880	876	469	1990
8	280	1030	187	100	103	94	128	746	1830	796	431	1130
9	260	3370	164	102	95	136	196	831	1760	796	429	944
10	240	1880	158	99	88	129	222	932	2100	990	506	872
11	200	4270	148	92	80	105	184	1210	2370	700	1090	2350
12	190	1560	143	150	76	92	153	1300	2800	651	1270	1620
13	180	702	118	1170	65	90	150	771	2400	1440	660	805
14	300	485	116	2190	64	101	150	597	2010	1300	436	529
15	800	392	116	539	72	98	150	623	1720	932	367	481
16	1000	329	114	287	78	95	193	800	1650	814	326	417
17	1300	286	118	208	72	87	199	1000	1860	831	329	362
18	1900	251	255	171	68	84	153	1250	2180	1090	434	328
19	1100	319	448	141	68	82	143	1500	2330	1670	320	320
20	700	316	527	110	67	78	335	1800	2130	831	275	295
21	390	352	306	92	66	78	494	1300	1720	738	269	264
22	330	325	232	84	66	84	394	1200	1490	788	281	234
23	300	295	206	78	63	121	357	1150	1420	722	287	211
24	900	245	268	77	60	138	287	1600	1770	693	324	208
25	3700	250	291	78	61	181	235	2200	2520	738	345	211
26	2000	214	235	80	60	172	222	1500	2170	754	312	206
27	1000	195	190	82	59	138	281	1200	2370	715	450	213
28	760	970	170	85	57	116	538	1200	1820	700	348	200
29	670	618	150	90	---	108	462	1400	1650	644	274	170
30	610	410	135	95	---	103	498	1700	1550	566	238	1150
31	600	---	120	101	---	105	---	1900	---	578	422	---
TOTAL	23945	35437	6980	6976	2283	2987	6785	34318	59580	28100	13485	26557
MEAN	772	1181	225	225	81.5	96.4	226	1107	1986	906	435	885
MAX	3700	10000	527	2190	124	181	538	2200	2800	1670	1270	3700
MIN	180	195	114	77	57	51	86	362	1420	566	238	170
CFSM	10.4	15.9	3.03	3.03	1.10	1.30	3.05	14.9	26.8	12.2	5.87	11.9
IN.	12.01	17.78	3.50	3.50	1.15	1.50	3.40	17.22	29.89	14.10	6.77	13.32
AC-FT	47490	70290	13840	13840	4530	5920	13460	68070	118200	55740	26750	52680

CAL YR 1981 TOTAL 308572 MEAN 845 MAX 10000 MIN 93 CFSM 11.4 IN 154.80 AC-FT 612100
WTR YR 1982 TOTAL 247433 MEAN 678 MAX 10000 MIN 51 CFSM 9.14 IN 124.13 AC-FT 490800

15011880 KETA RIVER NEAR KETCHIKAN--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May to October 1978 and March to November 1979.
WATER TEMPERATURES: May to October 1978 and March 1979 to September 1981.

INSTRUMENTATION.--Mini-water-quality monitor in conjunction with satellite telemeter since May 26, 1978.

REMARKS.--No record due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 41 micromhos/cm May 21, 1979; minimum recorded, 9 micromhos/cm Aug. 7, 1978.
WATER TEMPERATURES: Maximum recorded, 14.5°C July 31, Aug. 2, 1978, Aug. 12, 1980 and Aug. 10, 15, 1981; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT PERIOD.--
SPECIFIC CONDUCTANCE: No record for water year.
WATER TEMPERATURES: No record for water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 30...	1300	611	8	19	6.2	5.5	--	11.3	9	3	3.3
JAN 13...	1430	1170	11	33	6.5	.0	20	14.7	6	0	2.2
MAR 03...	1500	52	14	37	5.6	1.0	0	--	12	8	4.2

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 30...	.2	.7	.4	6	<5.0	1.0	.1	3.0	12	--	<.10
JAN 13...	.2	.7	.4	6	6.0	1.0	.1	2.3	12	17	<.09
MAR 03...	.4	.9	.5	4	5.0	.6	.1	4.1	19	19	.20

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT 30...	<.10	<.060	.090	.22	.38	.07	.31	.49	.53	<.010	.030
JAN 13...	<.09	--	.120	.25	--	--	.37	--	--	.010	.040
MAR 03...	.11	--	.060	.58	--	--	.64	--	.75	.010	<.010

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT 30...	--	.3	1	<1	<1	<1	<10	11	8	3	370
JAN 13...	--	--	<1	<1	1	<1	<10	10	1	9	1600
MAR 03...	1.8	.1	<1	<1	<1	1	<10	4	3	1	180

15011880 KETA RIVER NEAR KETCHIKAN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)
OCT 30...	280	90	18	8	10	10	5	5	.1	--
JAN 13...	1500	73	8	7	1	50	50	5	.1	.0
MAR 03...	70	110	2	1	1	10	2	8	.2	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 30...	<.1	2	<10	<1	<1	50	30	24	7	12
JAN 13...	.1	3	--	<1	<1	30	10	18	172	543
MAR 03...	.2	2	--	<1	<1	20	--	<3	--	--

15011894 BLOSSOM RIVER NEAR KETCHIKAN

LOCATION.--Lat 55°25'34", long 130°33'40", in SW¼NW¼ sec.29, T.74 S., R.98 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 0.2 mi (0.3 km) downstream from tributary, 2.5 mi (4.0 km) upstream from mouth and 43 mi (69 km) east of Ketchikan.

DRAINAGE AREA.--68.1 mi² (176.3 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (9 m), from topographic map.

REMARKS.--Water-discharge records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,110 ft³/s (258 m³/s) Nov. 5, 1981, gage height, 20.60 ft (6.279 m), from rating curve extended above 2,700 ft³/s (76 m³/s), on basis of slope-area measurement at gage height 19.63 ft (5.983 m); minimum daily, 52 ft³/s (1.47 m³/s) Mar. 4, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,110 ft³/s (258 m³/s) Nov. 5, gage height, 20.60 ft (6.279 m), from rating curve extended as explained above; minimum daily, 52 ft³/s (1.47 m³/s) Mar. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1830	925	424	100	119	54	89	521	2450	1000	475	2180
2	939	558	326	95	132	54	87	327	2220	963	423	2540
3	571	469	248	91	123	53	83	283	1850	793	414	958
4	424	1460	215	88	113	52	78	267	1470	814	372	510
5	352	6020	212	86	111	53	78	415	1440	565	406	706
6	374	1960	211	85	115	54	78	791	1510	537	683	2890
7	435	690	187	88	104	64	84	656	1570	624	526	2020
8	461	979	168	94	97	98	107	537	1550	559	500	1240
9	350	3030	155	98	89	125	149	583	1480	624	509	813
10	304	1820	150	96	89	112	156	630	1780	959	558	732
11	261	3040	142	92	82	96	139	852	2300	612	876	2040
12	233	1410	136	155	79	84	123	817	2550	571	1140	1430
13	246	674	126	800	70	84	129	522	2200	1370	573	692
14	277	472	123	2580	66	92	124	421	1940	1190	436	469
15	2060	389	122	478	68	91	123	432	1640	772	385	478
16	1410	329	122	271	75	81	166	678	1410	686	350	399
17	630	298	124	208	72	75	158	1350	1670	725	357	344
18	1930	252	233	176	69	72	130	1180	1920	954	451	330
19	686	256	288	151	69	70	128	851	1810	1410	330	328
20	465	255	366	138	67	70	282	1010	1670	699	294	300
21	362	273	232	122	64	70	319	865	1500	649	310	264
22	298	246	186	110	60	76	277	658	1270	618	327	228
23	318	225	200	102	60	103	240	583	1200	612	332	206
24	624	200	301	95	58	117	206	1640	1550	594	399	221
25	1600	213	283	90	57	135	179	1180	2030	588	413	231
26	813	185	205	88	56	129	175	751	1700	606	367	215
27	594	172	170	88	56	108	206	881	1860	582	495	236
28	488	757	146	90	56	93	348	1230	1420	582	378	201
29	473	465	124	94	---	88	334	1530	1230	531	292	164
30	855	334	115	98	---	85	380	1620	1130	484	269	1070
31	954	---	105	105	---	89	---	1980	---	506	462	---
TOTAL	21617	28356	6145	7052	2276	2627	5155	26041	51320	22779	14102	24435
MEAN	697	945	198	227	81.3	84.7	172	840	1711	735	455	815
MAX	2060	6020	424	2580	132	135	380	1980	2550	1410	1140	2890
MIN	233	172	105	85	56	52	78	267	1130	484	269	164
CFSM	10.2	13.9	2.91	3.33	1.19	1.24	2.53	12.3	25.1	10.8	6.68	12.0
IN.	11.81	15.49	3.36	3.85	1.24	1.43	2.82	14.22	28.03	12.44	7.70	13.35
AC-FT	42880	56240	12190	13990	4510	5210	10220	51650	101800	45180	27970	48470

WTR YR 1982 TOTAL 211905 MEAN 581 MAX 6020 MIN 52 CFSM 8.53 IN 115.75 AC-FT 420300

15011894 BLOSSOM RIVER NEAR KETCHIKAN--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1981 to current year.
WATER TEMPERATURES: February 1981 to current year.

INSTRUMENTATION.--Water quality monitor since February 1981.

REMARKS.--Record fair. No record Oct. 1-27 and Sept. 10-30 due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 38 micromhos/cm Apr. 6, 1982; minimum recorded, 2 micromhos/cm Nov. 5, 1981.
WATER TEMPERATURES: Maximum recorded, 14.0°C Aug. 10; minimum, 0.0°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 38 micromhos/cm Apr. 6; minimum recorded, 2 micromhos/cm Nov. 5.
WATER TEMPERATURES: Maximum recorded, 13.0°C July 26-30; minimum recorded, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 28...	1530	485	12	24	6.3	6.0	--	10.2	9	0	3.6
JAN 12...	1330	156	23	46	6.0	.0	5	13.5	12	0	4.4
MAR 03...	1130	40	20	47	6.5	.0	0	--	17	10	6.1

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT 28...	.2	.6	.5	9	<5.0	.7	.0	3.1	13	.52	.45
JAN 12...	.4	.8	.5	13	<5.0	.7	.1	3.9	18	.11	.10
MAR 03...	.5	1.1	.6	7	<5.0	1.2	.1	5.0	29	.12	.12

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT 28...	.070	.090	.22	.15	.29	.05	.24	.81	.69	<.010	<.010
JAN 12...	--	.120	--	.16	--	--	.28	--	.38	.020	.030
MAR 03...	--	<.060	--	--	--	--	.21	--	.33	.010	.030

15011894 BLOSSOM RIVER NEAR KETCHIKAN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT 28...	3.0	.3	<1	<1	<1	<1	<10	5	4	1
JAN 12...	--	--	<1	<1	<1	<1	<10	2	--	<1
MAR 03...	1.4	.1	<1	<1	<1	<1	<10	3	2	1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
OCT 28...	140	70	72	2	0	3	10	4	6	.1
JAN 12...	70	0	95	1	0	1	10	3	7	<.1
MAR 03...	140	20	120	2	0	2	10	1	9	<.1

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 28...	<.1	1	<10	<1	<1	30	20	13	1	1.3
JAN 12...	.1	2	--	<1	<1	<10	--	36	--	--
MAR 03...	.2	1	--	<1	<1	60	50	11	--	--

15011894 BLOSSOM RIVER NEAR KETCHIKAN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	33	32	23	20	17	15	16	15	19	17	19	17
2	33	32	26	23	17	15	16	16	20	19	17	17
3	34	33	27	26	18	16	17	16	21	15	21	17
4	34	34	27	26	19	18	17	16	17	16	22	21
5	35	34	26	21	19	18	19	17	17	15	22	19
6	38	34	21	19	19	17	19	18	15	13	19	18
7	35	33	22	20	18	17	18	17	15	14	20	18
8	34	31	23	23	18	17	18	17	15	14	20	19
9	31	28	23	22	18	17	18	16	15	15	22	19
10	29	28	23	22	17	16	17	15	16	14	---	---
11	30	29	22	20	17	15	19	17	15	14	---	---
12	31	30	22	20	16	15	19	18	15	14	---	---
13	31	30	25	23	16	15	18	18	18	15	---	---
14	31	31	26	25	17	16	16	15	19	18	---	---
15	31	30	26	24	17	16	18	16	19	19	---	---
16	30	26	24	19	18	16	18	18	20	19	---	---
17	29	26	19	18	17	15	18	17	21	19	---	---
18	31	29	20	19	16	15	17	15	19	17	---	---
19	32	30	21	20	16	15	17	15	21	19	---	---
20	30	21	21	19	16	15	19	17	22	21	---	---
21	24	21	22	19	18	15	19	19	22	20	---	---
22	25	24	22	21	18	16	19	17	22	20	---	---
23	27	25	23	22	18	16	18	18	21	20	---	---
24	28	27	22	17	17	15	19	18	21	18	---	---
25	29	28	21	18	15	15	18	17	19	17	---	---
26	30	29	22	21	15	15	17	16	21	19	---	---
27	29	26	22	20	15	15	18	16	19	17	---	---
28	26	23	20	18	15	15	18	16	21	19	---	---
29	24	23	19	18	16	15	18	16	23	21	---	---
30	24	21	19	17	16	15	18	17	23	23	---	---
31	---	---	18	15	---	---	18	17	23	19	---	---
MONTH	38	21	27	15	19	15	19	15	23	13		
YEAR	38	2										

15011894 BLOSSOM RIVER NEAR KETCHIKAN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.0	2.0	3.5	2.0	7.0	3.5	9.5	7.0	10.5	9.5	10.5	9.5
2	3.0	1.5	4.5	2.5	7.0	4.0	8.5	7.0	11.5	9.5	10.5	10.0
3	3.0	1.5	5.0	3.0	5.0	4.0	10.0	7.0	10.5	9.5	10.0	8.5
4	3.0	1.5	5.0	3.0	6.0	4.0	9.0	7.5	10.5	9.0	10.0	9.5
5	3.5	2.0	4.5	3.0	7.5	4.0	9.0	6.5	10.0	9.0	10.0	9.5
6	3.5	1.5	3.0	2.5	8.0	4.0	9.5	7.5	10.5	9.0	10.5	9.5
7	3.5	2.0	4.0	2.5	7.0	4.0	9.0	7.5	12.5	9.0	9.5	9.0
8	4.0	2.0	6.0	3.0	6.0	4.5	8.0	6.5	13.0	10.0	9.5	9.0
9	3.5	2.5	5.5	3.0	8.0	4.5	9.0	7.5	12.5	10.5	9.0	7.5
10	3.5	2.0	4.5	3.0	8.5	4.5	9.0	7.0	10.0	9.5	---	---
11	3.5	2.5	4.0	3.0	8.5	4.5	8.5	7.5	9.5	8.5	---	---
12	3.5	3.0	4.5	3.0	8.0	5.0	8.5	7.5	9.5	8.5	---	---
13	4.0	2.5	5.0	3.0	8.0	4.5	8.0	7.5	11.0	9.0	---	---
14	3.5	2.5	5.5	3.0	6.5	5.0	8.0	7.0	10.5	10.0	---	---
15	3.5	2.5	6.5	3.5	7.0	4.5	9.5	7.0	10.5	9.5	---	---
16	2.5	2.0	5.5	3.5	8.0	5.0	9.0	8.0	10.5	9.5	---	---
17	3.5	2.0	5.0	3.0	9.0	5.0	9.0	7.5	10.0	9.5	---	---
18	4.0	2.5	4.5	3.0	9.0	5.0	8.5	7.5	10.5	9.0	---	---
19	3.5	3.0	4.0	3.5	8.0	5.5	8.5	7.0	11.0	8.5	---	---
20	3.0	1.0	4.0	3.5	8.0	5.5	10.0	7.0	11.5	9.0	---	---
21	2.5	1.0	4.0	3.0	9.0	5.5	11.5	8.0	12.5	10.0	---	---
22	3.5	2.0	5.0	3.5	9.0	5.0	11.0	8.5	11.5	10.5	---	---
23	4.0	2.5	4.5	3.5	9.5	5.5	10.0	8.0	12.0	10.0	---	---
24	4.0	3.0	4.0	3.0	10.0	6.0	12.0	8.5	12.0	10.5	---	---
25	5.0	3.0	5.0	3.0	9.5	6.0	12.5	9.0	12.0	10.5	---	---
26	5.0	3.0	7.0	4.0	8.5	6.0	13.0	9.0	11.5	10.5	---	---
27	4.5	3.5	7.0	3.5	9.0	6.0	13.0	9.5	11.0	10.0	---	---
28	3.5	2.5	6.5	3.5	8.5	6.5	13.0	9.5	10.5	9.5	---	---
29	3.0	1.5	7.0	3.5	10.0	6.5	13.0	9.5	11.5	9.5	---	---
30	2.5	2.0	7.0	3.5	10.0	6.5	13.0	10.0	10.5	10.0	---	---
31	---	---	7.0	3.5	---	---	12.5	10.5	10.0	9.5	---	---
MONTH	5.0	1.0	7.0	2.0	10.0	3.5	13.0	6.5	13.0	8.5		
YEAR	13.0	.0										

15022000 HARDING RIVER NEAR WRANGELL

LOCATION.--Lat 56°12'48", long 131°38'12", in SW¼SW¼ sec.22, T.65 S., R.89 E., Hydrologic Unit 19060000, in Tongass National Forest, on right bank 1 mi (1.6 km) upstream from mouth on north shore of Bradfield Canal, 4 mi (6 km) downstream from Fall Lake, and 34 mi (55 km) southeast of Wrangell.

DRAINAGE AREA.--67.4 mi² (174.6 km²).

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

REVISED RECORDS.--WSP 1640: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), by barometer. Prior to Sept. 30, 1960, at site 300 ft (90 m) upstream at datum 0.12 ft (0.037 m) lower. Oct. 1, 1960, to Aug. 23, 1975, at prior site and present datum.

REMARKS.--Records good, except thos. for January through March, which are fair.

AVERAGE DISCHARGE.--31 years, 732 ft³/s (20.73 m³/s), 147.49 in/yr (3,746 mm/yr), 530,000 acre-ft/yr (653 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s (425 m³/s) Oct. 14, 1961, gage height, 16.22 ft (4.944 m) site then in use, from rating curve extended above 5,000 ft³/s (140 m³/s) on basis of slope-area measurement at gage height, 13.90 ft (4.237 m); minimum daily, 35 ft³/s (0.99 m³/s) Jan. 23 to Feb. 5, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (113 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0630	4,710	133	10.06	3.066	Sept. 6	2400	4,530	128	10.07	3.069
Nov. 5	1630	*8,050	228	*12.51	3.813						

Minimum discharge, 37 ft³/s (1.05 m³/s) Apr. 6, gage height, 4.55 ft (1.387 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1410	700	367	95	77	45	82	393	1790	1430	845	2100
2	733	508	328	88	74	46	74	342	1830	1270	638	2950
3	525	388	248	83	70	48	64	308	1690	1020	571	1230
4	414	709	218	79	68	50	58	294	1320	1070	554	785
5	347	6170	235	75	66	60	54	474	1220	985	519	1060
6	347	1710	262	72	78	90	40	688	1240	935	614	1930
7	372	778	210	75	76	125	40	656	1220	999	632	2250
8	468	682	181	78	72	140	62	571	1290	1010	663	1150
9	393	1600	158	79	68	115	98	5[illegible]	1140	900	798	798
10	318	1590	135	77	63	100	128	58[illegible]	1360	1200	607	707
11	271	2090	125	71	56	87	122	866	1550	999	752	1040
12	235	1210	115	95	52	80	98	825	1740	935	1160	805
13	244	726	110	759	48	76	111	614	1660	1600	688	614
14	372	530	105	1300	46	72	102	519	1520	1470	560	577
15	2470	436	105	1060	51	68	98	502	1500	1080	577	845
16	1430	357	108	350	57	65	125	595	1250	928	530	682
17	873	299	122	130	63	63	128	1060	1400	1010	583	577
18	2690	248	262	100	66	61	105	1120	1550	1290	638	571
19	1110	304	289	83	66	59	105	1010	1720	2080	441	577
20	682	398	347	74	63	59	222	1040	1680	1210	393	583
21	491	362	262	66	53	62	294	886	1450	971	430	525
22	378	337	205	61	55	78	205	726	1140	1040	441	430
23	491	289	185	59	52	100	162	759	1070	928	496	367
24	1120	244	193	59	50	135	147	859	1230	852	601	372
25	1750	240	257	60	48	120	132	1010	1640	900	726	409
26	964	210	210	62	47	105	128	798	1810	942	873	404
27	694	197	165	64	46	96	173	792	1840	928	1680	383
28	548	536	135	67	45	89	262	921	1600	1020	1120	337
29	566	491	120	70	---	85	304	1080	1410	985	682	275
30	644	337	110	73	---	84	318	1210	1280	921	638	1390
31	852	---	102	76	---	83	---	1550	---	999	1220	---
TOTAL	24202	24676	5974	5540	1681	2546	4041	23581	44140	33907	21670	26723
MEAN	781	823	193	179	60.0	82.1	135	761	1471	1094	699	891
MAX	2690	6170	367	1300	78	140	318	1550	1840	2080	1680	2950
MIN	235	197	102	59	45	45	40	294	1070	852	393	275
CFSM	11.6	12.2	2.86	2.66	.89	1.22	2.00	11.3	21.8	16.2	10.4	13.2
IN.	13.36	13.62	3.30	3.06	.93	1.41	2.23	13.01	24.36	18.71	11.96	14.75
AC-FT	48000	48940	11850	10990	3330	5050	8020	46770	87550	67250	42980	53010

CAL YR 1981	TOTAL	265161	MEAN 726	MAX 6170	MIN 80	CFSM 10.8	IN 146.35	AC-FT 525900		
WTR YR 1982	TOTAL	218681	MEAN 599	MAX 6170	MIN 40	CFSM 8.89	IN 120.69	AC-FT 433800		

15024750 GOAT CREEK NEAR WRANGELL

LOCATION.--Lat 56°39'40", long 131°58'14", in NE¼NE¼ sec.23, T.60 S., R.85 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 0.4 mi (0.6 km) upstream from mouth and 20 mi (32.2 km) northeast of Wrangell.

DRAINAGE AREA.--17.3 mi² (44.8 km²).

PERIOD OF RECORD.--August 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 35 ft (11 m), from topographic map.

REMARKS.--Records good except those for January through May, which are poor.

AVERAGE DISCHARGE.--6 years, 193 ft³/s (5.466 m³/s), 151.50 in/yr (3,848 mm/yr), 139,800 acre-ft/yr (172 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,020 ft³/s (199 m³/s) Sept. 11, 1981, gage height, 7.04 ft (1.387 m), from rating curve extended above 720 ft³/s (20 m³/s); minimum daily, 3.3 ft³/s (0.093 m³/s) Feb. 14, 15, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25.5 m³/s) and maximum (*).

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 18	0315	928	26.3	3.12	0.951	Sept. 2	0800	1,080	30.6	3.30	1.006
Nov. 5	1300	*2,390	67.7	*4.61	1.405						

Minimum daily discharge, 3.3 ft³/s (0.093 m³/s) Feb. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	489	156	70	15	12	5.1	11	70	491	391	224	430
2	256	115	62	14	12	5.2	11	60	520	383	172	874
3	162	88	48	13	13	5.5	11	50	520	312	136	385
4	117	236	41	13	13	5.8	10	45	429	298	119	189
5	84	1700	42	13	14	6.0	10	65	399	292	108	162
6	80	686	43	13	13	7.0	11	120	395	272	113	250
7	85	266	37	13	12	9.0	13	100	391	282	119	540
8	108	163	32	14	10	13	15	90	450	259	130	400
9	99	245	31	15	6.5	15	17	100	482	241	147	300
10	82	376	28	17	5.0	14	19	110	487	285	130	290
11	69	536	27	20	3.7	13	21	130	496	262	140	680
12	62	353	25	60	3.5	12	18	150	530	238	174	500
13	82	205	22	170	3.4	12	17	80	555	323	165	350
14	122	135	21	500	3.3	11	18	70	570	387	121	230
15	580	100	21	170	3.3	11	20	66	487	337	117	200
16	450	78	21	75	4.0	10	22	80	375	278	111	175
17	360	63	22	35	5.0	10	20	110	408	259	110	150
18	690	54	25	25	6.0	9.6	17	130	450	298	117	130
19	334	59	30	20	7.5	9.4	20	140	491	433	98	115
20	189	63	32	15	7.2	9.2	35	150	555	319	86	100
21	128	58	30	12	6.6	9.5	55	140	544	253	91	85
22	99	51	28	11	6.0	12	42	130	371	269	98	75
23	158	45	27	9.5	5.7	14	35	120	323	256	110	68
24	250	40	30	8.6	5.5	16	30	150	364	230	138	65
25	416	41	33	8.3	5.3	20	25	240	450	221	160	65
26	262	36	30	8.3	5.2	18	27	210	520	221	223	65
27	179	35	27	8.5	5.1	15	50	202	570	218	387	78
28	136	96	24	8.9	5.0	14	60	241	535	224	247	64
29	138	99	21	9.5	---	13	68	298	459	224	156	54
30	165	75	19	10	---	12	75	341	395	230	143	260
31	167	---	17	11	---	12	---	433	---	256	227	---
TOTAL	6598	6253	966	1335.6	201.8	348.3	803	4421	14012	8751	4617	7329
MEAN	213	208	31.2	43.1	7.21	11.2	26.8	143	467	282	149	244
MAX	690	1700	70	500	14	20	75	433	570	433	387	874
MIN	62	35	17	8.3	3.3	5.1	10	45	323	218	86	54
CFSM	12.3	12.0	1.80	2.49	.42	.65	1.55	8.27	27.0	16.3	8.61	14.1
IN.	14.19	13.44	2.08	2.87	.43	.75	1.73	9.51	30.13	18.82	9.93	15.76
AC-FT	13090	12400	1920	2650	400	691	1590	8770	27790	17360	9160	14540

CAL YR 1981 TOTAL 87758.0 MEAN 240 MAX 6640 MIN 17 CFSM 13.9 IN 188.69 AC-FT 174100
WTR YR 1982 TOTAL 55635.7 MEAN 152 MAX 1700 MIN 3.3 CFSM 8.79 IN 119.63 AC-FT 110400

NOTE.--No gage-height record Feb. 12 to May 27.

15024800 STIKINE RIVER NEAR WRANGELL
(National stream-quality accounting network station)

LOCATION.--Lat 56°42'07", long 132°08'28", in SE¼NW¼ sec.2, T.60 S., R.84 E., Hydrologic Unit 19060000, on right bank about 10 mi (16 km) upstream from mouth near Point Rothsay, 11 mi (18 km) west of Alaska-British Columbia boundary, and 18 mi (29 km) northeast of Wrangell.

DRAINAGE AREA.--19,920 mi² (51,000 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1976 to current year.

REVISED RECORDS.--WDR AK-78-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 25 ft (7.6 m), from topographic map.

REMARKS.--Water-discharge records good except those or Dec. 11 to May 26, which are poor. Satellite telemeter at station.

AVERAGE DISCHARGE.--6 years, 57,743 ft³/s (1,635 m³/s), 39.36 in/yr (1,000 mm/yr), 41,830,000 acre-ft/yr (51.6 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 299,600 ft³/s (8,480 m³/s) Sept. 11, 1981, gage height, 28.22 ft (8.601 m); minimum daily, 4,500 ft³/s (127 m³/s) Mar. 20 and 21, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 192,000 ft³/s (5,440 m³/s), June 21, gage height, 23.80 ft (7.254 m); minimum daily, 5,600 ft³/s (159 m³/s) Jan. 20-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71800	37100	20700	8100	5700	5700	6300	11400	103000	179000	138000	92100
2	58400	33100	19800	8000	5700	5800	6300	11700	120000	174000	111000	134000
3	47600	29800	17800	7600	5700	5800	6200	12300	133000	160000	94400	146000
4	41400	33000	16200	7200	5700	5800	6200	12900	142000	151000	85800	120000
5	36500	114000	15600	6700	5700	5800	6200	13800	145000	146000	77300	103000
6	33800	131000	15700	6400	5700	5900	6300	15000	140000	140000	76200	111000
7	32800	76200	15200	6200	5700	5900	6400	16000	131000	137000	78200	152000
8	33700	56000	14000	6100	5700	5900	6600	18000	129000	139000	88300	122000
9	33200	52000	13900	6000	5700	5900	7000	20500	137000	132000	105000	90200
10	31200	54100	13000	5800	5700	6000	7400	22500	146000	129000	107000	77400
11	28700	64900	12000	5700	5700	6100	7800	25000	154000	125000	90300	71000
12	27100	72300	11800	5800	5700	6100	8200	28000	168000	112000	85700	61900
13	27000	58100	11500	5900	5700	6200	8700	29000	182000	112000	89200	55900
14	33500	46900	11300	6000	5700	6200	9200	27000	187000	124000	74300	54900
15	69400	39600	11100	6100	5700	6200	9500	26000	184000	136000	77400	65200
16	90800	34600	10900	6200	5700	6200	9800	26000	171000	137000	85000	81500
17	71800	31300	10700	6100	5700	6100	10000	28000	162000	130000	81900	85800
18	99500	28000	10500	5900	5700	6000	10200	34000	163000	125000	77600	84100
19	86300	26200	10200	5800	5700	5900	10400	41000	171000	122000	66300	81300
20	62900	25600	10000	5600	5700	5800	10600	46000	185000	107000	66200	83200
21	50700	24600	9900	5600	5700	5800	10800	47000	191000	103000	73000	83800
22	43800	23700	9800	5600	5700	5800	11000	46000	178000	109000	78200	69400
23	40300	23000	9700	5600	5700	5900	11200	44000	156000	113000	79200	57100
24	44700	21400	9600	5600	5700	6000	11500	42000	144000	107000	87400	52800
25	58400	20800	9500	5600	5700	6100	11700	40000	152000	108000	109000	55900
26	55900	19500	9300	5600	5700	6300	11800	39000	170000	119000	116000	59200
27	48900	18900	9000	5600	5700	6400	11400	37800	185000	123000	123000	56600
28	43600	22400	8700	5600	5700	6400	11200	41700	190000	128000	104000	50200
29	40500	24000	8400	5600	---	6400	11000	51600	191000	134000	89600	40300
30	38900	21200	8300	5600	---	6400	11200	64600	186000	133000	83200	45600
31	39400	---	8200	5700	---	6300	---	82200	---	138000	83600	---
TOTAL	1522500	1263300	372300	188900	159600	187100	272100	1030000	4796000	4032000	2781300	2443400
MEAN	49110	42110	12010	6094	5700	6035	9070	32260	159900	130100	89720	81450
MAX	99500	131000	20700	8100	5700	6400	11800	82200	191000	179000	138000	152000
MIN	27000	18900	8200	5600	5700	5700	6200	11400	103000	103000	66200	40300
CFSM	2.47	2.11	.60	.31	.29	.30	.46	1.62	8.03	6.53	4.50	4.09
IN.	2.84	2.36	.70	.35	.30	.35	.51	1.87	8.96	7.53	5.19	4.56
AC-FT	3020000	2506000	738500	374700	316600	371100	539700	1983000	9513000	7997000	5517000	4846000

CAL YR 1981 TOTAL 25055600 MEAN 68650 MAX 298000 MIN 8200 CFSM 3.45 IN 46.79 AC-FT 49700000
WTR YR 1982 TOTAL 19018500 MEAN 52110 MAX 191000 MIN 5600 CFSM 2.62 IN 35.52 AC-FT 37720000

15024800 STIKINE RIVER NEAR WRANGELL--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1976 to 1981. Intermittent daily observations May 29 to Oct. 11, 1982.
SUSPENDED SEDIMENT DISCHARGE: May 28 to September 30, 1982

INSTRUMENTATION.--Temperature recorder from July 27, 1976 to Aug. 6, 1981 (discontinued).

REMARKS.--Records fair for periods of observation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 11.0°C June 3, 12, and July 10, 1978; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 9.0°C May 29; minimum not determined but probably 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,280 mg/l June 2.
SEDIMENT LOADS: Maximum daily, 414,000 tons (376,000 tonnes) June 2.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
AUG						
20...	1230	150	99	7.9	8.9	10.4
20...	1236	275	99	7.8	8.8	10.6
20...	1244	400	98	7.8	8.8	10.7
20...	1300	525	98	7.8	8.7	10.7
20...	1307	650	98	7.8	8.7	10.8
20...	1315	775	98	7.8	8.7	10.8
20...	1321	900	98	7.7	8.7	11.0
20...	1327	1025	98	7.7	8.7	11.3
20...	1335	1150	93	7.5	8.6	11.6
20...	1345	1275	88	7.3	8.2	11.8

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	SPECIFIC CONDUCTANCE LAB (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT										
07...	1200	33800	133	146	7.4	5.0	20	13.0	K1	K4
DEC										
09...	1200	13900	213	209	7.5	.0	3.5	13.9	<1	K0
MAY										
28...	1100	39880	120	145	7.6	6.0	23	11.6	K0	K10
AUG										
31...	1300	85300	--	105	--	--	270	--	--	--

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT										
07...	68	13	21	3.8	2.5	1.0	55	58	12	2.0
DEC										
09...	93	0	29	5.0	5.2	1.4	100	79	17	4.5
MAY										
28...	63	19	20	3.3	2.8	1.1	44	59	12	1.2
AUG										
31...	45	9	15	1.9	1.5	.9	--	36	9.0	.5

K NON-IDEAL COLONY COUNT

15024800 STIKINE RIVER NEAR WRANGELL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/I AS P)
OCT 07...	.1	5.8	85	83	<.09	<.060	.22	.060	.040	.020
DEC 09...	.2	7.7	120	118	.46	.080	.25	.010	.030	<.010
MAY 28...	<.1	6.0	86	82	.22	.070	1.10	.020	.060	.010
AUG 31...	<.1	3.3	47	54	<.10	.070	.40	.210	.020	.020

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
OCT 07...	1200	1	<1	100	60	45	5	3	2	10
MAY 28...	1100	1	<1	200	200	39	1	--	<1	20
AUG 31...	1300	1	<1	100	70	30	1	--	<1	10

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT 07...	0	10	1	<3	31	25	6	3500	3400	73
MAY 28...	--	<10	1	<1	28	23	5	3600	3500	140
AUG 31...	0	10	7	<1	41	--	<1	12000	12000	49

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
OCT 07...	9	--	<1	100	80	18	.1	.0	.1	6
MAY 28...	<1	--	3	110	100	15	6.2	1.0	5.2	7
AUG 31...	17	13	4	350	350	2	.3	--	<.1	27

DATE	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 07...	3	3	<1	<1	<1	<1	60	50	9
MAY 28...	--	<1	<1	<1	<1	<1	60	40	19
AUG 31...	--	<1	<1	<1	<1	<1	50	40	6

15024800 STIKINE RIVER NEAR WRANGELL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
OCT								
07...	1200	33800	103	9400	--	--	--	--
DEC								
09...	1200	13900	3	113	--	--	--	--
MAY								
31...	1230	79300	1290	276000	12	15	19	26
JUN								
04...	0915	141000	860	327000	16	22	29	38
14...	1515	187000	804	406000	16	27	34	42
20...	1530	188000	484	246000	16	27	34	44
JUL								
15...	1030	138000	395	147000	20	26	34	44
20...	1300	107000	220	63600	27	33	36	44
25...	1230	109000	242	71200	14	25	36	48
30...	0630	132000	378	135000	22	30	38	51
AUG								
04...	1210	86300	292	68000	15	24	34	44
09...	1520	110000	469	139000	16	23	35	44
13...	1610	92200	364	90600	20	25	31	46
16...	1730	86000	585	136000	14	17	20	25
SEP								
04...	1530	116000	498	156000	29	36	40	49
08..	1305	118000	367	117000	23	34	40	50
11...	1430	69900	171	32300	19	25	--	36
25...	1615	57100	136	21000	--	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
OCT						
07...	--	--	--	--	--	--
DEC						
09...	--	--	--	--	--	--
MAY						
31...	34	43	51	65	99	100
JUN						
04...	50	62	73	85	100	--
14...	54	64	76	88	98	100
20...	54	68	78	89	96	100
JUL						
15...	56	66	77	91	100	--
20...	55	66	78	91	99	100
25...	61	70	78	95	100	--
30...	62	70	77	88	99	100
AUG						
04...	56	57	80	95	100	--
09...	57	69	81	91	98	100
13...	62	75	81	93	100	--
16...	30	36	41	55	84	100
SEP						
04...	56	77	84	92	100	--
08...	61	68	76	89	100	--
11...	--	56	69	94	100	--
25...	--	61	74	97	100	--

TEMPERATURE, WATER (DEG. C), WATER YEAR MAY 198' TO SEPTEMBER 1982
ONCE-DAILY

DAY	JUNE	JULY	AUG	SEP	DAY	JUN	JUL	AUG	SEP	DAY	JUN	JUL	AUG	SEP	DAY	MAY	JUN	JUL	AUG	SEP
1	7.5	7.5	8.0	6.0	9	8.0	7.0	---	6.5	17	6.5	---	7.0	6.5	25	---	---	---	7.5	6.5
2	7.5	8.0	8.0	5.5	10	8.0	7.5	---	6.5	18	6.5	---	7.5	6.0	26	---	---	---	6.5	5.5
3	7.5	8.0	7.5	5.5	11	8.0	7.5	---	6.5	19	6.5	---	7.5	6.0	27	---	---	---	---	---
4	7.5	8.5	8.0	5.5	12	8.0	---	8.0	6.5	20	---	---	8.5	6.0	28	---	---	8.0	7.0	7.5
5	7.5	8.0	8.0	5.5	13	8.0	---	---	8.5	21	---	---	8.0	6.0	29	9.0	7.5	8.0	7.0	6.0
6	8.0	8.0	8.0	5.5	14	8.0	---	---	7.5	22	---	---	7.5	6.0	30	8.5	7.5	8.0	6.5	6.0
7	7.0	7.5	7.5	5.5	15	7.0	---	---	7.0	23	---	---	---	6.5	31	---	---	8.0	6.0	---
8	7.5	7.0	7.5	5.5	16	7.0	---	7.0	7.0	24	---	---	7.5	6.0						
															MEAN			8.0	7.5	6.0

15024800 STIKINE RIVER NEAR WRANGELL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR MAY 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		MAY			JUNE	
1	11400	---	---	103000	1100	307000
2	11700	---	---	120000	1280	414000
3	12300	---	---	133000	1070	385000
4	12900	---	---	142000	875	335000
5	13800	---	---	145000	960	375000
6	15000	---	---	140000	630	238000
7	16000	---	---	131000	430	152000
8	18000	---	---	129000	395	138000
9	20500	---	---	137000	410	151000
10	22500	---	---	146000	550	217000
11	25000	---	---	154000	630	262000
12	28000	---	---	168000	690	314000
13	29000	---	---	182000	760	374000
14	27000	---	---	187000	800	404000
15	26000	---	---	184000	700	348000
16	26000	---	---	171000	520	240000
17	28000	---	---	162000	450	197000
18	34000	---	---	163000	430	189000
19	41000	---	---	171000	470	218000
20	46000	---	---	185000	490	245000
21	47000	---	---	191000	520	268000
22	46000	---	---	178000	460	222000
23	44000	---	---	156000	405	170000
24	42000	---	---	144000	335	130000
25	40000	---	---	152000	375	154000
26	39000	---	---	170000	450	207000
27	37800	---	---	185000	605	302000
28	41700	135	15200	190000	625	321000
29	51600	360	50200	191000	630	326000
30	64600	680	119000	186000	515	259000
31	82200	1210	269000	---	---	---
TOTAL	1000000	---	---	4796000	---	7862000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	179000	445	215000	138000	630	235000	92100	225	56000
2	174000	425	200000	111000	400	120000	134000	720	260000
3	160000	390	168000	94400	350	89200	146000	915	360000
4	151000	380	155000	85800	300	69500	120000	580	188000
5	146000	360	142000	77300	270	56400	103000	425	118000
6	140000	320	121000	76200	245	50400	111000	330	98700
7	137000	315	117000	78200	225	47500	152000	955	391000
8	139000	340	128000	88300	350	83400	122000	445	147000
9	132000	410	146000	105000	465	132000	90200	220	53600
10	129000	325	113000	107000	430	124000	77400	195	40800
11	125000	280	94200	90300	350	85300	71000	175	33500
12	112000	260	78400	85700	270	62500	61900	165	27600
13	112000	255	77300	89200	330	79500	55900	165	24900
14	124000	325	109000	74300	310	62200	54900	220	32600
15	136000	400	147000	77400	280	58500	65200	255	44900
16	137000	430	159000	85000	260	59700	81500	265	58300
17	130000	370	130000	81900	255	56400	85800	280	64900
18	125000	320	108000	77600	245	51300	84100	290	65900
19	122000	300	98900	66300	210	37600	81300	300	65900
20	107000	220	63500	66200	210	37500	83200	300	67400
21	103000	300	83300	73000	220	43400	83800	280	63400
22	109000	250	73600	78200	240	50700	69400	205	38400
23	113000	365	111000	79200	265	56700	57100	145	22400
24	107000	305	88200	87400	310	73200	52800	200	28500
25	108000	250	72900	109000	490	144000	55900	175	26400
26	119000	280	89800	116000	645	203000	59200	135	21600
27	123000	345	114000	123000	705	234000	56600	130	19900
28	128000	430	148000	104000	480	135000	50200	125	16900
29	134000	550	198000	89600	305	73800	40300	145	15800
30	133000	390	140000	83200	255	57300	45600	250	30800
31	138000	670	250000	83600	235	53000	---	---	---
TOTAL	4032000	-	3939100	2781300	---	2722000	2443400	---	2483100

15028300 FARRAGUT RIVER NEAR PETERSBURG

LOCATION.--Lat 57°10'24", long 133°06'36", in NE¼SW¼ sec.24, T.54 S., R.77 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 2.2 mi (3.6 km) upstream from mouth and 26 mi (42 km) northwest of Petersburg.
DRAINAGE AREA.--151 mi² (391 km²).
PERIOD OF RECORD.--June 1977 to current year.
REVISED RECORDS.--WDR AK-80-1: 1977-78.
GAGE.--Water-stage recorder. Altitude of gage is 25 ft (7.6 m), from topographic map.
REMARKS.--Records fair prior to Feb. 5, good thereafter.
AVERAGE DISCHARGE.--5 years, 1,593 ft³/s (45.11 m³/s), 143.27 in/yr (3,639 mm/yr), 1,154,000 acre-ft/yr (1.42 km³/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 16,400 ft³/s (464 m³/s) Oct. 9, 1979, gage height, 15.23 ft (4.642 m), from rating curve extended above 8,500 ft³/s (240 m³/s), but may have been higher Nov. 5, 1981 during period of no gage-height record; minimum daily, 95 ft³/s (2.69 m³/s) Feb. 22, 23, 1979.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 12,000 ft³/s (340 m³/s) Nov. 5; minimum daily, 117 ft³/s (3.31 m³/s) Mar. 4 and 5.

Peak discharges above base of 8,000 ft³/s (230 m³/s) for the period of daily record were computed and are shown below. Annual maximums (*) are also shown.

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Sept. 12, 1977	Unknown	a8,280	234	a11.14	3.395
Oct. 15, 1977	0400	*6,330	179	*9.90	3.018
Oct. 3, 1978	Unknown	Unknown		Unknown	
Oct. 13, 1978	Unknown	Unknown		Unknown	
Oct. 18, 1978	Unknown	*Unknown		*Unknown	
Oct. 31, 1978	Unknown	Unknown		Unknown	
July 20, 1979	0300	9,940	282	12.09	3.685
Sept. 13, 1979	1130	13,000	368	13.65	4.161
Oct. 3, 1979	1930	11,000	312	12.67	3.862
Oct. 9, 1979	1500	*16,400	464	*15.23	4.642
Aug. 1, 1980	1200	8,640	245	10.57	3.222
Aug. 17, 1980	0230	10,500	297	12.61	3.844
Oct. 1, 1980	2030	*14,000	396	*13.99	4.264
Oct. 7, 1980	0830	13,400	379	13.76	4.194
Oct. 18, 1980	0500	11,100	312	12.71	3.874
Oct. 28, 1980	1500	11,900	337	13.09	3.990
Aug. 21, 1981	0900	11,600	329	12.92	3.938
Sept. 10, 1981	Unknown	Unknown		Unknown	
Sept. 15, 1981	Unknown	Unknown		Unknown	
Nov. 5, 1981	Unknown	*Unknown		*Unknown	
Sept. 2, 1982	1030	9,790	277	12.04	3.670

a During period June to September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3700	1700	850	220	200	130	144	710	2800	3060	2540	4060
2	2800	1250	714	210	200	128	141	590	2990	2790	2150	8090
3	1600	950	560	200	190	123	133	556	2830	2440	1920	4330
4	1000	1700	491	195	180	117	128	560	2330	2370	1710	2900
5	870	12000	507	188	170	117	127	1130	2060	2190	1580	2970
6	820	8000	517	185	230	139	124	1750	2000	2200	1640	4860
7	850	3000	433	190	207	181	130	1370	2000	2350	1690	5130
8	1100	1700	386	200	186	363	160	1220	2060	2230	1980	3200
9	980	2700	343	205	177	412	238	1140	2220	2160	2180	2210
10	790	3800	322	195	171	305	278	1300	2470	2300	1790	1760
11	650	5200	319	185	150	252	235	2220	2710	2120	2210	1460
12	520	3800	306	360	143	205	205	1860	2970	2450	2390	1260
13	500	2100	296	1200	128	194	216	1300	2880	2840	1860	1160
14	900	1400	280	3600	144	202	196	1120	2760	2930	1870	1730
15	2500	1000	270	1900	153	179	198	1050	3100	2530	1930	2680
16	5800	880	277	900	138	162	342	1070	2880	2340	1760	2280
17	2200	720	447	500	143	150	284	1730	2740	2730	1690	1990
18	3800	620	904	350	150	141	225	1720	2730	3520	1580	1840
19	6100	700	543	280	166	133	313	1660	3110	3800	1390	1890
20	2600	950	456	220	158	131	1490	2130	3620	2670	1440	1900
21	1300	860	416	185	160	128	938	1520	2930	2520	1550	1530
22	920	730	369	170	155	155	556	1690	2460	2510	1680	1280
23	1150	650	337	165	133	230	448	1500	2320	2230	1680	1220
24	1700	590	371	155	133	192	372	2280	2450	2160	2450	1270
25	4100	550	407	150	139	233	358	2020	3010	2280	2850	1370
26	3300	510	374	150	133	221	399	1490	3380	2280	3700	1280
27	2100	470	308	155	736	188	789	1480	3410	2470	4340	1280
28	1500	800	278	165	133	164	991	1590	3330	2680	3390	1050
29	1300	1200	260	170	---	153	754	1700	3110	2700	2490	914
30	1500	1000	245	180	---	150	651	1890	2880	2740	2700	2970
31	2000	---	230	190	---	144	---	2420	---	2960	3090	---
TOTAL	60950	61530	12816	13318	4506	5722	11563	45766	82540	79550	67220	71864
MEAN	1966	2051	413	430	161	185	385	1476	2751	2566	2168	2395
MAX	6100	12000	904	3600	230	412	1490	2420	3620	3800	4340	8090
MIN	500	470	230	150	128	117	124	556	2000	2120	1390	914
CFSM	13.0	13.6	2.74	2.85	1.07	1.23	2.55	9.78	18.2	17.0	14.4	15.9
IN.	15.02	15.16	3.16	3.28	1.11	1.41	2.85	11.27	20.33	19.60	16.56	17.70
AC-FT	120900	122000	25420	26420	8940	11350	22940	90780	163700	157800	133500	142500

CAL YR 1981 TOTAL 619062 MEAN 1696 MAX 12000 MIN 200 CFSM 11.2 IN 152.51 AC-FT 1228000
WTR YR 1982 TOTAL 517345 MEAN 1417 MAX 12000 MIN 117 CFSM 9.38 IN 127.45 AC-FT 1026000

NOTE.--No gage-height record prior to Dec. 2 and Jan. 7 to Feb. 5.

15050000 GOLD CREEK AT JUNEAU

LOCATION.--Lat 58°18'25", long 134°24'05", in NE¼ sec.23, T.41 S., R.67 E., City and Borough of Juneau, Hydrologic Unit 19060000, on left bank 10 ft (3 m) downstream from highway bridge, 150 ft (46 m) upstream from Alaska Electric Light and Power Company dam and diversion, 0.5 mi (0.8 km) northeast of Juneau, and 1 mi (1.6 km) upstream from mouth at Gastineau Channel.

DRAINAGE AREA.--9.76 mi² (25.28 km²).

PERIOD OF RECORD.--July 1916 to December 1920 (monthly discharge only), October 1946 to September 1948, October 1949 to September 1982 (discontinued).

REVISED RECORDS.--WSP 1372: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 245 ft (74.7 m), from topographic map. July 20, 1916 to Dec. 31, 1920, at site 50 ft (15 m) upstream at different datum. Sept. 11, 1946 to Sept. 30, 1948, nonrecording gage at site 0.7 mi (1.1 km) downstream at different datum.

REMARKS.--Records good, as station is worked monthly for the Water Resources Review. Three 16 inch (406 mm) wells, located upstream from gage in Last Chance Basin, pump water for Juneau's supply and may decrease flow during winter periods.

AVERAGE DISCHARGE.--39 years, 107 ft³/s (3.03 m³/s), 148.88 in/yr (3,782 mm/yr), 77,520 acre-ft/yr (95.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s (76.5 m³/s) Sept. 6, 1981, gage height, 6.53 ft (1.990 m), from rating curve extended above 1,800 ft³/s (51 m³/s); maximum gage height, 6.57 ft (2.003 m) Aug. 12, 1961; no flow at times during winters of 1951, 1956, 1974, and 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,170 ft³/s (33.1 m³/s) Oct. 17 (2200 hrs), gage height, 4.93 ft (1.503 m), only peak above base of 900 ft³/s (25.5 m³/s); no flow Feb. 17-22, Feb. 27 to Mar. 6, and Mar. 12 to Apr. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	80	36	8.0	2.3	.00	.00	17	273	226	76	329
2	107	66	31	7.5	2.2	.00	.00	16	268	166	63	353
3	89	56	28	7.2	2.0	.00	.00	16	205	142	63	192
4	77	153	26	6.8	1.8	.00	.00	17	140	144	97	129
5	68	439	27	6.4	1.8	.00	.00	31	122	137	68	166
6	64	162	25	6.0	1.8	.20	.00	95	117	139	106	273
7	63	106	23	5.7	1.8	.60	.00	72	127	153	10[illegible]	223
8	59	92	22	5.5	1.7	1.5	.00	57	145	144	117	157
9	51	122	19	5.3	1.6	.65	.00	52	173	127	132	107
10	48	276	18	5.2	1.5	.25	.21	59	192	154	66	95
11	44	328	17	5.0	1.3	.12	1.5	82	232	119	68	77
12	98	193	17	5.0	1.2	.00	1.8	69	258	125	99	64
13	212	126	17	5.6	1.1	.00	2.0	55	229	117	71	59
14	286	95	17	8.5	.92	.00	1.9	48	222	119	71	211
15	474	80	17	20	.81	.00	2.0	48	255	114	77	149
16	213	68	17	5.8	.20	.00	2.1	50	227	120	61	97
17	432	58	22	5.0	.00	.00	1.9	74	198	188	71	80
18	305	50	48	4.8	.00	.00	3.0	121	237	146	55	67
19	181	43	29	4.4	.00	.00	6.0	151	286	120	47	64
20	129	41	24	4.1	.00	.00	24	154	309	94	53	58
21	100	38	21	3.8	.00	.00	17	113	206	119	48	44
22	105	35	20	3.6	.00	.00	12	134	161	126	66	41
23	168	33	18	3.4	.07	.00	11	150	160	123	75	238
24	221	33	16	3.2	.20	.00	9.6	180	206	98	108	97
25	237	33	15	3.0	.10	.00	11	200	286	96	78	73
26	172	30	13	3.0	.07	.00	16	160	296	101	278	60
27	123	44	12	2.9	.00	.00	24	120	275	134	202	64
28	102	83	11	2.8	.00	.00	30	96	249	113	126	53
29	97	48	10	2.7	---	.00	22	91	206	112	89	69
30	85	38	9.2	2.4	---	.00	19	130	195	110	238	227
31	77	---	8.6	2.4	---	.00	---	210	---	116	242	---
TOTAL	4635	3049	633.8	165.0	24.47	3.32	218.01	2868	6455	4042	3112	3916
MEAN	150	102	20.4	5.32	.87	.11	7.27	92.5	215	130	100	131
MAX	474	439	48	20	2.3	1.5	30	210	309	226	278	353
MIN	44	30	8.6	2.4	.00	.00	.00	16	117	94	47	41
CFSM	15.4	10.5	2.09	.55	.09	.01	.75	9.48	22.0	13.3	10.2	13.4
IN.	17.66	11.62	2.42	.63	.09	.01	.83	10.93	24.60	15.40	11.86	14.92
AC-FT	9190	6050	1260	327	49	6.6	432	5690	12800	8020	6170	7770

CAL YR 1981 TOTAL 42072.80 MEAN 115 MAX 982 MIN 8.6 CFSM 11.8 IN 160.34 AC-FT 83450
WTR YR 1982 TOTAL 29121.60 MEAN 79.8 MAX 474 MIN .00 CFSM 8.18 IN 110.98 AC-FT 57760

15050000 GOLD CREEK AT JUNEAU

LOCATION.--Lat 58°18'25", long 134°24'05", in NE¼ sec.23, T.41 S., R.67 E., City and Borough of Juneau, Hydrologic Unit 19060000, on left bank 10 ft (3 m) downstream from highway bridge, 150 ft (46 m) upstream from Alaska Electric Light and Power Company dam and diversion, 0.5 mi (0.8 km) northeast of Juneau, and 1 mi (1.6 km) upstream from mouth at Gastineau Channel.

DRAINAGE AREA.--9.76 mi² (25.28 km²).

PERIOD OF RECORD.--July 1916 to December 1920 (monthly discharge only), October 1946 to September 1948, October 1949 to September 1982 (discontinued).

REVISED RECORDS.--WSP 1372: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 245 ft (74.7 m), from topographic map. July 20, 1916 to Dec. 31, 1920, at site 50 ft (15 m) upstream at different datum. Sept. 11, 1946 to Sept. 30, 1948, nonrecording gage at site 0.7 mi (1.1 km) downstream at different datum.

REMARKS.--Records good, as station is worked monthly for the Water Resources Review. Three 16 inch (406 mm) wells, located upstream from gage in Last Chance Basin, pump water for Juneau's supply and may decrease flow during winter periods.

AVERAGE DISCHARGE.--39 years, 107 ft³/s (3.03 m³/s), 148.88 in/yr (3,782 mm/yr), 77,520 acre-ft/yr (95.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s (76.5 m³/s) Sept. 6, 1981, gage height, 6.53 ft (1.990 m), from rating curve extended above 1,800 ft³/s (51 m³/s); maximum gage height, 6.57 ft (2.003 m) Aug. 12, 1961; no flow at times during winters of 1951, 1956, 1974, and 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,170 ft³/s (33.1 m³/s) Oct. 17 (2200 hrs), gage height, 4.93 ft (1.503 m), only peak above base of 900 ft³/s (25.5 m³/s); no flow Feb. 17-22, Feb. 27 to Mar. 6, and Mar. 12 to Apr. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	80	36	8.0	2.3	.00	.00	17	273	226	76	329
2	107	66	31	7.5	2.2	.00	.00	16	268	166	63	353
3	89	56	28	7.2	2.0	.00	.00	16	205	142	63	192
4	77	153	26	6.8	1.8	.00	.00	17	140	144	97	129
5	68	439	27	6.4	1.8	.00	.00	31	122	137	68	166
6	64	162	25	6.0	1.8	.20	.00	95	117	139	106	273
7	63	106	23	5.7	1.8	.60	.00	72	127	153	101	223
8	59	92	22	5.5	1.7	1.5	.00	57	145	144	117	157
9	51	122	19	5.3	1.6	.65	.00	52	173	127	132	107
10	48	276	18	5.2	1.5	.25	.21	59	192	154	66	95
11	44	328	17	5.0	1.3	.12	1.5	82	232	119	68	77
12	98	193	17	5.0	1.2	.00	1.8	69	258	125	99	64
13	212	126	17	5.6	1.1	.00	2.0	55	229	117	71	59
14	286	95	17	8.5	.92	.00	1.9	48	222	119	71	211
15	474	80	17	20	.81	.00	2.0	48	255	114	77	149
16	213	68	17	5.8	.20	.00	2.1	50	227	120	61	97
17	432	58	22	5.0	.00	.00	1.9	74	198	188	71	80
18	305	50	48	4.8	.00	.00	3.0	121	237	146	55	67
19	181	43	29	4.4	.00	.00	6.0	151	286	120	47	64
20	129	41	24	4.1	.00	.00	24	154	309	94	53	58
21	100	38	21	3.8	.00	.00	17	113	206	119	48	44
22	105	35	20	3.6	.00	.00	12	134	161	126	66	41
23	168	33	18	3.4	.07	.00	11	150	160	123	75	238
24	221	33	16	3.2	.20	.00	9.6	180	206	98	108	97
25	237	33	15	3.0	.10	.00	11	200	286	96	78	73
26	172	30	13	3.0	.07	.00	16	160	296	101	278	60
27	123	44	12	2.9	.00	.00	24	120	275	134	202	64
28	102	83	11	2.8	.00	.00	30	96	249	113	126	53
29	97	48	10	2.7	---	.00	22	91	206	112	89	69
30	85	38	9.2	2.4	---	.00	19	130	195	110	238	227
31	77	---	8.6	2.4	---	.00	---	210	---	116	242	---
TOTAL	4635	3049	633.8	165.0	24.47	3.32	218.01	2868	6455	4042	3112	3916
MEAN	150	102	20.4	5.32	.87	.11	7.27	92.5	215	130	100	131
MAX	474	439	48	20	2.3	1.5	30	210	309	226	278	353
MIN	44	30	8.6	2.4	.00	.00	.00	16	117	94	47	41
CFSM	15.4	10.5	2.09	.55	.09	.01	.75	9.48	22.0	13.3	10.2	13.4
IN.	17.66	11.62	2.42	.63	.09	.01	.83	10.93	24.60	15.40	11.86	14.92
AC-FT	9190	6050	1260	327	49	6.6	432	5690	12800	8020	6170	7770

CAL YR 1981	TOTAL 42072.80	MEAN 115	MAX 982	MIN 8.6	CFSM 11.8	IN 160.34	AC-FT 83450
WTR YR 1982	TOTAL 29121.60	MEAN 79.8	MAX 474	MIN .00	CFSM 8.18	IN 110.98	AC-FT 57760

15052500 MENDENHALL RIVER NEAR AUKE BAY

LOCATION.--Lat 58°25'05", long 134°32'40", in SW¼NE¼ sec.8, T.40 S., R.66 E., City and Borough of Juneau, Hydrologic Unit 19060000, at east end of Mendenhall Lake, 250 ft (76 m) northwest of Mendenhall Visitors Center, 4.2 mi (6.8 km) northeast of Auke Bay, and 7 mi (11 km) upstream from mouth at Fritz Cove.

DRAINAGE AREA.--85.1 mi² (220.4 km²).

PERIOD OF RECORD.--May 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 60 ft (18 m), from topographic map.

REMARKS.--Records good except those for December through February, which are fair. Streamflow is augmented and diurnal fluctuations are caused by meltage from Mendenhall Glacier that covers two-thirds of the basin.

AVERAGE DISCHARGE.--17 years, 1,128 ft³/s (31.94 m³/s), 180.00 in/yr (4,572 mm/yr), 817,200 acre-ft/yr (1.01 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft³/s (481 m³/s) Sept. 8, 1981, gage height, 10.91 ft (3.32 m) from rating curve extended above 7,000 ft³/s (200 m³/s); minimum daily, 19 ft³/s (0.54 m³/s) Mar. 1 3, 1969 and Mar. 7-11, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,600 ft³/s (130 m³/s) and maximum (*).

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 16	0030	5,180	147	6.85	2.088	Sept. 7	0700	5,540	157	6.94	2.115
Sept. 3	0300	*7,840	222	*7.96	2.426						

Minimum daily discharge, 26 ft³/s (0.74 m³/s) Feb. 14 and 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	626	435	200	76	53	31	35	117	844	2990	2640	4440
2	534	373	190	74	51	30	34	112	1060	3060	2110	6820
3	406	327	175	71	48	30	35	111	1050	2500	2120	6380
4	331	325	160	68	46	30	34	112	861	2320	2280	3400
5	320	514	145	64	44	31	33	128	809	2130	1990	2900
6	286	385	95	63	41	32	32	223	754	2280	2140	4300
7	287	381	85	61	38	37	32	282	748	2500	2650	5190
8	259	435	75	60	36	42	34	265	793	2530	3350	3140
9	222	458	65	62	34	46	37	262	895	2400	4210	2110
10	201	751	60	150	32	45	40	264	1000	2520	3390	1820
11	171	1040	55	350	30	45	42	311	1160	2280	2450	1620
12	188	795	50	600	28	42	42	320	1280	2220	2340	1440
13	300	609	47	300	27	40	43	277	1380	2380	2240	1300
14	850	539	45	170	26	38	45	247	1560	2560	2520	1720
15	3200	395	43	110	26	36	44	228	1750	2850	2590	2460
16	4340	299	42	80	27	34	44	222	1710	2560	2160	3010
17	2760	237	55	65	29	32	45	247	1620	2690	2070	3030
18	3320	201	90	58	32	32	46	323	1700	3100	1760	2570
19	2280	240	110	52	34	32	46	377	1950	2600	1630	2380
20	1710	229	120	47	35	33	81	379	2400	2020	1950	2230
21	1260	217	125	41	36	32	91	352	2120	2360	2330	1690
22	930	200	130	38	36	34	96	323	1910	2690	2490	1170
23	948	183	122	36	35	37	94	308	1990	2570	2230	1790
24	1410	176	115	34	35	38	83	331	2390	2360	2500	2260
25	2350	174	114	33	34	38	82	365	2660	2480	3070	2430
26	2109	140	112	33	33	38	91	351	2970	2670	3660	2240
27	1330	172	105	34	33	38	104	331	3070	3140	3480	1860
28	902	254	96	36	32	37	118	358	3070	3580	2740	1470
29	707	225	91	38	---	37	123	352	2860	3500	2310	1090
30	604	214	85	44	---	36	118	430	2810	2950	2530	1770
31	520	---	81	50	---	36	---	611	---	3200	3300	---
TOTAL	35652	10923	3083	2998	991	1119	1824	8919	51174	81990	79230	80030
MEAN	1150	364	99.5	96.7	35.4	36.1	60.8	288	1706	2645	2556	2668
MAX	4340	1040	200	600	53	46	123	611	3070	3580	4210	6820
MIN	171	140	42	33	26	30	32	111	748	2020	1630	1090
CFSM	13.5	4.28	1.17	1.14	.42	.42	.71	3.38	20.0	31.1	30.0	31.4
IN.	15.58	4.77	1.35	1.31	.43	.49	.80	3.90	22.37	35.84	34.63	34.98
AC-FT	70720	21670	6120	5950	1970	2220	3620	17690	101500	162600	157200	158700

CAL YR 1981	TOTAL	497272	MEAN	1362	MAX	13700	MIN 42	CFSM 16.0	IN 217.37	AC-FT	986300
WTR YR 1982	TOTAL	357933	MEAN	981	MAX	6820	MIN 26	CFSM 11.5	IN 156.46	AC-FT	710000

NOTE.--No gage-height record Jan. 10 to Mar. 8.

15056100 SKAGWAY RIVER AT SKAGWAY
(National stream-quality accounting network station)

LOCATION.--Lat 59°28'01", long 135°18'03", Hydrologic Unit 19060000, on left bank 800 ft (240 m) downstream from highway bridge, on dike near end of 20th Street in City of Skagway, and 1 mi (1.6 km) upstream from mouth at Taiya Inlet.

DRAINAGE AREA.--145 mi² (376 km²), approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6.1 m), from topographic map. Prior to Mar. 3, 1976, at site 0.85 mi (1.4 km) downstream at different datum.

REMARKS.--Water-discharge records fair prior to Dec. 8 and poor thereafter. Streamflow is augmented and large diurnal fluctuations are caused by meltage from glaciers that cover 17 percent of the basin.

AVERAGE DISCHARGE.--19 years, 566 ft³/s (16.03 m³/s), 53.01 in/yr (1,299 mm/yr), 410,100 acre-ft/yr (506 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,400 ft³/s (464 m³/s) Sept. 7, 1981, gage height, 19.25 ft (5.867 m), from rating curve extended above 2,500 ft³/s (70.8 m³/s); minimum daily, 6.0 ft³/s (0.17 m³/s) Mar. 31, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,050 ft³/s (86.4 m³/s) Sept. 30, gage height 16.99 ft (5.179 m), only peak above base of 3,000 ft³/s (85.0 m³/s); minimum daily, 12 ft³/s (0.34 m³/s), Feb. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	323	296	140	74	29	15	15	86	1280	1880	1360	839
2	298	270	137	71	27	14	15	86	1300	1760	1210	1620
3	267	251	132	68	25	14	15	87	1080	1640	1170	937
4	236	219	129	65	23	13	15	93	623	1500	1000	701
5	234	444	126	63	21	13	16	95	667	1390	952	713
6	217	336	120	61	20	14	17	108	650	1580	1010	1070
7	203	278	114	60	19	15	18	126	737	2000	1010	1100
8	199	251	100	60	18	17	19	122	819	2120	1160	713
9	190	236	85	65	17	18	22	125	1090	1770	1500	497
10	182	298	72	80	16	19	24	140	1340	1620	974	406
11	174	479	61	180	15	19	26	170	1570	1310	853	336
12	176	438	55	450	14	19	28	161	1480	1200	780	290
13	375	333	50	353	14	18	29	132	1440	1320	901	273
14	1740	281	49	190	13	16	31	116	1290	1630	1040	497
15	1980	249	48	110	13	15	32	126	1100	1630	1070	894
16	894	219	47	70	12	14	33	137	832	1320	901	1050
17	762	210	49	45	13	14	35	197	774	1320	832	866
18	1080	199	70	35	13	14	43	241	1050	1070	755	667
19	618	180	90	30	14	13	61	244	1940	908	731	701
20	479	178	110	27	14	14	93	254	1920	1000	839	901
21	403	165	120	25	15	14	82	229	1150	1370	866	656
22	359	163	128	23	16	14	72	199	959	1530	846	430
23	377	161	123	22	16	15	73	210	1100	1360	853	501
24	859	161	123	21	17	15	71	206	1370	1440	1100	634
25	1100	158	125	20	17	16	69	208	1840	1560	1100	392
26	636	150	114	21	17	16	72	231	2140	1680	1040	377
27	488	149	102	22	16	16	84	262	2290	1710	901	287
28	403	150	95	24	16	16	97	296	2410	1670	901	206
29	366	147	88	26	---	16	94	333	2100	1680	762	170
30	349	144	83	27	---	16	86	388	1820	1840	768	2150
31	314	---	78	28	---	16	---	853	---	1740	880	---
TOTAL	16281	7193	2963	2416	480	478	1387	6261	40161	47548	30065	20874
MEAN	525	240	95.6	77.9	17.1	15.4	46.2	202	1339	1534	970	696
MAX	1980	479	140	450	29	19	97	853	2410	2120	1500	2150
MIN	174	144	47	20	12	13	15	86	623	908	731	170
CFSM	3.62	1.66	.66	.54	.12	.11	.32	1.39	9.23	10.6	6.69	4.80
IN.	4.18	1.85	.76	.62	.12	.12	.36	1.61	10.30	12.20	7.71	5.36
AC-FT	32290	14270	5880	4790	952	948	2750	12420	79660	94310	59630	41400

CAL YR 1981 TOTAL 321695 MEAN 881 MAX 7190 MIN 37 CFSM 6.08 IN 82.53 AC-FT 638100
WTR YR 1982 TOTAL 176107 MEAN 482 MAX 2410 MIN 12 CFSM 3.32 IN 45.18 AC-FT 349300

NOTE.--No gage-height record Jan. 28 to Mar. 14.

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949, 1966, 1968-69, 1972, 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August to October 1980, June to December 1981, and May to September 1982.
WATER TEMPERATURES: April 1979 to October 1980 and June to December 1981.

INSTRUMENTATION.--Temperature recorder Jan. 9, 1979 to Aug. 20, 1980. Mini-water-quality monitor since Aug. 21, 1980.

REMARKS.--Records fair. Missing temperature record, Jan. 3 to Sept. 30 and missing specific conductance record Jan 4 to May 24 due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 88 micromhos/cm Dec. 14, 1981; minimum recorded, 9 micromhos/cm June 20 and 25, 1982.
WATER TEMPERATURES: Maximum recorded, 13.5°C June 24, 1980; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 87 micromhos/cm Nov. 21; minimum recorded, 9 micromhos/cm June 20 and 25.
WATER TEMPERATURES: Maximum recorded, 7.0°C Oct. 11; minimum recorded, 0.0°C during many days of winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 26...	1200	E620	40	30	6.8	4.0	18	12.5	K1	K4	22	0
DEC 13...	1500	50	88	94	6.8	.0	.50	11.7	<1	<1	35	3
MAR 15...	1000	19	73	87	7.4	.0	.30	13.1	K0	K0	35	2
MAY 25...	1645	192	50	64	7.0	8.5	2.7	10.7	--	--	26	11
SEP 16...	1700	1040	15	35	7.3	7.0	80	11.8	--	--	14	0

DATE	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)	ALKA-LINITY 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)	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)
OCT 26...	7.5	1.0	1.0	1.1	23	13	<5.0	6.1	.2	3.2	33	--
DEC 13...	12	1.3	1.4	1.5	--	32	5.6	1.4	.3	4.1	42	47
MAR 15...	12	1.4	1.4	1.5	33	37	<5.0	1.6	.3	3.9	27	--
MAY 25...	8.6	1.1	1.3	1.1	15	23	6.0	1.1	.2	3.8	40	37
SEP 16...	4.9	.5	.4	.8	14	12	<5.0	.4	.1	1.4	28	--

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)
OCT 26...	.14	<.060	.59	.060	.040	.020	0	0	0	100	70	34
DEC 13...	.27	.100	.25	.010	.030	.010	--	--	--	--	--	--
MAR 15...	.28	<.060	.80	.010	.010	<.010	<1	--	<1	<100	--	52
MAY 25...	.52	.110	.20	<.010	.130	.010	<1	--	<1	<100	--	40
SEP 16...	<.10	.110	.30	.250	.040	.030	<1	--	<1	<100	--	23

E ESTIMATED
K NON-IDEAL COLONY COUNT

15056100 SKAGWAY . VER AT SKAGWAY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
OCT 26...	1	<1	10	10	0	<1	<3	11	7	4	3400	3300
DEC 13...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	1	<1	<10	--	<10	<1	1	13	12	1	130	--
MAY 25...	<1	<3	<10	--	<10	1	<1	2	1	1	50	10
SEP 16...	<1	<1	<10	--	<10	5	<1	6	5	1	1000	880

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)
OCT 26...	54	9	6	3	50	50	5	.2	.2	.0	4	3
DEC 13...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	<10	7	--	<1	10	--	<1	<.1	--	<.1	2	1
MAY 25...	36	3	1	2	<10	--	7	<.1	--	.1	1	0
SEP 16...	120	<1	--	<1	30	20	7	.2	--	<.1	6	--

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 26...	1	0	0	0	<1	<1	50	10	40	--	--
DEC 13...	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	1	<1	--	<1	<1	<1	10	--	<3	0	.00
MAY 25...	1	<1	--	<1	<1	<1	10	--	<12	2	1.0
SEP 16...	<1	<1	--	<1	<1	<1	50	40	8	235	660

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	51	49	50	69	67	68	61	59	60	80	78	79
2	53	51	52	71	70	70	61	60	60	81	77	78
3	53	51	52	71	70	71	61	60	60	79	26	60
4	54	52	53	72	68	70	61	60	61	---	---	---
5	54	53	53	70	64	67	62	60	61	---	---	---
6	54	53	54	74	70	72	64	60	62	---	---	---
7	55	53	54	76	74	75	69	65	67	---	---	---
8	55	54	54	76	75	75	69	68	68	---	---	---
9	56	54	55	76	74	75	71	43	66	---	---	---
10	55	52	54	76	69	72	76	44	62	---	---	---
11	51	32	41	70	65	67	75	69	73	---	---	---
12	35	30	33	73	67	70	69	65	67	---	---	---
13	36	31	34	76	73	75	69	66	68	---	---	---
14	40	36	39	78	76	77	85	67	75	---	---	---
15	42	36	39	80	79	79	82	77	79	---	---	---
16	45	39	42	81	80	80	78	74	76	---	---	---
17	47	44	46	81	80	81	75	73	74	---	---	---
18	48	43	46	84	82	83	73	67	70	---	---	---
19	47	44	46	84	83	83	70	68	69	---	---	---
20	48	46	47	85	83	84	71	69	70	---	---	---
21	49	48	49	87	83	85	71	70	70	---	---	---
22	50	48	49	60	59	60	72	70	71	---	---	---
23	49	38	46	60	59	59	73	71	72	---	---	---
24	37	32	35	59	58	59	73	71	72	---	---	---
25	41	31	36	60	58	59	72	71	71	---	---	---
26	59	40	58	61	59	60	73	71	72	---	---	---
27	62	59	61	61	59	60	77	73	75	---	---	---
28	65	63	64	60	58	59	79	77	78	---	---	---
29	65	64	64	60	58	59	80	79	79	---	---	---
30	67	65	66	62	59	60	79	78	78	---	---	---
31	68	66	67	---	---	---	79	78	78	---	---	---
MONTH	68	30	50	87	58	70	85	43	70			

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										52	49	51
26										48	44	47
27										45	40	42
28										42	37	40
29										42	36	39
30										38	21	35
31										22	13	19
MONTH												

SOUTHEAST ALASKA

15056100 SKAGWAY RIVER AT SKAGWAY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23	12	15	14	12	13	13	11	12	14	13	14
2	23	12	15	15	11	13	14	11	12	15	13	14
3	29	11	16	15	14	15	14	12	13	15	14	14
4	15	11	13	15	14	15	15	14	15	16	14	15
5	29	18	23	16	14	15	16	14	15	15	14	14
6	35	30	33	16	14	15	16	14	15	14	13	13
7	19	13	15	15	12	14	---	---	---	15	13	14
8	17	13	15	13	12	13	---	---	---	16	14	15
9	29	17	22	13	12	12	15	12	13	17	15	16
10	29	10	22	13	11	12	15	12	14	16	15	16
11	15	10	12	13	12	12	16	14	15	17	15	16
12	24	12	17	13	12	12	16	15	15	17	15	16
13	21	12	17	13	11	12	16	14	15	17	15	16
14	22	17	20	12	12	12	15	13	14	17	15	16
15	24	12	18	12	11	11	15	13	14	15	14	15
16	25	20	23	12	11	12	14	13	14	15	14	15
17	24	18	22	13	11	12	15	13	14	16	14	15
18	24	19	22	13	12	13	16	14	14	18	16	17
19	19	12	16	14	12	13	15	13	14	17	15	16
20	19	9	12	14	13	13	14	12	13	17	16	16
21	18	11	13	13	12	13	14	11	13	19	16	18
22	23	13	16	13	12	12	13	11	12	19	18	18
23	19	14	16	13	11	12	14	11	13	20	19	19
24	16	11	13	13	11	12	14	12	13	21	19	20
25	16	9	11	12	11	12	13	11	12	21	19	20
26	19	10	14	12	11	11	13	11	12	21	20	21
27	18	11	15	12	11	11	14	12	13	23	20	22
28	14	10	12	12	11	11	14	13	13	25	23	24
29	16	13	17	12	11	11	14	13	14	28	23	25
30	17	13	15	12	11	12	14	13	13	27	20	23
31	---	---	---	12	11	12	14	13	14	---	---	---
MONTH	35	9	17	16	11	13	16	11	14	28	13	17

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO JANUARY 1982

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

15056560 KLEHINI RIVER NEAR KLUKWAN

LOCATION.--Lat 59°24'49", long 136°00'04", in SE¼ NE¼ sec.26, T.28 S., R.55 E., Haines Borough, Hydrologic Unit 19060000, in Tongass National Forest, on left bank about 800 ft (240 m) upstream from bridge near mile 26.2 (42.0 km) Haines Highway, and 4 miles (6 km) west of Klukwan.

DRAINAGE AREA.--245 mi² (635 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1981 to September 1982.

GAGE.--Water-stage recorder. Altitude of gage 121 ft (36.9 m).

REMARKS.--Water-discharge records good except those for period of no gage-height record prior to Oct. 22 and those for January and February, which are fair.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 9,000 ft³/s (250 m³/s) Oct. 15; minimum daily, 170 ft³/s (4.81 m³/s) Feb. 23 and 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2150	1020	625	275	235	185	179	334	3780	5480	4540	2400
2	1850	938	587	270	245	190	176	336	3830	5110	3960	2570
3	1500	897	594	265	255	202	173	338	3240	5650	3210	2120
4	1240	907	572	260	256	206	175	355	2760	5210	2530	1930
5	1150	970	579	255	262	213	180	354	2980	4670	2230	2010
6	1050	857	543	245	254	216	190	402	2830	5220	2280	3810
7	985	729	500	242	254	213	196	444	2920	6540	2620	3140
8	900	763	460	240	256	209	199	440	2820	6890	3800	2600
9	825	729	435	243	254	206	203	478	3170	6050	3880	1800
10	805	1140	420	260	250	202	201	479	3730	5780	2970	1500
11	780	2160	400	330	231	195	197	514	4360	5190	3220	1300
12	750	1360	390	363	182	199	193	587	4510	5030	3710	1150
13	900	1330	380	358	189	192	192	557	4250	5140	4960	1050
14	3500	1170	370	300	195	182	198	519	3770	5850	5030	1750
15	9000	970	363	238	210	199	206	527	3900	6340	4730	2800
16	7000	992	444	235	220	195	213	533	3760	5390	4650	4300
17	3000	928	456	230	231	195	212	610	3660	4840	3770	3250
18	4000	799	680	225	231	195	208	713	4260	4070	3100	2700
19	4500	808	602	220	227	199	225	862	6090	3480	2820	2600
20	2600	737	508	210	216	199	315	987	5250	4090	2840	3300
21	1800	771	462	210	202	199	286	986	3390	5410	3030	2400
22	1300	737	408	205	176	199	266	899	3240	5420	2890	1900
23	1250	729	391	205	170	202	260	925	3170	4850	2540	1600
24	1300	720	414	205	170	206	252	961	3850	5280	2840	2300
25	1390	720	402	205	175	206	262	989	5180	6260	3220	1600
26	1290	609	391	205	175	199	317	1090	6070	6230	3050	1300
27	1240	680	309	210	180	189	373	1180	7040	6300	2720	1000
28	1150	704	291	210	180	195	386	1300	7600	6050	3110	800
29	1120	656	290	215	---	199	359	1260	6870	5400	2650	700
30	1050	625	285	220	---	189	338	1790	5700	5660	2740	8200
31	1000	---	280	225	---	192	---	2650	---	5270	2440	---
TOTAL	62375	27155	13831	7579	6081	6167	7130	24399	127980	168150	102080	69880
MEAN	2012	905	446	244	217	199	238	787	4266	5424	3293	2329
MAX	9000	2160	680	363	262	216	386	2650	7600	6890	5030	8200
MIN	750	609	280	205	170	182	173	334	2760	3480	2230	700
CFSM	8.21	3.69	1.82	1.00	.89	.81	.97	3.21	17.4	22.1	13.4	9.51
IN.	9.47	4.12	2.10	1.15	.92	.94	1.08	3.70	19.43	25.53	15.50	10.61
AC-FT	123700	53860	27430	15030	12060	12230	14140	48400	253800	333500	202500	138600

WTR YR 1982 TOTAL 622807 MEAN 1706 MAX 9000 MIN 170 CFSM 6.96 IN 94.56 AC-FT 1235000

15056560 KLEHINI RIVER NEAR KLUKWAN--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)
APR 07...	1400	190	273	5.5	.90	131	38	39	8.2	2.5	2.1	93

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
APR 07...	41	.6	<.1	3.6	153	154	.22	<.060	<.10	.010	1.0	.1

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)
APR 07...	<1	1	100	<100	<1	<1	<10	<10	1	<1	3	1

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
APR 07...	2	170	150	20	2	0	2	10	<10	<.1	<.1	2

DATE	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
APR 07...	0	3	1	0	1	<1	<1	10	0	10	1	.51

15067900 UPPER MAHONEY LAKE OUTLET NEAR KETCHIKAN

LOCATION.--Lat 55°24'50", long 131°33'16", in SE¼NE¼ sec.34, T.74 S., R.91 E., Gateway Borough, Hydrologic Unit 1906000, on Revillagigedo Island, in Tongass National Forest, on right bank 300 ft (100 m) upstream from lake outlet and 6 mi (10 km) northeast of Ketchikan.

DRAINAGE AREA.--2.03 mi² (5.26 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft (600 m), from topographic map.

REMARKS.--Records fair except those for Dec. 26 to Apr. 14, which are poor.

AVERAGE DISCHARGE.--5 years, 39.7 ft³/s (1.124 m³/s), 265.58 in/yr (6,746 mm/yr) 28,760 acre-ft/yr (35.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (corrected), 805 ft³/s (22.8 m³/s) Sept. 14, 1981, gage height, 7.80 ft (2.377 m), from rating curve extended above 75 ft³/s (2.1 m³/s), minimum, 0.85 ft³/s (0.024 m³/s) Feb. 12, 1981, gage height, 3.75 ft (1.143 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 573 ft³/s (16.2 m³/s) Nov. 5, gage height, 7.21 ft (2.200 m), from rating curve extended above 75 ft³/s (2.1 m³/s), minimum daily, 1.6 ft³/s (0.045 m³/s) Feb. 14-17, Mar. 2 and 3, and Apr. 5.

Peak discharges above base of 400 ft³/s (11.3 m³/s) for the period of daily record were computed and are shown below. Annual maximums (*) are also shown.

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 11, 1977	0930	*409	11.6	*6.70	2.042
Oct. 2, 1978	1800	400	11.3	6.67	2.033
Oct. 22, 1978a	0700	*480	*13.6	*6.93	2.112
Oct. 31, 1978	0700	409	11.6	6.70	2.042
Nov. 6, 1978	0200	439	12.4	6.80	2.073
Sept. 27, 1979	0600	400	11.3	6.67	2.033
Sept. 30, 1979	1400	403	11.4	6.68	2.036
Nov. 21, 1979	1700	*487	13.8	*6.95	2.118
Oct. 6, 1980	Unknown	Unknown		Unknown	
Oct. 28, 1980	0115	671	19.0	7.47	2.277
Nov. 20, 1980	0700	497	14.1	6.98	2.128
July 2, 1981	1915	443	12.5	6.82	2.079
Aug. 4, 1981	2300	662	17.6	7.35	2.240
Aug. 21, 1981	0900	633	17.9	7.38	2.249
Sept. 14, 1981	2130	*b805	22.8	*b7.80	2.377
Nov. 5, 1981	1330	*573	16.2	*7.21	2.198
Sept. 6, 1982	1600	461	13.1	6.88	2.097

a Date corrected.
b Maximum previously published was not the annual maximum.

CORRECTIONS.--The date of the annual maximum for water year 1979 is Oct. 22, 1978; the previously published date was incorrect. The maximum discharge for water year 1981 is shown above; the previously published figure was not the maximum.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	30	17	2.1	3.1	1.7	2.0	70	119	84	39	52
2	34	18	10	2.0	3.0	1.6	1.9	84	122	74	27	70
3	20	12	6.7	1.9	2.9	1.6	1.8	69	116	70	24	34
4	12	217	6.5	1.8	2.8	1.7	1.7	48	95	78	26	19
5	10	434	9.3	1.7	2.6	1.8	1.6	48	91	68	50	51
6	16	91	4.8	1.8	2.5	1.9	1.7	97	98	77	100	238
7	18	24	5.2	3.1	2.3	2.1	1.8	80	95	73	52	111
8	34	148	4.9	5.0	2.2	2.4	2.2	55	95	88	37	41
9	24	246	3.7	10	2.1	3.0	3.3	42	102	142	31	30
10	14	194	3.1	16	2.0	3.5	4.6	41	116	137	29	68
11	9.2	228	2.6	18	1.9	3.7	7.0	81	117	90	37	120
12	7.3	80	2.0	18	1.8	3.8	9.4	74	119	138	36	55
13	6.4	30	1.9	68	1.7	3.7	13	50	102	176	26	27
14	5.6	14	1.8	58	1.6	3.1	19	40	95	91	20	16
15	99	11	1.7	24	1.6	2.7	19	37	88	69	17	16
16	64	8.9	1.7	14	1.6	2.3	30	40	76	63	15	15
17	61	5.8	2.7	7.8	1.6	2.1	27	57	85	68	14	12
18	194	5.2	11	5.2	1.7	1.9	22	78	94	88	14	9.6
19	40	69	12	4.1	1.8	1.7	31	106	108	94	12	8.9
20	18	95	10	3.2	1.9	1.7	70	145	107	59	11	8.2
21	11	74	6.4	2.7	2.0	1.7	66	89	92	55	9.9	7.7
22	7.6	70	6.2	2.4	2.0	1.8	40	70	77	61	11	7.2
23	6.7	50	6.3	2.2	2.0	1.9	49	62	74	56	13	6.6
24	8.9	19	7.3	2.0	2.0	2.1	23	134	80	55	16	6.2
25	34	13	4.5	1.9	2.0	2.3	20	99	107	177	20	5.9
26	26	7.5	3.9	1.8	2.0	2.6	18	71	109	55	21	5.8
27	31	5.4	3.3	1.8	1.9	2.7	27	71	114	49	19	5.7
28	45	144	2.9	2.0	1.8	2.6	30	78	103	48	14	5.5
29	49	76	2.6	2.3	---	2.4	31	87	97	46	11	11
30	36	29	2.4	2.6	---	2.2	42	96	88	45	9.2	35
31	39	---	2.2	2.9	---	2.1	---	103	---	54	12	---
TOTAL	1055.7	2448.8	166.6	290.3	58.4	72.4	616.0	2302	2981	2528	773.1	1098.3
MEAN	34.1	81.6	5.37	9.36	2.09	2.34	20.5	74.3	99.4	81.5	24.9	36.6
MAX	194	434	17	68	3.1	3.8	70	145	122	177	100	238
MIN	5.6	5.2	1.7	1.7	1.6	1.6	1.6	37	74	45	9.2	5.5
CFSM	16.8	40.2	2.65	4.61	1.03	1.15	10.1	36.6	49.0	40.1	12.3	18.0
IN.	19.34	44.85	3.05	5.32	1.07	1.33	11.28	42.16	54.60	46.30	14.16	20.12
AC-FT	2090	4860	330	576	116	144	1220	4570	5910	5010	1530	2180

CAL YR 1981	TOTAL 18185.12	MEAN 49.8	MAX 434	MIN .94	CFSM 24.5	IN 333.08	AC-FT 36070		
WTR YR 1982	TOTAL 14390.60	MEAN 39.4	MAX 434	MIN 1.6	CFSM 19.4	IN 263.58	AC-FT 28540		

15072000 FISH CREEK NEAR KETCHIKAN

LOCATION (REVISED).--Lat 55°23'31", long 131°11'38", in SW¼ SW¼ sec.6, T.75 S., R.94 E., Gateway Borough, Hydrologic Unit 1906000, on Revillagigedo Island, in Tongass National Forest, on right bank 250 ft (76 m) upstream from outlet of Low Lake, 750 ft (230 m) upstream from mouth at Thorne Arm, and 18 mi (29 km) east of Ketchikan.

DRAINAGE AREA.--32.1 mi² (83.1 km²), excludes that of Granite Lake drainage basin.

PERIOD OF RECORD.--May 1915 to October 1936, October 1938 to current year. Prior to October 1945, monthly discharge only. Prior to January 1921, published as "near Sea Level, Revillagigedo Island."

REVISED RECORDS.--WSP 1372: 1918.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6.1 m) by barometer. Prior to October 1935, at site 50 ft (15 m) downstream at different datum. October 1935 to Oct. 3, 1975, at prior site and present datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--64 years, 422 ft³/s (11.95 m³/s), 178.53 in/yr (4,535 mm/yr), 305,700 acre-ft/yr (377 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft³/s (153 m³/s) Oct. 15, 1961, gage height, 8.85 ft (2.697 m), site then in use, from rating curve extended above 3,600 ft³/s (102 m³/s); minimum daily, 20 ft³/s (0.57 m³/s) Sept. 9, 10, 1928.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,680 ft³/s (75.9 m³/s) Nov. 5 (2245 hrs), gage height, 3.85 ft (1.174 m), only peak above base of 2,200 ft³/s (62 m³/s); minimum, 51 ft³/s (1.44 m³/s) Aug. 27, 28, and Sept. 29, 30; minimum gage height, 0.73 ft (0.223 m) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	622	664	110	140	84	101	682	707	325	88	143
2	812	463	552	96	143	81	93	530	759	288	85	343
3	545	347	409	88	129	79	88	447	733	269	80	462
4	386	384	317	80	118	73	86	366	649	246	75	386
5	292	1630	273	75	119	73	82	386	575	231	70	353
6	259	2160	259	71	119	74	77	622	540	212	80	579
7	229	1140	246	76	109	81	75	773	531	197	93	939
8	216	887	216	97	100	100	77	635	518	188	107	828
9	208	1170	184	119	95	111	88	510	503	180	113	600
10	188	1360	162	136	96	130	101	454	496	192	113	456
11	162	1690	141	184	91	130	116	579	521	214	135	558
12	145	1570	128	223	84	144	139	689	560	222	151	657
13	128	1050	113	492	79	167	155	591	582	296	169	519
14	116	672	104	814	71	172	151	474	558	380	169	386
15	173	499	101	723	65	161	155	403	519	369	148	297
16	450	403	93	512	64	146	261	370	471	317	128	242
17	474	312	101	364	61	132	229	403	445	278	113	200
18	717	259	135	268	72	122	207	512	440	266	101	170
19	771	348	220	207	83	112	218	683	462	328	93	146
20	552	432	302	164	91	106	383	916	468	380	85	127
21	386	462	307	135	93	99	469	858	462	338	75	112
22	292	426	273	111	93	99	391	780	423	273	70	100
23	233	397	269	97	91	99	320	708	380	233	66	90
24	208	343	338	92	87	114	270	740	354	196	59	82
25	246	317	317	89	91	169	232	791	350	175	55	76
26	322	288	273	83	91	161	202	732	364	151	53	69
27	359	242	233	77	88	147	307	625	386	138	51	63
28	375	397	196	76	84	136	405	584	386	128	51	58
29	456	828	166	100	---	124	420	588	381	116	55	54
30	606	771	138	100	---	117	642	610	354	104	62	64
31	660	---	125	112	---	109	---	641	---	97	70	---
TOTAL	12026	21869	7355	5971	2647	3652	6540	18682	14877	7327	2863	9159
MEAN	388	729	237	193	94.5	118	218	603	496	236	92.4	305
MAX	1060	2160	664	814	143	172	642	916	759	380	169	939
MIN	116	242	93	71	61	73	75	366	350	97	51	54
CFSM	12.1	22.7	7.38	6.01	2.94	3.68	6.79	18.8	15.5	7.35	2.88	9.50
IN.	13.94	25.34	8.52	6.92	3.07	4.23	7.58	21.65	17.24	8.49	3.32	10.61
AC-FT	23850	43380	14590	11840	5250	7240	12970	37060	29510	14530	5680	18170

CAL YR 1981 TOTAL 151084 MEAN 414 MAX 2510 MIN 61 CFSM 12.9 IN 175.08 AC-FT 299700
WTR YR 1982 TOTAL 112968 MEAN 310 MAX 2160 MIN 51 CFSM 9.66 IN 130.91 AC-FT 224100

15081580 BLACK BEAR LAKE OUTLET NEAR KLAWOCK

LOCATION.--Lat 55°33'25", long 132°52'33", in SW¼NE¼ sec.12, T.73 S., R.82 E., Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on left bank at outlet of Black Bear Lake 8.6 mi (13.8 km) east of Klawock.

DRAINAGE AREA.--1.82 mi² (4.71 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,700 ft (520 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 413 ft³/s (11.7 m³/s) Nov. 5, 1981, gage height, 7.13 ft (2.173 m), from rating curve extended above 100 ft³/s (2.8 m³/s); minimum, 2.2 ft³/s (0.062 m³/s) Feb 12, 1981 and Apr. 7-9, 1982; minimum gage height, 4.07 ft (1.240 m) Apr. 7-9, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 413 ft³/s (11.7 m³/s) Nov. 5, gage height, 7.13 ft (2.173 m); from rating curve extended above 100 ft³/s (2.8 m³/s); minimum, 2.2 ft³/s (0.062 m³/s) Apr. 7-9, gage height, 4.07 ft (1.240 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	35	31	4.9	5.5	3.3	3.1	12	70	41	12	51
2	38	22	22	4.3	6.2	3.1	3.0	11	77	35	11	98
3	22	17	16	3.8	8.0	2.9	2.7	9.3	72	32	9.6	51
4	15	76	14	3.3	9.6	2.9	2.8	8.3	56	31	11	27
5	12	334	17	3.0	13	3.0	2.5	11	44	32	16	20
6	12	130	16	2.9	14	3.3	2.4	45	41	33	21	39
7	12	49	12	6.0	12	3.4	2.4	49	42	33	19	57
8	12	46	9.6	11	9.3	4.2	2.2	31	40	36	16	38
9	12	65	7.7	24	8.3	4.9	2.8	25	43	38	14	30
10	9.9	109	6.2	25	8.6	6.5	3.4	27	58	39	13	29
11	8.3	115	6.0	20	7.4	6.2	4.2	38	70	36	16	69
12	7.4	63	5.5	19	6.5	7.4	6.0	40	74	45	18	63
13	7.4	35	4.7	101	5.5	7.7	6.5	27	63	62	17	34
14	7.4	22	4.7	100	4.7	6.5	5.5	20	61	45	15	21
15	38	16	4.5	45	4.3	5.5	6.5	17	60	34	13	17
16	44	13	4.7	27	4.0	4.7	6.5	19	57	28	11	14
17	35	10	10	17	4.3	4.0	6.8	30	60	27	9.6	11
18	75	9.6	23	12	6.0	3.6	6.0	39	58	39	9.3	9.3
19	47	13	23	9.0	6.8	3.3	7.7	45	64	82	8.3	7.4
20	27	16	20	7.1	6.8	3.0	22	53	65	55	7.4	6.2
21	17	20	15	5.8	7.4	2.8	28	40	51	35	6.8	5.5
22	13	30	12	5.1	6.2	2.8	18	37	43	27	6.5	4.9
23	12	33	11	4.9	5.1	3.0	14	34	40	22	6.8	4.5
24	14	24	11	4.9	4.3	3.6	11	59	41	20	7.4	4.2
25	16	18	12	5.1	4.2	4.5	9.0	66	53	20	8.0	3.8
26	20	14	11	5.5	3.8	4.5	8.3	46	62	18	10	3.6
27	22	13	8.6	5.8	3.6	4.3	12	37	69	17	17	3.4
28	25	98	6.8	6.0	3.6	4.2	14	36	60	16	16	3.1
29	30	67	5.8	6.2	---	4.0	14	40	51	15	13	3.1
30	40	38	5.8	5.8	---	3.8	13	46	43	14	12	15
31	48	---	5.8	5.3	---	3.4	---	55	---	14	13	---
TOTAL	761.4	1550.6	362.4	505.7	189.0	130.3	246.3	1052.6	1688	1021	383.7	743.0
MEAN	24.6	51.7	11.7	16.3	6.75	4.20	8.21	34.0	56.3	32.9	12.4	24.8
MAX	75	334	31	101	14	7.7	28	66	77	82	21	98
MIN	7.4	9.6	4.5	2.9	3.6	2.8	2.2	8.3	40	14	6.5	3.1
CFSM	13.5	28.4	6.43	8.96	3.71	2.31	4.51	18.7	30.9	18.1	6.81	13.6
IN.	15.55	31.68	7.40	10.33	3.86	2.66	5.03	21.50	34.48	20.86	7.84	15.18
AC-FT	1510	3080	719	1000	375	258	489	2090	3350	2030	761	1470

CAL YR 1981 TOTAL 10012.5 MEAN 27.4 MAX 334 MIN 2.5 CFSM 15.1 IN 204.54 AC-FT 19860
WTR YR 1982 TOTAL 8634.0 MEAN 23.7 MAX 334 MIN 2.2 CFSM 13.0 IN 176.38 AC-FT 17130

15083500 PERKINS CREEK NEAR METLAKATLA

LOCATION.--Lat 54°56'48", long 132°10'15", in NW¼SW¼ sec.9, T.80 S., R.88 E., Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on right bank 1,000 ft (305 m) upstream from mouth at South Arm of Moria Sound, 27 mi (43 km) southwest of Metlakatla, and 35 mi (56 km) southwest of Ketchikan.

DRAINAGE AREA.--3.38 mi² (8.75 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 18 ft (5.5 m), from topographic map.

REMARKS.--Water-discharge records good except those above 150 ft³/s (4.2 m³/s), which are fair.

AVERAGE DISCHARGE.--6 years, 33.3 ft³/s (0.943 m³/s), 133.79 in/yr (3,398 mm/yr), 24,130 acre-ft/yr (29.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,010 ft³/s (28.6 m³/s) Jan. 18, 1981, gage height, 4.94 ft (1.506 m), from rating curve extended above 80 ft³/s (2.3 m³/s); minimum daily, 1.2 ft³/s (0.034 m³/s) Aug 27, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 818 ft³/s (23.2 m³/s) Jan. 8, gage height, 4.55 ft (1.387 m), from rating curve extended above 80 ft³/s (2.3 m³/s); minimum, 1.6 ft³/s (0.045 m³/s) Aug. 26, 27, gage height, 0.93 ft (0.283 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	23	60	7.2	49	6.2	16	42	13	2.3	2.0	37
2	19	16	32	6.5	41	5.8	14	89	11	2.3	2.0	49
3	14	18	36	5.8	25	5.4	11	38	10	2.6	2.0	9.1
4	11	122	105	5.5	16	5.1	11	29	8.4	2.3	2.3	5.6
5	52	135	48	5.2	21	7.1	11	151	7.0	2.3	44	13
6	66	25	29	5.0	19	17	11	128	7.7	15	32	82
7	20	16	16	29	13	36	14	36	7.4	5.8	8.4	19
8	59	98	15	273	10	29	21	25	6.7	93	5.3	16
9	32	59	14	100	8.5	26	30	25	6.4	37	4.3	12
10	15	198	10	73	7.5	43	23	37	6.4	13	3.8	39
11	11	165	9.1	36	6.6	14	19	54	6.1	9.4	3.4	27
12	9.4	53	11	78	6.2	42	105	23	5.6	44	5.0	11
13	8.0	152	9.1	259	5.8	29	32	17	5.3	55	4.3	7.0
14	7.4	35	13	57	5.5	20	20	16	6.4	12	3.4	5.6
15	94	24	34	20	5.2	14	36	16	5.0	8.0	3.0	4.8
16	20	19	60	15	5.1	12	67	19	4.8	5.8	2.8	4.3
17	51	25	99	12	7.9	11	22	32	4.5	7.0	2.5	4.1
18	62	144	115	9.8	93	11	15	29	4.3	21	2.5	3.8
19	15	130	74	8.0	25	11	108	88	4.3	12	2.3	3.4
20	11	67	28	7.0	11	12	83	48	3.8	8.0	2.0	3.2
21	8.7	130	15	6.5	9.8	14	40	64	3.4	5.8	2.0	3.0
22	7.7	116	78	6.2	8.6	29	25	43	2.6	4.5	2.1	3.0
23	7.4	61	95	6.0	8.0	27	22	93	2.6	4.1	2.3	2.8
24	7.4	37	92	6.5	7.0	60	20	62	2.5	3.2	2.1	2.8
25	28	54	29	7.5	6.8	33	19	41	2.5	3.0	1.7	2.6
26	24	17	23	8.6	6.6	20	32	20	2.6	2.8	1.6	2.5
27	142	19	20	12	6.6	20	186	17	4.3	2.6	1.8	2.5
28	46	142	14	26	6.8	35	40	16	3.0	2.5	2.5	2.3
29	28	28	11	108	---	20	47	15	2.6	2.3	1.8	2.5
30	195	155	9.5	22	---	16	172	13	2.5	2.1	3.4	49
31	29	---	8.2	26	---	14	---	14	---	2.1	4.5	---
TOTAL	1140.0	2283	1211.9	1237.3	441.5	644.6	1272	1340	162.7	392.8	163.1	428.9
MEAN	36.8	76.1	39.1	39.9	15.8	20.8	42.4	43.2	5.42	12.7	5.26	14.3
MAX	195	198	115	273	93	60	186	151	13	93	44	82
MIN	7.4	16	8.2	5.0	5.1	5.1	11	13	2.5	2.1	1.6	2.3
CFSM	10.9	22.5	11.6	11.8	4.68	6.15	12.5	12.8	1.60	3.76	1.56	4.23
IN.	12.54	25.12	13.33	13.61	4.86	7.09	14.00	14.74	1.79	4.32	1.79	4.72
AC-FT	2260	4530	2400	2450	876	1280	2520	2660	323	779	324	851

CAL YR 1981 TOTAL 13680.1 MEAN 37.5 MAX 258 MIN 2.1 CFSM 11.1 IN 150.52 AC-FT 27130
WTR YR 1982 TOTAL 10717.8 MEAN 29.4 MAX 273 MIN 1.6 CFSM 8.70 IN 117.92 AC-FT 21260

15083500 PERKINS CREEK NEAR METLAKATLA--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1976 to August 1979 and February 1980 to July 1981, November 1981 to January 1982, and September 1982.

INSTRUMENTATION.--Temperature recorder since Aug. 6, 1976.

REMARKS.--Records fair. No record Oct. 1 to Nov. 1 and Jan. 26 to Sept. 9 due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 18.0°C Aug. 14, 15, and 20, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 12.0°C Sept. 15-17; minimum recorded, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
SEP 10...	1130	9.2	32	6.0	10.0	9.2	4	0	1.3	.4	3.2	.3

DATE	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, 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, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
SEP 10...	4	7.0	4.1	.2	3.6	23	<.10	.160	.94	1.1	.050

SOUTHEAST ALASKA

15083500 PERKINS CREEK NEAR METLAKATLA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR NOVEMBER 1981 TO SEPTEMBER 1982

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

TEMPERATURE, WATER (DEG. C), SEPTEMBER 1982

DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN
10	10.5	10.0	17	12.0	11.0	24	10.5	8.0
11	11.0	10.5	18	11.5	10.5	25	11.5	10.5
12	11.5	10.0	19	11.5	10.5	26	11.0	10.0
13	11.0	10.0	20	11.5	11.0	27	11.0	10.0
14	11.5	10.0	21	11.5	10.5	28	10.0	8.5
15	12.0	11.0	22	11.0	9.5	29	9.5	8.5
16	12.0	10.5	23	11.0	9.0	30	11.0	9.5

15085100 OLD TOM CREEK NEAR KASAAN

LOCATION.--Lat 55°23'44", long 132°24'25", in NW¼SW¼ sec.6, T.75 S., R.86 E., Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on left bank 1,000 ft (305 m) upstream from mouth at Skowl Arm of Kasaan Bay, 0.4 mi (0.6 km) downstream from unnamed tributary, and 10 mi (16 km) south of Kasaan.

DRAINAGE AREA.--5.90 mi² (15.28 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1949 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (3 m), from topographic map.

REMARKS.--Water-discharge records good except those for January and February and those for period of no gage height record after Aug. 15, which are poor.

AVERAGE DISCHARGE.--33 years, 38.8 ft³/s (1.099 m³/s), 89.31 in/yr (2,268 mm/yr), 28,110 acre-ft/year (36.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1,110 ft³/s (31.4 m³/s) Nov. 21, 1979, gage height, 6.14 ft (1.871 m), from rating curve extended above 140 ft³/s (4.0 m³/s); minimum recorded, 0.16 ft³/s (0.005 m³/s) Nov. 15, 1965, gage height, 1.10 ft (0.335 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 5	1015	530	15.0	4.55	1.387	Nov. 30	1845	451	12.8	4.42	1.347
Nov. 10	2345	*997	28.2	*5.76	1.756	Dec. 4	2330	611	17.3	4.93	1.503

Minimum daily discharge, 3.4 ft³/s (0.096 m³/s) Aug. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	65	113	9.0	9.9	9.0	14	71	55	14	6.2	11
2	37	39	48	8.5	16	9.2	13	111	50	13	5.8	18
3	25	29	34	8.0	16	9.5	12	63	43	12	5.6	33
4	20	89	134	7.6	13	8.0	11	49	36	12	5.6	17
5	26	269	188	7.3	16	7.2	10	99	34	11	6.5	9.0
6	36	78	51	7.1	16	6.6	10	125	34	12	8.7	80
7	25	44	29	9.0	13	8.5	10	70	33	12	7.4	60
8	58	75	21	30	11	15	14	51	32	18	6.3	40
9	42	112	16	120	9.4	16	21	46	33	28	5.9	37
10	26	357	12	70	9.4	15	22	52	34	22	5.8	29
11	20	249	11	30	9.1	14	19	65	34	19	5.9	42
12	17	86	9.8	25	8.5	14	49	46	32	19	5.9	33
13	15	91	9.0	111	7.8	17	43	37	29	41	5.9	25
14	13	51	8.1	63	7.4	17	29	36	28	23	5.6	19
15	31	34	8.1	30	7.2	14	23	33	25	18	5.2	15
16	35	28	16	21	8.0	12	41	42	23	15	4.8	13
17	34	20	108	16	10	11	28	65	23	13	4.5	11
18	75	34	92	13	18	10	20	52	23	12	4.1	9.5
19	33	126	71	11	32	9.5	67	109	23	12	3.8	8.5
20	23	50	43	10	22	9.4	245	97	22	11	3.6	7.5
21	18	127	27	9.0	21	9.9	79	133	20	10	3.5	6.7
22	16	242	23	8.5	17	14	38	111	19	9.5	3.4	6.2
23	14	191	28	8.0	14	22	28	86	17	8.9	3.5	5.7
24	14	66	57	7.5	11	31	24	79	16	8.2	3.6	5.3
25	19	40	45	7.2	9.5	34	22	66	16	8.1	3.7	4.8
26	17	25	30	7.0	9.0	27	35	53	16	8.3	3.8	4.5
27	134	19	21	8.1	9.0	21	260	51	19	7.9	4.0	4.2
28	80	61	15	7.5	9.0	17	78	53	18	7.4	4.2	4.0
29	52	37	12	11	---	16	59	52	16	7.0	4.5	3.8
30	152	184	11	9.5	---	16	86	50	15	6.6	5.0	12
31	88	---	9.8	7.3	---	15	---	54	---	6.5	7.5	---
TOTAL	1261	2918	1300.8	697.1	359.2	454.8	1403	2107	818	425.4	159.8	574.7
MEAN	40.7	97.3	42.0	22.5	12.8	14.7	46.8	68.0	27.3	13.7	5.15	19.2
MAX	152	357	188	120	32	34	260	133	55	41	8.7	80
MIN	13	19	8.1	7.0	7.2	6.6	10	33	15	6.5	3.4	3.8
CFSM	6.90	16.5	7.12	3.81	2.17	2.49	7.93	11.5	4.63	2.32	.87	3.25
IN.	7.95	18.40	8.20	4.39	2.26	2.87	8.84	13.28	5.16	2.68	1.01	3.62
AC-FT	2500	5790	2580	1380	712	902	2780	4180	1620	844	317	1140

CAL YR 1981 TOTAL 16436.9 MEAN 45.0 MAX 457 MIN 4.1 CFSM 7.63 IN 103.62 AC-FT 32600
WTR YR 1982 TOTAL 12478.8 MEAN 34.2 MAX 357 MIN 3.4 CFSM 5.80 IN 78.67 AC-FT 24750

15085100 OLD TOM CREEK NEAR KASAAN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1959, and 1965 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1964, April 1965 to February 1975, June 1975 to April 1978, and November 1978 to current year.

INSTRUMENTATION.--Temperature recorder since October 1964.

REMARKS.--Records fair except those days with intermittent recorder problems which were deleted.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 17.5°C Aug. 12, 14-18, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 17.0°C July 28-30; minimum recorded, 0.0°C on many days during winter periods.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

15085100 OLD TOM CREEK NEAR KASAAN--Continued

TEMPERATURE, WATER (DEG C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.5	1.5	4.0	2.0	7.5	4.5	15.5	12.5	15.0	13.5	12.5	11.5
2	2.0	1.5	3.5	2.0	7.0	4.5	13.5	12.0	13.5	12.5	12.5	12.0
3	2.5	1.0	4.0	---	5.5	4.5	13.5	12.5	13.5	12.0	13.0	11.5
4	2.5	1.0	4.0	---	5.5	4.5	14.0	12.5	13.5	12.0	12.5	11.5
5	3.0	1.0	3.5	2.5	7.0	4.5	12.5	11.5	12.5	12.0	13.0	11.5
6	2.5	1.0	3.0	2.5	8.0	4.5	14.0	11.5	12.5	11.5	12.0	11.0
7	3.0	1.0	4.5	3.0	7.5	5.0	12.5	11.5	14.5	11.0	11.0	10.5
8	3.5	1.5	4.5	3.0	8.0	5.5	11.5	11.0	13.0	12.0	10.5	10.0
9	3.0	2.0	5.5	3.0	8.5	5.5	11.5	10.5	12.5	11.5	11.0	10.0
10	3.0	2.0	4.0	3.0	9.0	5.5	12.0	10.5	12.0	11.5	10.5	10.0
11	3.0	1.5	4.5	3.0	8.0	6.0	11.0	10.5	12.0	11.0	11.0	10.0
12	2.5	.5	5.0	---	8.5	6.0	11.0	10.0	13.0	11.0	11.5	10.5
13	2.0	1.0	4.5	3.0	8.0	6.0	10.5	10.0	13.5	10.0	12.0	10.5
14	3.0	1.5	4.5	3.0	8.5	6.5	10.5	9.5	14.0	10.5	11.0	10.0
15	2.5	1.0	6.0	3.0	7.5	6.0	11.5	10.0	13.0	12.0	12.5	11.0
16	2.5	1.5	5.0	3.5	8.0	6.5	11.0	10.0	13.0	12.0	12.5	11.0
17	3.0	1.5	5.0	3.5	9.5	6.5	11.0	10.5	13.0	12.0	13.0	11.5
18	3.0	1.5	5.0	3.5	10.5	7.0	11.5	10.5	12.5	11.5	12.0	11.0
19	3.0	1.0	4.0	3.0	10.0	8.0	11.0	10.0	13.0	10.5	12.0	10.5
20	1.5	---	5.0	3.5	10.0	9.0	12.5	9.5	13.5	10.5	12.0	11.0
21	2.5	---	4.0	3.5	11.5	8.5	14.0	10.5	13.5	11.0	12.0	11.0
22	3.0	1.5	6.0	4.0	12.0	8.5	13.0	11.5	13.0	12.0	11.0	9.5
23	3.0	1.5	5.0	4.0	13.0	9.0	13.0	11.5	13.5	12.0	11.0	10.0
24	3.5	2.0	5.0	4.0	14.0	10.0	15.5	11.5	14.0	12.5	11.0	9.5
25	3.5	2.5	5.0	4.0	15.5	11.5	16.0	12.0	14.5	12.5	11.5	10.5
26	3.0	2.5	7.0	4.0	14.0	13.0	16.0	12.5	14.5	13.0	11.0	10.0
27	2.5	1.5	7.0	4.0	14.0	12.5	16.5	12.5	13.5	12.5	10.5	9.5
28	3.5	---	7.0	4.5	15.0	12.5	17.0	13.5	13.0	11.5	9.5	8.5
29	3.5	---	7.0	4.0	15.5	12.0	17.0	14.0	13.5	11.0	10.0	9.0
30	3.0	2.0	7.5	4.5	13.0	12.5	17.0	14.0	12.5	11.5	10.0	9.5
31	---	---	7.5	4.5	---	---	15.5	14.5	12.5	11.5	---	---
MONTH	3.5	.5	7.5	2.0	15.5	4.5	17.0	9.5	15.0	10.0	13.0	8.5
YEAR	17.0	.0										

15087545 MUNICIPAL WATERSHED CREEK NEAR PETERSBURG

LOCATION.--Lat 56°46'42", long 132°55'00", in NE¼NW¼NE¼ sec.11, T.59 S., R.79 E., Hydrologic Unit 19060000, on Mitkof Island, in Tongass National Forest, on left bank 0.5 mi (0.8 km) upstream from the Petersburg reservoir, 2.2 mi (3.5 km) upstream from mouth, and 2.3 mi (3.7 km) southeast of Petersburg.

DRAINAGE AREA.--2.20 mi² (5.70 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 400 ft (120 m), from topographic map.

REMARKS.--Records fair except those for December through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 875 ft³/s (24.8 m³/s) Nov. 5, 1981, gage height, 4.49 ft (1.369 m); from rating curve extended above 120 ft³/s (3.4 m³/s) on basis of slope-area measurement at gage height 3.72 ft (1.134 m), from floodmarks; minimum daily, 0.60 ft³/s (0.017 m³/s) Aug. 24-28, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 875 ft³/s (24.8 m³/s) Nov. 5, gage height, 4.49 ft (1.369 m), from rating curve extended as explained above; minimum daily, 2.3 ft³/s (0.065 m³/s) Jan. 5-7 and July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	71	28	2.8	5.0	2.5	3.4	12	78	8.2	2.7	70
2	10	13	9.2	2.6	5.0	2.5	3.3	9.9	60	6.3	2.5	55
3	5.9	6.9	6.6	2.5	5.0	2.5	3.2	11	45	5.5	2.4	9.5
4	4.7	350	6.0	2.4	4.9	2.5	3.1	13	38	5.2	2.7	8.7
5	4.1	296	10	2.3	4.9	2.4	3.1	86	36	4.6	3.4	19
6	4.0	16	7.9	2.3	4.8	2.4	3.0	122	36	4.3	5.3	56
7	6.2	8.2	6.0	2.3	4.6	9.0	3.3	40	40	4.8	4.0	48
8	8.6	76	5.2	2.4	4.5	100	4.3	27	41	5.5	3.2	16
9	6.3	114	4.0	2.6	4.3	45	6.3	25	50	8.5	4.9	7.2
10	4.6	66	3.3	2.7	4.0	13	6.1	73	49	12	4.8	8.4
11	4.1	71	3.1	2.7	3.8	4.3	5.2	109	49	6.7	7.7	12
12	3.8	29	2.9	9.0	3.5	3.9	4.6	30	42	57	9.3	7.2
13	3.8	11	2.8	30	3.3	4.0	5.1	17	32	61	5.2	6.0
14	30	9.5	2.8	120	3.2	4.0	4.5	16	42	33	4.0	14
15	133	7.2	2.7	30	3.2	3.6	4.8	20	30	9.2	3.6	14
16	33	6.6	4.6	12	3.1	3.4	17	28	28	7.7	3.2	6.8
17	134	5.5	17	10	3.0	3.3	5.4	68	33	14	3.4	6.0
18	72	5.1	26	8.2	3.0	3.2	4.5	70	35	56	4.2	5.2
19	13	35	7.9	7.1	2.9	3.2	58	67	34	40	3.4	4.5
20	6.0	18	9.9	6.4	2.9	3.1	264	96	23	8.9	3.0	4.2
21	4.8	15	6.5	5.7	2.8	3.0	37	47	14	6.3	2.7	3.9
22	4.6	8.4	5.5	5.1	2.7	12	8.2	81	14	5.1	3.5	3.8
23	29	7.2	5.5	4.7	2.7	30	7.0	80	15	4.6	3.8	3.7
24	20	6.3	8.9	4.4	2.6	15	6.1	110	17	4.2	3.8	3.5
25	60	8.2	7.2	4.2	2.6	12	6.5	96	18	3.7	4.2	3.4
26	13	5.6	5.8	4.1	2.5	4.6	12	70	14	3.4	24	3.3
27	12	19	5.0	4.1	2.5	4.2	53	52	12	3.1	26	5.1
28	13	138	4.4	4.1	2.5	3.8	30	54	9.2	2.7	16	4.3
29	21	18	4.0	4.2	---	3.7	16	58	7.2	2.5	6.6	3.8
30	60	21	3.3	4.5	---	3.6	18	69	6.8	2.3	24	101
31	39	---	3.0	4.8	---	3.5	---	75	---	2.5	53	---
TOTAL	792.5	1461.7	225.0	310.2	99.8	313.2	606.0	1731.9	948.2	398.8	250.5	513.5
MEAN	25.6	48.7	7.26	10.0	3.56	10.1	20.2	55.9	31.6	12.9	8.08	17.1
MAX	134	350	28	120	5.0	100	264	122	78	61	53	101
MIN	3.8	5.1	2.7	2.3	2.5	2.4	3.0	9.9	6.8	2.3	2.4	3.3
CFSM	11.6	22.1	3.30	4.55	1.62	4.59	9.18	25.4	14.4	5.86	3.67	7.77
IN.	13.39	24.70	3.80	5.24	1.69	5.29	10.24	29.27	16.03	6.74	4.23	8.68
AC-FT	1570	2900	446	615	198	621	1200	3440	1880	791	497	1020

CAL YR 1981 TOTAL 9354.9 MEAN 25.6 MAX 350 MIN 2.1 CFSM 11.6 IN 158.11 AC-FT 18560
WTR YR 1982 TOTAL 7651.3 MEAN 21.0 MAX 350 MIN 2.3 CFSM 9.55 IN 129.32 AC-FT 15180

NOTE.--No gage-height record Dec. 31 to Feb. 9.

SOUTHEAST ALASKA

15087545 MUNICIPAL WATERSHED CREEK NEAR PETERSBURG--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT									
12...	1500	3.7	<25	15	6.7	6.0	11.3	12	9
DEC									
10...	1530	3.2	5	10	6.3	.0	11.5	5	0
MAR									
28...	1200	3.8	30	27	6.2	.5	13.2	6	1
JUN									
05...	1330	21	17	11	5.5	5.0	13.1	2	1
AUG									
06...	1500	7.3	<25	18	--	11.0	11.0	5	--

DATE	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)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT									
12...	4.2	.5	1.1	.3	3	<5.0	1.1	<.1	4.2
DEC									
10...	1.7	.3	.8	.5	5	7.0	.8	.0	4.1
MAR									
28...	1.9	.3	.9	.3	5	6.0	1.1	.1	4.7
JUN									
05...	.6	.1	.5	.3	1	<5.0	.7	<.1	1.6
AUG									
06...	1.5	.4	.8	.4	--	9.0	.7	<.1	3.9

DATE	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, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT									
12...	18	<.09	<.060	--	<.21	--	<.010	2	.02
DEC									
10...	18	<.10	<.070	--	.61	--	.020	0	.00
MAR									
28...	19	.18	<.060	--	.33	.51	<.010	3	.03
JUN									
05...	--	<.10	.060	1.6	1.7	--	.070	--	--
AUG									
06...	--	.18	.130	1.0	1.2	1.4	.050	0	.00

15087570 HAMILTON CREEK NEAR KAKE

LOCATION.--Lat 56°52'21", long 133°40'30", in SE¼NE¼ sec.1, T.58 S., R.74 E., Hydrologic Unit 19060000, on Kupreanof Island, in Tongass National Forest, 2.9 mi (4.7 km) upstream from mouth at Hamilton Bay and 9.5 mi (15 km) southeast of Kake.
DRAINAGE AREA.--65.0 mi² (168.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximums, water years 1972-73 and 1975-76. October 1976 to current year.
REVISED RECORDS.--WDR AK-79-1: 1976 (M). WDR AK-80-1: 1977 (M) and 1978 (M).
GAGE.--Water-stage recorder. Altitude of gage is 25 ft (8 m), from topographic map. Prior to October 1976, crest-stage gage at same datum and different site.
REMARKS.--Records good except those for December through March and for September, which are poor.
AVERAGE DISCHARGE.--6 years, 326 ft³/s (9.232 m³/s), 68.11 in/yr (1,730 mm/yr), 236,200 acre-ft/yr (292 hm³/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft³/s (442 m³/s) Jan. 30, 1976, gage height, 14.97 ft (4.563 m), from floodmarks, from rating curve extended above 780 ft³/s (22 m³/s) on basis of slope-area measurement at gage height 13.36 ft (4.072 m); minimum, 9.5 ft³/s (0.27 m³/s) July 7, 1982, gage height, 6.55 ft (1.996 m).
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,870 ft³/s (251 m³/s) Nov. 5, gage height, 13.10 ft (3.993 m), from rating curve extended as explained above; minimum, 9.5 ft³/s (0.27 m³/s) July 7, gage height, 6.55 ft (1.996 m).

Peak discharges above base of 4,400 ft³/s (125 m³/s) for period of daily record were computed and are shown below. Annual maximums (*) are also shown.

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 26, 1976	1330	*12,000	340	*14.06	4.286
Nov. 3, 1976	0830	9,830	278	13.43	4.094
Dec. 12, 1976	1515	6,480	184	12.28	3.743
Oct. 11, 1977	2400	*6,410	182	*12.25	3.734
Oct. 18, 1978	1715	8,420	238	13.08	3.987
Oct. 25, 1978	1230	4,480	127	11.51	3.508
Oct. 31, 1978	0100	*14,100	399	*14.60	4.450
Nov. 27, 1978	0645	5,390	153	11.83	3.606
Dec. 13, 1978	0830	4,670	132	11.50	3.505
Sept. 13, 1979	0745	7,030	199	12.49	3.807
Oct. 3, 1979	1630	*9,600	272	*13.36	4.072
Oct. 9, 1979	1700	8,840	250	13.12	3.999
Dec. 28, 1979	1400	6,480	184	12.28	3.743
Oct. 1, 1980	1830	*10,800	309	*13.74	4.188
Oct. 7, 1980	0730	6,660	189	12.35	3.764
Oct. 28, 1980	0630	6,690	189	12.36	3.767
Sept. 7, 1981	0415	5,140	146	11.72	3.572
Oct. 18, 1981	0100	6,230	176	12.16	3.706
Nov. 5, 1981	0015	*8,870	251	*13.10	3.993
Jan. 8, 1982	Unknown	Unknown		Unknown	
Apr. 20, 1982	0900	4,460	126	11.48	3.499
Apr. 26, 1982	Unknown	Unknown		Unknown	

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	1640	802	90	600	76	110	563	95	12	16	900
2	302	498	431	85	350	70	105	359	90	12	16	700
3	181	241	194	78	250	65	100	278	70	12	15	300
4	124	3080	142	73	150	80	99	216	50	11	17	150
5	97	5220	810	76	160	100	98	500	49	11	19	300
6	134	568	431	120	140	300	98	1140	40	11	24	1100
7	184	209	175	1000	120	450	203	416	37	10	28	700
8	237	340	115	3600	110	320	274	267	35	11	29	400
9	278	859	101	1000	100	350	472	178	33	12	28	300
10	158	1740	169	700	90	540	545	150	34	14	34	350
11	110	2460	230	460	85	250	372	810	30	16	89	400
12	89	1010	140	1600	77	500	248	248	28	37	76	200
13	81	310	84	3200	70	330	528	131	26	528	65	140
14	83	199	220	800	66	250	315	175	23	494	43	130
15	1280	151	550	300	62	200	270	124	24	286	32	120
16	467	131	900	180	66	150	1260	89	26	117	26	100
17	966	110	1400	150	100	140	451	101	27	106	23	80
18	2540	93	700	120	150	135	178	194	25	244	21	70
19	298	1140	450	95	300	140	569	210	23	581	22	60
20	158	766	300	86	160	150	3420	534	22	332	19	50
21	117	286	170	77	130	200	1150	500	22	122	17	40
22	97	213	110	73	110	300	500	637	19	70	16	35
23	187	187	1150	78	100	450	230	416	17	50	23	31
24	274	144	550	87	90	620	200	1070	16	40	25	34
25	472	197	350	98	84	320	400	657	15	33	28	38
26	251	144	250	115	83	240	3100	480	14	27	70	32
27	157	119	200	140	82	270	2510	330	14	23	130	30
28	170	2240	160	700	82	200	696	240	14	21	65	28
29	512	431	130	1400	---	160	401	170	13	20	35	25
30	1560	441	110	500	---	130	451	135	12	18	70	500
31	1650	---	100	400	---	120	---	110	---	17	150	---
TOTAL	14274	25167	11624	17481	3967	7606	19053	11428	943	3298	1273	7343
MEAN	460	839	375	564	142	245	635	369	31.4	106	41.1	245
MAX	2540	5220	1400	3600	600	620	3420	1140	95	581	150	1100
MIN	81	93	84	73	62	65	98	89	12	10	15	25
CFSM	7.08	12.9	5.77	8.68	2.19	3.77	9.77	5.68	.48	1.63	.63	3.77
IN.	8.17	14.40	6.65	10.00	2.27	4.35	10.90	6.54	.54	1.89	.73	4.20
AC-FT	28310	49920	23060	34670	7870	15090	37790	22670	1870	6540	2520	14560

CAL YR 1981 TOTAL 134573 MEAN 369 MAX 5220 MIN 24 CFSM 5.68 IN 77.02 AC-FT 266900
WTR YR 1982 TOTAL 123457 MEAN 338 MAX 5220 MIN 10 CFSM 5.20 IN 70.65 AC-FT 244900

15087570 HAMILTON CREEK NEAR KAKE--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 7-13 1981 and December 3, 1981 to September 30, 1982.

INSTRUMENTATION.--Temperature recorder since October 7, 1981.

REMARKS.--Records fair and represent water temperature at the sensor within 0.5°C. No record Oct. 14 to Dec. 3 due to equipment malfunction.

EXTREMES FOR CURRENT YEAR.--Maximum recorded, 22.5°C June 25 and 28, 1982, minimum recorded, 0.0°C during many winter days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
07...	1200	180	6.0	1	.49
DEC					
03...	1100	200	1.5	0	.00
MAR					
30...	1400	122	0.0	6	2.0
JUN					
04...	1400	48	---	0	.00
AUG					
06...	1100	23	---	0	.00

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

SOUTHEAST ALASKA

15087570 HAMILTON CREEK NEAR KAKE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	.0	.0	3.5	1.5	16.5	10.0	19.0	14.5	19.0	15.5	12.5	10.0
2	.0	.0	4.5	2.5	17.5	10.5	19.0	13.0	18.5	14.5	13.0	10.0
3	.0	.0	6.0	2.5	15.5	10.0	17.5	14.0	17.0	14.0	13.0	11.0
4	.0	.0	4.5	2.5	13.5	10.0	17.5	14.0	16.5	13.0	12.0	10.0
5	.0	.0	4.5	3.0	15.0	10.0	20.0	14.0	16.5	13.0	13.0	11.0
6	.0	.0	4.0	3.0	16.5	10.0	20.5	14.0	15.0	13.5	12.5	11.5
7	.0	.0	5.5	3.0	16.5	11.0	17.0	14.0	19.0	13.0	11.5	10.5
8	.0	.0	6.5	4.0	17.5	11.0	15.0	13.5	17.0	15.0	11.5	10.0
9	.0	.0	7.0	3.0	18.0	13.0	16.0	13.5	15.5	13.0	12.0	9.5
10	.0	.0	5.0	4.0	19.5	12.0	16.0	13.5	16.0	13.0	10.5	10.0
11	.0	.0	5.5	3.5	17.0	14.0	15.5	12.0	15.0	12.0	11.0	9.0
12	.0	.0	6.5	4.5	18.0	13.0	14.0	13.0	15.5	12.5	12.0	10.0
13	.0	.0	7.0	4.5	16.0	13.0	13.0	12.0	17.0	11.0	12.0	10.0
14	.0	.0	7.0	4.0	16.0	12.5	12.5	11.0	17.0	12.0	11.5	10.0
15	.5	.0	8.0	4.5	13.5	12.0	14.5	11.0	15.5	13.5	13.0	11.0
16	.5	.0	8.0	5.0	15.0	11.0	13.0	12.0	15.5	12.5	14.0	11.5
17	1.5	.0	9.0	5.0	17.5	12.5	14.0	12.0	16.0	13.0	13.0	11.0
18	2.0	.0	7.5	6.0	20.0	12.5	13.0	11.5	16.0	13.5	11.5	10.0
19	1.0	.0	6.5	5.0	17.5	15.0	12.5	11.0	16.0	11.5	11.5	9.0
20	.5	.0	6.5	5.0	15.5	13.0	15.0	10.5	16.0	11.0	12.0	10.0
21	2.0	.0	6.0	5.5	16.5	12.0	18.5	12.0	16.0	13.0	12.5	9.5
22	3.5	.5	5.5	5.0	18.0	10.0	18.0	13.0	15.5	13.0	10.5	8.5
23	3.5	1.0	6.0	5.0	20.0	12.0	16.0	13.5	15.5	13.0	11.5	10.0
24	3.5	1.5	5.5	5.0	21.0	13.0	19.5	13.5	16.0	14.0	11.0	9.5
25	4.5	2.0	6.5	5.0	22.5	14.5	20.0	14.0	16.5	14.0	12.0	10.0
26	3.0	1.5	8.5	5.5	22.0	16.0	20.5	14.0	15.5	14.0	11.5	10.5
27	1.5	1.0	11.5	6.0	20.0	16.5	21.5	14.0	13.5	12.0	11.0	9.0
28	3.0	1.0	12.5	7.0	22.5	16.0	22.0	15.5	13.0	11.0	9.0	7.0
29	3.0	1.5	13.0	7.0	21.5	14.0	21.0	16.0	14.0	11.5	9.5	8.0
30	3.0	2.0	15.0	7.5	18.0	15.0	21.5	15.5	13.0	11.0	10.0	9.5
31	---	---	16.0	9.0	---	---	20.0	17.0	12.0	11.5	---	---
MONTH	4.5	.0	16.0	1.5	22.5	10.0	22.0	10.5	19.0	11.0	14.0	7.0
YEAR	22.5	.0										

15087590 ROCKY PASS CREEK NEAR POINT BAKER

LOCATION.--Lat 56°37'10", long 133°44'10", in SW¼SE¼ sec.34, T.60 S., R.74 E., Hydrologic Unit 19060000, on Kuiu Island, in Tongass National Forest, on left bank 0.5 mi (0.8 km) upstream from mouth and 22 mi (35 km) northwest of Point Baker.

DRAINAGE AREA.--3.27 mi² (8.47 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

REVISED RECORDS.--WDR AK-79-1: 1977-78 (M).

GAGE.--Water-stage recorder. Altitude of gage is 65 ft (19.8 m), from topographic map.

REMARKS.--Water-discharge records good except those for January, which are poor.

AVERAGE DISCHARGE.--6 years, 10.8 ft³/s (0.306 m³/s), 44.85 in/yr (1,139 mm/yr), 7,820 acre-ft/yr (9.64 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft³/s (33.7 m³/s) Oct. 9, 1979, gage height, 6.15 ft (1.874 m), from rating curve extended above 50 ft³/s (1.4 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.02 ft³/s (0.001 m³/s) Nov. 27, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 277 ft³/s (7.84 m³/s) Oct. 17, gage height, 3.65 ft (1.113 m), from rating curve extended as explained above; minimum daily discharge, 0.05 ft³/s (0.001 m³/s) July 7.

Peak discharges above base of 230 ft³/s (6.5 m³/s) for the period of daily record were computed and are shown below. Annual maximums (*) are also shown.

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 12, 1976	0900	*315	8.92	*3.85	1.173
Dec. 27, 1976	2400	227	6.43	3.44	1.049
Oct. 11, 1977a	0200	*722	20.4	*5.15	1.570
Oct. 16, 1977	2200	628	17.8	4.90	1.494
Oct. 13, 1978	0730	362	10.2	4.03	1.228
Oct. 17, 1978	1500	402	11.4	4.19	1.277
Oct. 22, 1978	1900	294	8.33	3.76	1.146
Oct. 30, 1978	2200	512	14.5	4.56	1.390
Sept. 13, 1979	Unknown	*bUnknown		*bUnknown	
Oct. 3, 1979	1100	445	12.6	4.34	1.323
Oct. 5, 1979	0200	357	10.1	4.02	1.225
Oct. 9, 1979	0800	*1,190	33.7	*6.15	1.875
Nov. 26, 1980	1715	272	7.70	3.63	1.106
Sept. 6, 1981	2315	*424	12.0	*4.26	1.298
Sept. 9, 1981	0030	268	7.59	3.63	1.106
Oct. 17, 1981	2100	*277	7.84	*3.65	1.113
Nov. 4, 1981	2300	246	6.97	3.49	1.064

a Corrected
b Revised

CORRECTIONS.--The date of the maximum discharge for water year 1978 has been corrected to Oct. 11, 1977.

REVISIONS.--Revised figures of discharge for the water year 1979, superseding those published in the report for 1979 are given on the following page.

EXTREMES FOR 1979 WATER YEAR.--Maximum daily discharge, 300 ft³/s (8.50 m³/s), Sept. 13; the previously published peak for that date of 792 ft³/s (22.4 m³/s), gage height, 5.32 ft (1.622 m), was not the maximum as the recorded gage height was less than actually occurred. Minimum daily discharge, 0.60 ft³/s (0.017 m³/s) Aug. 16.

The daily discharge for Oct. 9, 1979 also has been revised to 422 ft³/s (12.0 m³/s) and supersedes the figure published in the report for 1980.

Monthly	Cfs-day	Mean	Maximum	Minimum	Per square mile	Runoff in Inches	Runoff in Acre-feet
October 1979	1,058.2	34.1	422	2.2	10.4	12.03	2,100
CAL YR 1979	4,214.55	11.5	422	0.02	3.52	47.93	8,360
WTR YR 1980	3,805.18	10.4	422	0.02	3.18	43.28	7,550

15087590 ROCKY PASS CREEK NEAR POINT BAKER--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	69	5.0	2.4	3.0	2.1	2.0	2.7	29	5.8	114	1.9
2	83	36	53	2.3	3.4	2.2	2.0	2.3	26	5.8	68	2.5
3	23	49	38	2.2	4.5	5.0	2.0	10	11	5.6	9.4	5.0
4	8.2	49	22	2.0	6.4	10	2.5	11	16	4.7	4.0	7.2
5	24	57	15	1.9	10	20	5.0	11	12	4.5	2.7	3.3
6	69	24	12	1.9	6.2	25	3.5	5.0	10	4.2	2.0	2.7
7	14	19	25	1.8	5.2	18	2.8	3.3	8.0	4.2	1.6	2.4
8	62	13	50	1.7	4.5	14	2.4	2.5	9.8	4.0	1.4	2.0
9	35	6.4	30	1.7	4.0	10	2.2	2.2	12	4.7	1.2	1.7
10	42	4.5	14	1.6	3.5	13	2.1	6.2	18	7.2	1.1	1.7
11	16	5.6	10	1.6	3.2	17	2.0	10	11	7.7	1.1	23
12	12	5.4	16	1.6	2.9	18	1.9	7.2	6.2	6.8	1.0	59
13	134	4.3	35	1.6	2.7	9.0	2.2	6.2	5.4	5.8	.94	300
14	14	3.9	13	1.6	2.5	18	2.0	8.2	9.5	5.8	.90	40
15	24	14	9.2	2.0	2.3	8.5	2.2	4.0	18	5.6	.80	6.2
16	7.7	9.4	10	3.0	2.2	6.5	2.4	3.2	12	5.4	.60	3.7
17	126	8.2	11	4.2	2.1	4.5	2.1	14	5.0	16	.90	3.2
18	166	12	8.8	6.4	2.0	5.0	2.0	14	4.0	7.7	.76	6.0
19	20	17	7.5	9.5	2.0	7.0	2.1	7.2	3.9	36	.90	5.2
20	19	17	11	7.1	1.9	13	2.3	4.7	3.7	123	1.0	4.5
21	26	17	8.0	5.6	1.9	9.0	2.7	3.3	3.4	114	1.2	3.8
22	150	14	6.8	4.0	1.8	7.2	3.1	14	3.4	60	1.3	3.4
23	47	20	6.0	7.5	1.8	6.6	3.5	18	3.6	17	1.4	4.9
24	34	30	5.2	12	1.8	6.0	4.1	15	3.4	7.0	1.1	6.0
25	67	50	4.5	5.0	1.8	4.8	3.1	26	3.3	5.0	1.0	8.0
26	20	82	4.0	5.8	1.8	3.7	3.2	13	3.0	3.8	.90	11
27	41	140	3.7	4.4	1.9	2.9	4.2	6.0	2.8	2.8	1.0	17
28	11	30	3.4	4.0	2.0	2.5	5.8	4.0	2.7	3.2	1.1	26
29	7.6	12	3.1	3.5	---	2.3	4.0	3.2	3.3	3.5	1.2	9.7
30	217	8.0	2.8	3.2	---	2.2	3.1	2.7	3.9	2.4	1.4	102
31	79	---	2.6	3.1	---	2.1	---	3.4	---	8.5	1.6	---
TOTAL	1610.5	826.7	445.6	116.2	89.3	275.1	84.5	243.5	263.3	497.7	227.50	673.0
MEAN	52.0	27.6	14.4	3.75	3.19	8.87	2.82	7.85	8.78	16.1	7.34	22.4
MAX	217	140	53	12	10	25	5.8	26	29	123	114	300
MIN	7.6	3.9	2.6	1.6	1.8	2.1	1.9	2.2	2.7	2.4	.60	1.7
CFSM	15.9	8.44	4.40	1.15	.98	2.71	.86	2.40	2.69	4.92	2.25	6.85
IN.	18.32	9.40	5.07	1.32	1.02	3.13	.96	2.77	2.99	5.66	2.59	7.65
AC-FT	3190	1640	884	230	177	546	168	483	522	987	451	1330

CAL YR 1978 TOTAL 4615.37 MEAN 12.6 MAX 217 MIN .15 CFSM 3.85 IN 52.49 AC-FT 9150
WTR YR 1979 TOTAL 5332.90 MEAN 14.7 MAX 300 MIN .60 CFSM 4.50 IN 60.88 AC-FT 10620

15087590 ROCKY PASS CREEK NEAR POINT BAKER--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	28	20	1.7	1.2	.71	4.0	21	.71	.10	.11	28
2	12	10	12	1.5	1.2	.71	3.7	16	.56	.10	.10	21
3	5.2	6.8	7.9	1.4	1.3	.71	3.4	14	.50	.06	.11	7.9
4	3.0	99	9.1	1.4	1.2	.63	3.2	13	.45	.06	.11	4.2
5	2.0	93	26	1.3	1.2	.63	3.2	38	.45	.06	.11	6.2
6	7.1	10	8.4	1.3	1.2	1.5	3.2	51	.34	.06	.34	3[illegible]
7	5.4	5.2	4.5	1.3	1.1	5.0	6.8	16	.30	.05	.45	2[illegible]
8	45	23	2.8	1.4	1.1	45	17	11	.25	.06	.34	[illegible].4
9	3.2	34	2.5	1.4	1.0	22	19	7.9	.25	.08	.45	[illegible].4
10	2.2	51	2.0	1.5	.96	11	16	11	.22	.16	.45	[illegible].2
11	1.9	54	1.7	1.5	.89	4.5	11	24	.18	.22	.50	1[illegible]
12	1.6	18	1.5	1.4	.85	3.0	13	8.8	.18	4.0	.50	[illegible].5
13	1.8	9.8	1.4	4.0	.83	2.4	16	5.4	.16	22	.34	[illegible].4
14	5.2	7.9	1.5	60	.80	2.2	12	3.8	.16	10	.30	[illegible].2
15	66	7.1	11	9.0	.78	2.0	18	2.8	.16	5.7	.22	[illegible].2
16	14	6.8	27	3.2	.77	1.9	48	2.2	.16	3.2	.18	2.5
17	83	4.2	26	2.5	.79	1.9	14	2.5	.16	3.8	.16	2.0
18	43	3.2	18	2.2	.80	1.8	11	11	.13	9.4	.16	1.6
19	13	22	11	1.9	.78	1.8	33	7.6	.11	9.4	.13	1.2
20	5.7	12	9.4	1.7	.76	2.3	105	12	.13	4.2	.10	1.1
21	3.6	7.1	4.7	1.5	.74	4.4	26	8.5	.11	2.3	.10	.79
22	3.0	4.7	3.2	1.3	.73	27	15	21	.10	1.4	.16	.71
23	8.5	4.5	3.8	1.2	.72	18	11	23	.08	1.1	.18	.97
24	10	4.0	21	1.1	.72	14	11	24	.06	.79	.16	1.2
25	18	7.9	13	1.1	.72	11	12	22	.06	.56	.13	.97
26	8.5	3.8	10	1.0	.71	8.6	18	9.8	.06	.40	.97	.79
27	7.4	17	7.9	1.0	.71	7.4	32	4.2	.06	.30	2.8	.71
28	15	39	5.2	1.0	.71	6.5	23	2.7	.06	.22	1.6	.63
29	25	11	4.0	1.1	---	5.8	21	1.8	.06	.16	.88	.71
30	26	15	2.8	1.2	---	5.2	25	1.2	.06	.13	2.0	37
31	19	---	1.9	1.2	---	4.5	---	.97	---	.13	12	---
TOTAL	488.3	619.0	281.2	114.3	25.27	224.09	554.5	398.17	6.27	80.20	26.14	[illegible]25.48
MEAN	15.8	20.6	9.07	3.69	.90	7.23	18.5	12.8	.21	2.59	.84	7.52
MAX	83	99	27	60	1.3	45	105	51	.71	22	12	37
MIN	1.6	3.2	1.4	1.0	.71	.63	3.2	.97	.06	.05	.10	.63
CFSM	4.83	6.30	2.77	1.13	.28	2.21	5.66	3.91	.06	.79	.26	2.30
IN.	5.55	7.04	3.20	1.30	.29	2.55	6.31	4.53	.07	.91	.30	2.56
AC-FT	969	1230	558	227	50	444	1100	790	12	159	52	447

CAL YR 1981 TOTAL 4343.74 MEAN 11.9 MAX 209 MIN .84 CFSM 3.64 IN 49.40 AC-FT 8620
WTR YR 1982 TOTAL 3042.92 MEAN 8.34 MAX 105 MIN .05 CFSM 2.55 IN 34.61 AC-FT 6040

NOTE.--No gage-height record Jan. 2 to Feb. 8.

15087590 ROCKY PASS CREEK NEAR POINT BAKER--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: February to September 1978, November to December 1978, March to May 1979, October to December 1981, March to September 1982 (Intermittent).

INSTRUMENTATION.--Temperature recorder since February 1, 1978.

REMARKS.--Records are fair and represent water temperature at the sensor within 0.5°C. No record Oct. 1-8, Dec. 27, to Mar. 29, and Apr. 20 to June 3 due to equipment malfunctions.

EXTREME FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum 19.5 July 29 to Aug. 3 and Aug. 8, 1978, Minimum 0.0°C during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum 17.5°C June 25, minimum 0.0°C many days during the winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 09...	1300	3.2	30	17	5.6	6.0	10.1	8	6
DEC 04...	1300	9.2	6	26	4.7	2.0	12.3	4	--
MAR 30...	1000	5.0	25	18	5.2	.0	13.6	4	2
JUN 04...	1100	.44	16	21	5.7	9.5	11.6	3	1
AUG 05...	1100	.11	< 25	21	6.1	12.0	10.3	4	1

DATE	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)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 09...	2.6	.5	2.0	.2	2	< 5.0	3.6	<.1	4.2
DEC 04...	1.3	.3	2.0	.2	--	7.0	2.8	.1	3.1
MAR 30...	1.2	.3	1.9	.1	2	8.0	2.1	.1	3.7
JUN 04...	.6	.3	2.0	.3	2	9.0	2.5	<.1	4.8
AUG 05...	.9	.5	2.3	.2	3	9.0	2.3	<.1	6.0

DATE	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, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 09...	19	<.09	<.060	--	.29	<.010	--	--
DEC 04...	--	<.10	<.070	--	.86	.020	1	.03
MAR 30...	20	<.10	.110	.49	.60	<.010	1	.01
JUN 04...	21	<.10	<.060	--	1.3	.030	2	.00
AUG 05...	23	<.10	.190	2.9	3.1	.030	0	.00

15087590 ROCKY PASS CREEK NEAR POINT BAKER--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	.5	.0			---	---	14.5	11.5	14.0	12.0	11.5	11.0
2	.5	.0			---	---	14.5	10.0	13.5	11.0	12.0	11.5
3	.5	.0			---	---	14.5	10.5	13.5	11.5	11.5	10.5
4	.5	.0			10.5	---	14.5	11.5	13.0	11.0	11.5	10.5
5	.0	.0			11.5	8.5	14.0	11.5	12.5	11.0	12.0	11.5
6	.5	.0			12.0	7.5	16.0	12.5	12.5	12.0	11.5	11.5
7	.5	.0			11.5	8.0	14.5	12.5	14.0	11.5	11.0	10.5
8	.5	.0			12.5	8.5	12.5	12.0	13.0	12.5	10.5	9.5
9	.5	.0			12.5	9.5	13.0	12.0	12.5	11.0	10.5	9.5
10	.5	.0			14.0	9.0	13.0	11.5	12.0	11.0	10.0	9.5
11	.5	.0			13.0	10.5	11.5	11.0	12.0	10.5	10.5	9.5
12	.5	.0			14.0	10.5	11.0	10.5	12.5	11.0	11.0	10.0
13	.5	.0			12.5	10.5	11.0	10.0	12.5	9.5	11.0	10.5
14	1.0	.0			12.5	10.0	11.0	10.5	13.0	10.0	11.0	10.5
15	.0	.0			11.5	10.5	12.0	11.0	12.0	11.0	12.0	11.0
16	.5	.0			12.5	10.5	11.5	11.0	12.5	10.5	11.5	11.0
17	1.0	.5			13.5	10.5	12.0	10.5	12.5	11.0	11.5	10.5
18	1.5	.5			15.0	10.0	11.0	10.5	12.5	11.0	10.5	9.0
19	1.0	.5			13.5	12.0	11.5	10.5	13.0	10.0	10.0	8.5
20	---	---			12.0	11.0	12.5	10.0	12.5	8.5	10.5	9.5
21	---	---			12.5	10.0	13.5	10.5	12.5	10.5	9.5	8.0
22	---	---			14.0	8.0	13.0	11.0	12.0	11.0	9.0	7.5
23	---	---			15.0	8.5	12.5	10.5	12.0	11.5	10.0	9.0
24	---	---			16.0	9.0	13.5	10.5	13.0	12.0	10.0	9.0
25	---	---			17.5	11.0	14.0	11.0	13.0	11.5	10.5	9.5
26	---	---			16.5	13.0	14.5	11.0	12.5	12.0	10.5	10.0
27	---	---			15.0	13.0	15.5	11.5	12.0	11.0	10.5	8.5
28	---	---			16.5	11.5	16.0	12.0	12.0	10.5	8.5	6.0
29	---	---			15.5	11.0	15.0	11.0	12.0	11.0	8.5	7.5
30	---	---			13.5	11.5	15.5	11.5	11.5	11.0	10.0	8.5
31	---	---			---	---	15.0	12.5	11.0	11.0	---	--
MONTH					17.5	7.5	16.0	10.0	14.0	8.5	12.0	6.0
YEAR	17.5	.0										

15087610 NAKWASINA RIVER NEAR SITKA

LOCATION.--Lat 57°15'37", long 135°19'54", in NW¼SW¼ sec.24, T.53 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Baranof Island, in Tongass National Forest, on left bank 0.7 mi (1.1 km) upstream from mouth at Nakwasina Bay and 15 mi (24.1 km) north of Sitka.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--31.9 mi² (82.6 km²).

PERIOD OF RECORD.--October 1976 to September 1982 (discontinued).

REVISED RECORDS.--WDR AK-79-1: 1977-78.

GAGE.--Water-stage recorder. Altitude of gage 20 ft (6.1 m), from topographic map.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--6 years, 298 ft³/s (8.439 m³/s), 126.86 in/yr (3,222 mm/yr), 215,900 acre-ft/yr (266 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,300 ft³/s (178 m³/s), Oct. 9, 1979, gage height, 8.81 ft (2.685 m), from floodmarks, from rating curve extended above 640 ft³/s (18 m³/s) on basis of slope-area measurement of peak flow; minimum discharge, 22 ft³/s (0.62 m³/s), Apr. 6, 7, 1982, gage height, 0.93 ft (0.283 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 15	0930	1,370	38.8	4.02	1.225	Jan. 14	Unknown	Unknown		Unknown	
Oct. 17	2030	2,600	73.6	5.[illegible]	1.689	Sept. 1	2000	1,870	53.0	4.63	1.411
Oct. 25	0330	1,480	41.9	4.18	1.274	Sept. 30	[illegible]30	2,410	68.2	5.30	1.615
Nov. 5	Unknown	*Unknown		*Unknown							

Minimum discharge, 22 ft³/s (0.62 m³/s) Apr. 6, 7, gage height, 0.93 ft (0.283 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	375	276	270	68	86	25	27	125	596	469	276	748
2	331	244	224	68	90	24	25	121	638	415	247	865
3	287	224	187	63	90	24	25	119	599	387	227	477
4	254	800	170	60	88	23	23	120	492	379	218	356
5	230	2000	194	63	87	23	23	147	429	395	199	310
6	227	629	184	60	90	24	22	274	421	439	211	419
7	218	511	159	54	92	35	23	299	445	435	233	465
8	205	477	136	52	94	83	28	278	461	439	247	364
9	199	626	125	54	100	56	33	262	508	452	244	302
10	193	723	107	68	95	48	37	287	536	415	227	272
11	187	832	95	52	85	43	36	373	534	379	227	302
12	258	578	87	60	75	38	36	341	519	391	244	302
13	398	465	81	200	75	35	35	280	490	402	221	276
14	529	387	77	700	70	32	35	243	470	465	205	574
15	800	334	72	250	68	30	35	231	440	477	196	469
16	551	283	70	150	65	28	35	231	406	411	181	375
17	1110	237	79	130	60	27	33	263	423	469	175	324
18	926	208	200	120	58	25	33	321	503	490	169	279
19	621	190	160	110	54	24	57	337	551	542	157	258
20	465	181	130	98	52	24	195	333	507	452	148	237
21	375	163	120	87	46	28	129	309	452	398	142	221
22	406	148	110	80	40	52	120	342	423	395	154	205
23	733	142	105	74	36	54	116	367	423	423	178	230
24	728	140	107	70	33	44	108	428	465	448	291	237
25	943	157	117	66	32	41	106	530	569	395	298	218
26	551	142	110	66	30	36	110	420	611	360	367	214
27	423	331	95	67	29	33	117	383	569	349	621	211
28	349	597	87	70	27	32	139	389	542	345	435	211
29	313	379	83	73	---	30	136	397	490	324	345	244
30	287	302	75	77	---	30	129	421	482	313	341	1260
31	268	---	70	82	---	29	---	520	---	310	456	---
TOTAL	13740	12706	3886	3292	1847	1080	2006	9491	14994	12763	7880	11225
MEAN	443	424	125	106	66.0	34.8	66.9	306	500	412	254	374
MAX	1110	2000	270	700	100	83	195	530	638	542	621	1260
MIN	187	140	70	52	27	23	22	119	406	310	142	205
CFSM	13.9	13.3	3.92	3.32	2.07	1.09	2.10	9.59	15.7	12.9	7.96	11.7
IN.	16.02	14.82	4.53	3.84	2.15	1.26	2.34	11.07	17.48	14.88	9.19	13.09
AC-FT	27250	25200	7710	6530	3660	2140	3980	18830	29740	25320	15630	22260

CAL YR 1981 TOTAL 104596 MEAN 287 MAX 2400 MIN 58 CFSM 9.00 IN 121.97 AC-FT 207500
WTR YR 1982 TOTAL 94910 MEAN 260 MAX 2000 MIN 22 CFSM 8.15 IN 110.68 AC-FT 188300

NOTE.--No gage-height record Nov. 5 and Jan. 12 to Feb. 8.

15087610 NAKWASINA RIVER NEAR SITKA--Continued

WATER QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1976 to current year (discontinued).

INSTRUMENTATION.--Temperature recorder since Sept. 4, 1976.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 10.5°C Sept. 13, 1979 and Sept. 6, 1981; minimum, 0.5°C Feb. 14, 15, 1979, and Jan. 22, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 10.0°C Sept. 30; minimum recorded, 1.5°C Jan. 12-13, and Feb. 24-26.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

15087610 NAKWASINA RIVER NEAR SITKA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.5	3.5	5.5	3.5	6.5	3.5	6.0	5.0	7.5	6.5	9.5	7.5
2	5.5	3.5	6.5	4.0	6.5	3.5	6.5	4.5	7.0	6.0	8.5	7.5
3	5.5	3.0	6.0	4.0	5.0	4.0	6.5	5.0	7.0	6.0	8.0	6.5
4	5.5	3.0	5.5	4.0	5.0	3.5	6.5	5.0	7.5	6.0	8.0	6.5
5	5.5	3.5	5.0	3.5	5.5	4.0	7.0	5.0	7.0	6.0	7.5	7.0
6	6.0	3.5	4.5	3.0	6.5	4.0	7.5	5.5	7.0	6.5	8.0	7.0
7	6.0	3.5	4.5	3.5	6.0	4.0	6.5	5.5	8.0	6.5	7.5	7.0
8	6.0	3.5	5.0	3.5	6.0	4.0	6.5	5.0	7.5	6.5	7.5	6.5
9	4.5	3.5	6.0	3.0	6.5	4.0	6.5	5.5	7.0	6.5	7.5	6.5
10	5.5	3.5	4.5	3.5	6.5	4.0	6.5	5.0	7.5	6.5	7.0	6.5
11	5.5	4.0	4.0	3.5	5.0	4.0	7.0	5.0	7.0	6.5	7.5	6.5
12	5.0	4.0	4.5	3.5	5.0	4.0	6.0	5.0	7.5	6.5	7.5	6.5
13	6.0	3.5	5.0	3.5	5.0	4.0	6.0	5.5	8.5	6.5	7.5	6.5
14	5.5	3.5	6.0	3.0	5.5	4.0	6.0	5.5	8.5	6.5	9.0	7.0
15	5.0	4.0	6.0	3.5	5.0	4.0	6.0	5.5	8.0	6.5	8.0	7.5
16	5.0	3.5	5.0	3.5	5.5	4.0	6.0	5.0	7.0	6.5	7.5	7.0
17	5.5	3.5	6.0	4.0	6.5	4.0	6.0	5.5	7.0	6.5	8.0	7.0
18	5.0	3.5	5.0	4.0	6.5	4.0	6.0	5.0	7.5	6.5	8.0	7.0
19	4.5	3.0	5.0	3.5	5.0	4.5	7.0	5.5	8.0	6.0	8.0	7.0
20	3.5	2.5	4.5	3.5	5.0	4.0	8.5	5.0	8.5	6.0	7.5	7.0
21	5.0	3.5	6.0	3.5	5.5	4.0	8.0	5.5	8.0	6.5	7.5	6.5
22	6.0	3.0	4.0	3.5	7.0	4.0	7.0	6.0	7.5	6.5	7.0	6.5
23	5.0	3.5	4.5	3.5	7.5	4.0	7.0	6.0	7.5	7.0	7.5	6.5
24	5.0	3.5	4.0	3.5	7.5	4.0	7.0	6.0	8.5	7.0	8.0	7.0
25	5.0	4.0	4.0	3.5	8.0	4.5	7.5	6.0	8.5	7.5	7.5	7.0
26	5.0	4.0	5.0	3.5	7.0	4.5	8.5	6.0	8.5	7.5	7.0	6.5
27	5.0	4.0	6.5	3.5	6.5	4.5	9.5	6.0	8.5	8.0	7.0	6.5
28	5.0	3.5	6.5	3.5	7.0	5.0	9.0	6.5	8.0	7.0	7.5	6.0
29	4.5	3.5	5.0	4.0	6.5	4.5	8.0	6.5	8.0	7.0	8.5	6.5
30	5.5	3.5	7.0	4.0	6.0	5.0	7.5	6.5	8.0	7.0	10.0	8.0
31	---	---	6.5	3.5	---	---	8.0	6.5	8.0	7.0	---	---
MONTH	6.0	2.5	7.0	3.0	8.0	3.5	9.5	4.5	8.5	6.0	10.0	6.0
YEAR	10.0	1.5										

15087690 INDIAN RIVER NEAR SITKA

LOCATION.--Lat 57°04'01", long 135°19'42", in SW¼SE¼ sec.30, T.55 S., R.64 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Baranof Island, in Tongass National Forest, 2 mi (3.2 km) upstream from mouth, and 1 mi (1.6 km) southeast of Sitka.

DRAINAGE AREA.--10.1 mi² (26.2 km²).

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

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

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (revised), 2,600 ft³/s (73.6 m³/s) Sept. 7, 1981, gage height, 10.48 ft (3.194 m), minimum daily, 18 ft³/s (0.51 m³/s) Mar. 3-5, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft³/s (44.7 m³/s), Sept. 14, gage height 9.38 ft (2.859 m); minimum daily, 18 ft³/s (0.51 m³/s) Mar. 3-5.

REVISIONS.--Revised figures of discharge for the water years 1980 and 1981, superseding those published in the report for 1981 are given herein.

EXTREMES FOR PERIOD.--August to September 1980: Maximum discharge during period, 1,670 ft³/s (47.3 m³/s), Sept. 24, gage height, 9.50 ft (2.896 m); minimum daily, 45 ft³/s (1.274 m³/s) Aug. 30 and 31.

EXTREMES FOR 1981 WATER YEAR.--Maximum discharge, 2,600 ft³/s (73.6 m³/s) Sept. 7, gage height, 10.48 ft (3.194 m); minimum daily, 27 ft³/s (0.076 m³/s) Apr. 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST TO SEPTEMBER 1980
MEAN VALUES

DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	AUG	SEP
1	90	6	80	11	79	16	106	21	100	26	---	122
2	56	7	63	12	67	17	71	22	394	27	---	109
3	87	8	310	13	59	18	82	23	164	28	52	113
4	91	9	176	14	54	19	115	24	329	29	56	214
5	82	10	98	15	50	20	67	25	261	30	45	235
										31	45	---

SEPTEMBER TOTAL - 3924 MEAN - 131 MAX - 394 MIN - 50 CFSM - 13.0 IN. - 14.45 AC-FT - 7780

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	446	113	69	74	50	52	46	53	48	115	60	46
2	374	130	62	109	49	62	60	51	51	244	55	43
3	335	81	55	117	46	47	48	51	44	221	187	42
4	188	81	49	187	42	46	43	53	57	152	301	56
5	208	68	44	119	39	42	39	53	56	131	167	186
6	195	60	41	334	37	40	42	56	45	124	134	773
7	330	55	47	166	34	38	50	75	44	103	95	1340
8	889	53	45	127	34	38	43	76	41	86	78	253
9	620	53	44	187	31	41	38	61	39	77	74	238
10	230	46	42	197	30	45	34	55	37	69	65	381
11	190	42	55	174	30	43	31	47	36	64	58	912
12	172	43	65	132	41	55	30	48	35	63	53	181
13	149	52	149	119	53	52	29	53	33	57	53	123
14	134	64	200	176	95	47	28	50	33	52	195	104
15	334	96	102	181	239	64	27	48	32	48	81	104
16	988	125	74	179	147	64	27	53	38	45	64	86
17	500	108	62	138	143	45	28	52	31	42	57	80
18	265	111	55	127	130	43	28	53	32	40	52	111
19	140	102	50	179	102	42	40	50	31	37	101	134
20	125	111	45	127	141	43	38	47	46	36	110	86
21	138	96	42	134	214	42	47	45	80	39	198	69
22	91	86	40	134	121	41	43	50	63	47	95	61
23	74	100	37	215	93	40	40	50	95	40	77	57
24	64	234	35	154	78	40	39	56	80	36	64	52
25	57	241	35	108	71	42	38	57	69	86	58	47
26	52	225	33	90	64	42	38	62	58	102	53	44
27	47	297	30	80	60	81	36	54	90	167	50	41
28	81	149	38	69	55	62	35	46	71	91	121	38
29	80	102	104	62	---	60	36	48	89	69	71	38
30	57	81	81	57	---	51	46	54	117	74	57	80
31	55	---	53	53	---	49	---	49	---	67	51	---
TOTAL	7608	3205	1883	4305	2269	1499	1174	1652	1615	2624	2935	5856
MEAN	245	107	60.7	139	81.0	48.4	39.1	53.3	53.8	84.6	94.7	195
MAX	988	297	200	334	239	81	60	76	117	244	301	1340
MIN	47	42	30	53	30	38	27	45	31	36	50	38
CFSM	24.3	10.6	6.01	13.8	8.02	4.79	3.87	5.28	5.33	8.38	9.38	19.3
IN.	28.02	11.80	6.93	15.85	8.36	5.52	4.32	6.08	5.95	9.66	10.81	21.57
AC-FT	15090	6360	3730	8540	4500	2970	2330	3280	3200	5200	5820	11620

WTR YR 1981 TOTAL 36625 MEAN 100 MAX 1340 MIN 27 CFSM 9.90 IN 134.88 AC-FT 72650

15087690 INDIAN RIVER NEAR SITKA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	105	106	27	29	19	27	69	179	68	37	446
2	61	82	80	25	30	19	26	64	181	60	36	410
3	49	74	72	23	32	18	26	64	154	57	35	127
4	43	312	69	23	42	18	25	64	119	55	35	90
5	40	376	83	22	60	18	24	117	104	53	33	91
6	39	161	66	22	60	25	24	227	102	57	34	152
7	37	121	57	21	49	55	24	156	108	55	34	138
8	35	154	52	21	47	116	24	113	108	52	36	111
9	33	212	49	30	62	45	34	96	115	51	37	88
10	32	224	44	31	54	39	38	125	121	47	37	77
11	30	195	42	35	45	32	35	235	115	44	36	77
12	46	161	40	187	41	29	32	154	106	43	42	68
13	90	119	38	689	37	29	31	117	98	44	37	60
14	135	102	35	187	37	29	28	100	93	55	33	599
15	370	85	35	90	36	29	28	93	83	57	31	188
16	133	78	36	74	35	28	28	88	83	49	30	115
17	290	71	40	64	33	27	28	104	85	72	30	98
18	249	64	69	57	32	27	28	138	100	96	30	86
19	166	65	49	51	30	27	97	138	111	130	30	78
20	111	65	53	45	29	27	156	138	96	77	29	72
21	98	56	43	42	28	33	77	125	81	64	28	66
22	102	51	39	39	26	57	61	262	77	58	33	61
23	260	53	37	38	24	47	57	179	78	58	37	80
24	245	68	64	36	23	38	55	294	83	60	73	75
25	259	65	60	34	23	35	62	599	91	56	69	62
26	174	53	49	31	22	31	71	187	91	51	151	58
27	128	280	39	30	20	30	74	149	80	47	242	57
28	105	373	35	29	20	30	86	140	71	45	109	57
29	107	143	33	31	---	29	80	140	65	43	86	95
30	106	104	31	31	---	28	72	140	66	41	118	506
31	107	---	28	30	---	27	---	171	---	39	161	---
TOTAL	3775	4072	1573	2095	1006	1041	1458	4786	3044	1784	1789	4288
MEAN	122	136	50.7	67.6	35.9	33.6	48.6	154	101	57.5	57.7	143
MAX	370	376	106	689	62	116	156	599	181	130	242	599
MIN	30	51	28	21	20	18	24	64	65	39	28	57
CFSM	12.1	13.5	5.02	6.69	3.55	3.33	4.81	15.2	10.0	5.69	5.71	14.2
IN.	13.90	15.00	5.79	7.72	3.70	3.33	5.37	17.63	11.21	6.57	6.59	15.79
AC-FT	7490	8080	3120	4160	2000	2060	2890	9490	6040	3540	3550	8510

CAL YR 1981 TOTAL 33349 MEAN 91.4 MAX 1340 MIN 27 CFSM 9.05 IN 122.82 AC-FT 66150
WTR YR 1982 TOTAL 30711 MEAN 84.1 MAX 689 MIN 18 CFSM 8.33 IN 113.10 AC-FT 60920

15100500 NICHOLS CREEK NEAR ANGOON

LOCATION.--Lat 57°21'15", long 134°56'27", in SW¼SW¼ sec.14, T.52 S., R.65 E., in Greater Sitka Borough, Hydrologic Unit 19060000, on Baranof Island, in Tongass National Forest, 17 mi (27 km) southwest of Angoon.

DRAINAGE AREA.--0.12 mi² (0.31 km²), estimated.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to September 1981 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (9 m), from topographic map.

REMARKS.--Records poor. Water-quality records for water year published in WDR AK-81-1.

EXTREMES FOR CURRENT YEAR.--Maximum discharge not determined; maximum gage height, 6.07 ft (1.850 m) Sept. 7; minimum discharge, 0.01 ft³/s (0.0003 m³/s) on many days throughout April to August.

DISCHARGE, IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	7.1	1.3	2.2	.77	.80	.08	.01	.01	.20	.01	.04
2	4.8	3.5	1.0	3.6	.72	1.3	.11	.01	.01	1.1	.01	.02
3	5.2	5.0	.75	5.1	.68	1.3	.35	.01	.08	2.8	.01	.02
4	4.3	3.7	.62	5.8	.65	.80	.47	.01	.17	.53	6.6	.02
5	7.5	2.6	.62	4.4	.63	.70	.41	.01	.14	.26	2.4	.06
6	3.7	2.2	.95	6.2	.60	.58	.35	.01	.06	.17	.67	4.2
7	6.8	2.3	1.1	4.0	.58	.80	.41	.01	.02	.08	.30	16
8	5.4	2.1	.80	2.7	.58	2.0	.41	.01	.01	.06	.17	8.1
9	5.7	2.3	.70	4.3	.58	4.5	.11	.01	.01	.02	.11	6.5
10	2.6	2.9	.68	5.1	.58	2.4	.02	.01	.01	.01	.08	4.9
11	3.9	2.1	.70	4.5	.60	2.6	.01	.01	.01	.01	.06	13
12	2.3	6.9	.80	2.6	.65	1.4	.01	.01	.01	.02	.06	3.9
13	1.4	4.9	3.3	6.4	.75	1.2	.01	.01	.01	.01	.04	1.8
14	1.5	3.1	6.2	6.6	.95	5.2	.01	.01	.01	.01	.04	9.0
15	2.4	7.6	2.7	3.7	5.7	5.2	.01	.01	.01	.01	.04	4.5
16	9.8	8.1	1.8	4.9	2.4	1.4	.01	.01	.01	.01	.02	1.7
17	6.8	5.0	1.4	4.0	2.2	.47	.63	.01	.01	.01	.02	4.7
18	5.3	7.4	1.1	7.1	3.7	.26	1.1	.01	.01	.01	.02	12
19	3.6	5.3	.90	3.7	2.4	.17	.53	.01	.01	.01	.08	3.3
20	4.3	4.6	.75	2.6	2.2	.14	.39	.01	.02	.01	1.7	1.6
21	3.5	3.3	.67	7.8	4.6	.11	.17	.01	.01	.01	5.3	.99
22	2.5	2.8	.60	3.5	2.4	.11	.14	.01	.01	.01	1.6	.26
23	2.8	5.6	.53	2.1	1.6	.74	.08	.01	.01	.01	.67	.21
24	2.2	7.0	.48	1.7	1.0	2.1	.04	.21	.01	.01	.30	.21
25	2.2	6.3	.46	1.5	.80	3.2	.02	.21	.01	.01	.14	.21
26	2.2	7.8	.46	1.3	.75	.91	.02	.41	.01	.01	.11	.17
27	2.7	7.0	.49	1.2	.68	.60	.01	.17	.01	.06	.08	.17
28	4.0	4.2	.58	1.1	.66	.99	.01	.06	.01	.11	.21	.14
29	3.7	2.4	.75	.97	---	.53	.01	.02	.35	.04	.17	.59
30	2.4	1.7	1.1	.88	---	.26	.01	.02	.06	.02	.08	4.2
31	5.8	---	1.6	.83	---	.17	---	.01	---	.02	.06	---
TOTAL	130.4	136.8	35.89	112.38	40.41	42.94	5.85	1.34	1.12	5.65	41.16	102.51
MEAN	4.21	4.56	1.16	3.63	1.44	1.39	.20	.043	.037	.18	.68	3.42
MAX	9.8	8.1	6.2	7.8	5.7	5.2	1.1	.41	.35	2.8	6.6	16
MIN	1.4	1.7	.46	.83	.58	.11	.01	.01	.01	.01	.01	.02
CFSM	35.1	38.0	9.67	30.3	12.0	11.6	1.67	.36	.31	1.50	5.67	28.5
IN.	40.09	42.06	11.03	34.55	12.42	13.20	1.80	.41	.34	1.74	6.51	31.52
AC-FT	259	271	71	223	80	85	12	2.7	2.2	11	42	203

WTR YR 1981 TOTAL 636.45 MEAN 1.74 MAX 16 MIN .01 CFSM 14.5 IN 195.67 AC-FT 1260

15100500 NICHOLS CREEK NEAR ANGOON--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)
OCT 11...	1000	.06	96	101	6.6	6.5	11.1	39

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 11...	3	14	1.2	3.5	.2	36	<5.0	3.7	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 11...	4.7	.12	<.070	.33	.45	.010	2	.00

15101500 GREENS CREEK NEAR JUNEAU

LOCATION.--Lat 58°05'18", long 134°44'49", in SE¼ sec.11, T.44 S., R.65 E., Hydrologic Unit 19060000, on Admiralty Island, in Tongass National Forest, on left bank 1 mi (1.6 km) upstream from mouth at Hawk Inlet and 19 mi (31 km) southwest of Juneau.

DRAINAGE AREA.--22.8 mi² (59.1 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (15 m), from topographic map.

REMARKS.--Water-discharge records good except those for January through March, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft³/s (74.8 m³/s) Oct. 30, 1978, gage height, 15.12 ft (4.609 m); minimum daily, 8.9 ft³/s (0.25 m³/s) Feb. 14, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,350 ft³/s (38.2 m³/s) Nov. 5, gage height, 14.19 ft (4.325 m); minimum daily, 10 ft³/s (0.28 m³/s) Feb. 23 to Mar. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	101	70	12	17	10	12	36	322	153	56	153
2	106	83	61	12	17	10	18	35	333	126	52	229
3	80	73	55	12	18	10	34	36	280	112	52	140
4	75	313	52	11	19	10	31	38	209	114	73	101
5	70	743	59	11	19	11	18	72	184	119	77	86
6	67	241	58	11	20	13	18	172	161	114	67	118
7	68	155	49	13	19	45	12	126	172	108	77	181
8	67	139	45	18	18	100	12	91	196	103	70	114
9	62	188	39	25	18	40	17	90	229	103	91	88
10	58	306	36	23	17	16	18	116	246	108	70	77
11	53	425	33	25	16	15	18	184	268	93	62	70
12	56	275	30	50	15	14	17	130	277	108	58	61
13	67	172	28	130	14	13	20	88	239	106	52	53
14	70	133	26	153	14	12	18	72	212	167	47	88
15	121	110	25	80	13	12	17	70	196	140	45	78
16	108	96	24	45	13	12	17	70	193	119	42	67
17	260	85	42	35	12	12	18	114	193	126	45	61
18	343	76	86	27	12	14	17	172	236	128	45	55
19	165	73	56	23	11	14	18	164	265	150	40	49
20	115	73	49	21	11	14	43	172	239	110	37	46
21	93	67	42	20	11	13	43	148	184	97	35	43
22	125	62	37	19	11	22	32	140	164	93	35	40
23	142	61	35	19	10	26	27	123	164	97	37	49
24	160	60	35	20	10	22	24	130	178	86	46	50
25	323	63	33	21	10	20	26	130	212	80	46	43
26	172	58	32	22	10	18	31	128	232	75	184	41
27	126	64	19	22	10	16	47	116	209	70	283	41
28	103	164	15	22	10	16	50	130	190	68	170	40
29	92	102	14	21	---	14	41	150	164	64	112	36
30	85	77	13	19	---	14	36	212	158	61	167	128
31	94	---	13	18	---	13	---	277	---	62	130	---
TOTAL	3676	4638	1211	960	395	591	750	3732	6505	3260	2403	2426
MEAN	119	155	39.1	31.0	14.1	19.1	25.0	120	217	105	77.5	80.9
MAX	343	743	86	153	20	100	50	277	333	167	283	229
MIN	53	58	13	11	10	10	12	35	158	61	35	36
CFSM	5.22	6.80	1.72	1.36	.62	.84	1.10	5.26	9.52	4.61	3.40	3.55
IN.	6.00	7.57	1.98	1.57	.64	.96	1.22	6.09	10.61	5.32	3.92	3.96
AC-FT	7290	9200	2400	1900	783	1170	1490	7400	12900	6470	4770	4810

CAL YR 1981 TOTAL 40732 MEAN 112 MAX 1250 MIN 13 CFSM 4.91 IN 66.45 AC-FT 80790
WTR YR 1982 TOTAL 30547 MEAN 83.7 MAX 743 MIN 10 CFSM 3.67 IN 49.84 AC-FT 60590

15101500 GREENS CREEK NEAR JUNEAU--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1978 to current year.
WATER TEMPERATURES: December 1978 to current year.

INSTRUMENTATION.--Water quality mini-monitor since Dec. 31, 1978 in conjunction with satellite telemeter.

REMARKS.--Records good. No records, Oct. 8 to Dec. 28, due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 277 micromhos/cm Jan. 31 and Feb. 1-2, 1979; minimum recorded, 54 micromhos/cm Aug. 26, 1982.
WATER TEMPERATURES: Maximum, 13.0°C Aug. 8, 9, 1981; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 229 micromhos/cm Sept. 16; minimum recorded, 54 micromhos/cm Aug. 26.
WATER TEMPERATURES: Maximum recorded, 12.0°C July 27-29; minimum recorded, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 02...	1030	103	106	121	7.6	4.5	--	--	--	K13	K8
DEC 29...	1330	14	207	177	7.5	.0	5	.50	13.7	--	--
MAR 10...	1030	16	175	155	7.8	.0	10	.40	13.3	K12	<1
JUN 24...	1530	154	100	102	7.8	8.5	5	2.1	11.7	--	--
SEP 03...	1230	96	113	118	7.2	8.5	10	1.4	13.9	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY 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)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 02...	59	15	19	3.0	1.6	.1	46	43	5.0	9.0	.1
DEC 29...	92	23	29	4.8	2.3	.3	69	69	15	3.6	.1
MAR 10...	70	15	22	3.8	2.3	.3	55	60	9.0	3.6	.1
JUN 24...	46	12	15	2.2	1.3	.2	34	41	10	1.8	<.1
SEP 03...	53	14	17	2.7	2.2	.3	39	42	12	1.3	<.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, VOLA-TILE, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)
OCT 02...	16	82	81	--	<.10	.23	.070	.080	.16	.24	.47
DEC 29...	5.1	102	103	11	--	.15	--	.160	.20	.36	.51
MAR 10...	4.3	91	82	14	--	.10	--	<.060	--	.31	.41
JUN 24...	3.3	55	59	32	--	<.10	--	.110	1.4	1.6	--
SEP 03...	3.7	63	65	84	--	<.10	--	.110	1.1	1.3	--

K NON-IDEAL COLONY COUNT

15101500 GREENS CREEK NEAR JUNEAU--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	TANNIN AND LIGNIN (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)
OCT 02...	.030	.040	--	.3	--	--	4800	4600	200	0	0
DEC 29...	.010	.020	2.3	--	0	.00	500	400	100	<1	--
MAR 10...	<.010	<.020	5.8	.2	0	.00	200	100	100	1	0
JUN 24...	.140	.090	1.8	.1	<1	<.10	100	--	<100	<1	--
SEP 03...	.060	.020	2.9	--	2	.20	200	--	<100	1	0

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)
OCT 02...	0	200	40	160	0	0	<1	<10	0	2	0
DEC 29...	<1	200	200	46	1	--	<1	40	<10	<1	--
MAR 10...	1	<100	--	40	<1	--	<1	<10	<10	<1	--
JUN 24...	<1	100	70	33	<1	--	<1	10	<10	<1	--
SEP 03...	1	100	60	36	1	--	<1	<10	<10	<1	--

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT 02...	--	10	7	3	300	160	140	4	3	1	20
DEC 29...	<3	6	1	5	300	260	36	1	0	3	20
MAR 10...	2	6	5	1	90	40	46	2	0	3	10
JUN 24...	<1	2	--	<1	250	240	10	<1	--	<1	10
SEP 03...	1	5	2	3	380	330	49	<1	--	3	20

DATE	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)
OCT 02...	10	8	.4	.1	.3	3	12	6	6	1
DEC 29...	9	11	.1	.0	.1	--	2	0	4	1
MAR 10...	4	6	.4	.1	.3	--	<1	--	3	1
JUN 24...	8	2	4.3	2.3	2.0	--	4	--	<1	<1
SEP 03...	10	7	.2	.1	.1	--	4	1	3	1

15101500 GREENS CREEK NEAR JUNEAU--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT 02...	1	0	0	0	0	70	40	30	3	.83
DEC 29...	0	1	<1	--	<1	20	0	21	0	.00
MAR 10...	--	<1	<1	--	<1	20	0	20	1	.04
JUN 24...	--	<1	<1	--	<1	10	3	7	9	3.7
SEP 03...	0	1	<1	--	<1	--	0	37	3	1 3

15101500 GREENS CREEK NEAR JUNEAU--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	90	76			---	---	214	200	214	201	210	207
2	95	88			---	---	214	199	217	201	224	207
3	101	95			---	---	201	200	224	202	225	207
4	105	101			---	---	201	199	204	202	218	208
5	108	105			---	---	211	198	205	192	213	208
6	109	106			---	---	198	193	198	191	225	207
7	108	---			---	---	201	193	197	193	226	201
8	---	---			---	---	205	193	212	195	201	17[illegible]
9	---	---			---	---	199	193	220	19[illegible]	179	1[illegible]4
10	---	---			---	---	216	193	213	19[illegible]	194	179
11	---	---			---	---	201	193	210	198	204	186
12	---	---			---	---	205	194	217	199	199	191
13	---	---			---	---	194	189	224	201	202	193
14	---	---			---	---	194	186	219	201	207	196
15	---	---			---	---	190	187	206	201	212	198
16	---	---			---	---	194	190	216	201	208	200
17	---	---			---	---	194	191	218	201	208	201
18	---	---			---	---	195	193	208	200	225	202
19	---	---			---	---	197	195	202	200	209	204
20	---	---			---	---	198	196	217	200	205	203
21	---	---			---	---	200	197	204	200	202	193
22	---	---			---	---	201	199	---	201	193	169
23	---	---			---	---	201	199	226	204	174	166
24	---	---			---	---	216	199	220	205	191	172
25	---	---			---	---	200	199	219	206	197	178
26	---	---			---	---	201	199	211	206	197	183
27	---	---			---	---	227	200	208	206	190	186
28	---	---			---	---	203	200	216	207	196	189
29	---	---			203	200	209	200	---	---	201	192
30	---	---			209	201	203	201	---	---	205	195
31	---	---			228	202	215	201	---	---	210	197
MONTH					228	200	227	186	226	191	226	166

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	211	198	151	147	104	92	97	89	134	131	117	96
2	213	200	162	150	113	100	104	96	137	134	104	91
3	204	202	167	150	123	103	109	103	139	136	117	106
4	207	202	156	150	128	123	107	101	137	130	128	118
5	218	204	162	112	130	124	106	99	134	127	134	129
6	214	204	112	103	135	130	107	98	137	128	135	94
7	213	204	127	105	131	126	108	104	130	125	105	84
8	204	201	148	124	125	116	109	103	132	126	117	105
9	201	187	150	127	119	113	108	103	125	119	125	11[illegible]
10	186	184	150	115	118	112	106	101	131	125	129	126
11	187	185	124	105	114	104	111	105	132	130	155	128
12	194	178	144	108	110	105	111	106	136	131	139	134
13	179	175	162	125	141	107	110	105	140	136	147	140
14	184	179	141	136	120	114	111	94	141	139	144	116
15	187	182	140	138	122	118	104	96	144	142	148	124
16	193	177	152	139	122	117	108	103	14[illegible]	144	229	130
17	181	176	150	115	123	112	106	103	146	144	156	137
18	182	175	127	110	114	103	108	98	146	144	170	141
19	176	167	137	110	108	100	105	98	149	146	168	145
20	166	133	116	110	115	100	111	105	152	149	153	149
21	149	133	121	113	121	116	115	110	154	152	170	152
22	161	149	137	117	126	119	116	113	154	152	173	155
23	175	156	143	122	126	116	116	111	153	152	181	146
24	174	163	130	121	122	85	119	116	153	146	174	145
25	163	155	126	120	91	77	121	117	146	145	163	150
26	165	150	128	119	86	75	124	119	144	54	174	154
27	150	135	133	128	88	75	126	122	103	74	177	154
28	145	135	131	125	90	83	129	124	112	94	183	154
29	152	139	128	117	96	87	130	126	124	112	203	158
30	157	145	121	102	96	89	130	129	123	101	158	98
31	---	---	114	97	---	---	131	128	117	107	---	---
MONTH	218	133	167	97	141	75	131	89	154	54	229	84
YEAR	229	54										

15101500 GREENS CREEK NEAR JUNEAU--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.0	.5	2.5	1.5	6.0	3.0	8.5	7.0	11.5	10.0	10.0	9.5
2	1.0	.0	2.5	1.5	6.5	3.5	9.0	6.5	11.5	10.0	10.0	9.5
3	.5	.0	3.0	1.5	4.5	3.5	9.5	6.5	10.5	9.5	9.5	8.5
4	.5	.0	3.0	1.5	5.5	4.0	9.0	7.5	10.5	9.5	10.0	8.5
5	.5	.0	2.0	.5	5.0	4.0	10.0	7.0	11.0	9.0	10.0	9.0
6	1.0	.0	1.0	.5	6.0	4.0	10.0	7.5	10.5	10.0	10.0	9.5
7	1.5	.5	2.5	.5	6.5	4.0	9.5	8.5	11.0	9.5	9.0	8.5
8	2.0	.5	3.5	1.5	6.0	4.5	9.0	7.5	10.5	10.0	9.0	8.5
9	1.5	1.0	3.5	1.5	6.5	4.5	10.0	8.0	10.5	9.5	8.5	7.0
10	2.0	1.0	2.5	1.5	7.0	4.0	9.5	8.0	11.0	9.0	8.5	8.0
11	1.5	1.0	2.0	1.5	7.0	4.5	9.0	8.0	10.5	9.5	9.0	8.0
12	2.0	1.0	3.5	1.5	6.0	4.5	9.0	8.0	10.5	9.0	9.0	8.0
13	1.5	1.0	4.0	2.0	6.5	4.5	9.0	8.0	11.5	9.5	9.0	8.0
14	2.0	1.0	4.0	2.0	6.5	4.5	8.5	8.5	11.0	9.5	9.0	9.0
15	1.5	1.0	4.5	2.0	6.0	5.0	9.5	8.0	10.5	9.5	10.0	9.0
16	1.5	1.0	4.5	2.0	7.0	5.0	9.0	8.0	11.0	9.5	10.0	9.5
17	1.5	1.0	3.5	2.5	8.0	5.0	9.0	8.0	10.5	10.0	10.0	9.5
18	2.0	1.0	3.0	2.0	8.0	5.5	8.5	7.5	10.5	9.5	9.5	8.5
19	1.5	1.0	3.5	2.0	7.0	5.5	9.5	7.5	11.0	9.0	8.5	8.0
20	1.0	.5	3.5	2.0	7.0	5.0	10.5	7.5	10.5	8.5	9.0	8.0
21	2.0	.5	3.0	2.0	7.5	5.5	11.0	8.5	11.0	9.5	9.5	8.5
22	2.0	1.0	3.5	2.5	8.5	5.5	10.5	9.5	10.5	10.0	9.0	8.0
23	2.0	1.0	3.0	2.5	9.0	5.0	10.0	9.0	10.5	10.0	8.5	8.5
24	2.5	1.5	3.0	2.5	9.5	5.5	10.5	9.0	11.0	10.0	9.0	8.5
25	2.0	1.5	3.5	2.5	10.0	5.5	11.0	9.5	11.5	10.5	9.0	8.5
26	2.0	1.5	4.0	2.5	10.0	6.5	11.5	9.5	11.0	10.0	9.0	8.5
27	1.5	1.0	5.0	3.0	9.5	6.5	12.0	9.5	10.5	9.5	8.5	8.0
28	2.5	1.0	5.0	3.0	9.5	7.0	12.0	10.0	10.5	9.5	8.0	6.5
29	2.0	1.0	5.5	3.0	9.5	6.5	12.0	10.0	10.5	9.5	7.5	7.0
30	2.5	1.0	6.0	2.5	8.5	7.0	11.5	10.5	10.0	9.0	8.5	7.5
31	---	---	6.0	3.0	---	---	12.0	10.5	10.0	9.0	---	---
MONTH	2.5	.0	6.0	.5	10.0	3.0	12.0	6.5	11.5	8.5	10.0	6.5
YEAR	12.0	.0										

15106100 BLACK RIVER NEAR PELICAN

LOCATION.--Lat 57°42'19", long 136°05'34", in NW¼SW¼ sec.18, T.48 S., R.58 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 1.2 mi (2.0 km) upstream from mouth at Black Bay and 23 mi (37 km) southeast of Pelican.

DRAINAGE AREA.--24.7 mi² (64.0 km²).

PERIOD OF RECORD.--October 1977 to September 1982 (discontinued).

REVISED RECORDS.--WDR AK-80-1: 1977-78.

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (9.1 m), from topographic map.

REMARKS.--Records fair except those of January and February, which are poor.

AVERAGE DISCHARGE.--5 years, 239 ft³/s (6.768 m³/s), 131.40 in/yr (3,338 mm/yr), 173,200 acre-ft/year (214 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,620 ft³/s (159 m³/s) Oct. 9, 1979, gage height, 13.00 ft (3.962 m), from rating curve extended above 470 ft³/s (13.3 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 7.9 ft³/s (0.22 m³/s) Dec. 19, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 2,710 ft³/s (76.7 m³/s) Oct. 17, gage height, 9.83 ft (2.996 m), from rating curve extended as explained above, but discharge may have been greater on Jan. 13 during a period of no gage-height record; minimum daily, 23 ft³/s (0.65 m³/s) Jan. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	470	306	327	33	42	34	59	208	437	148	60	658
2	238	221	202	30	52	34	59	194	442	124	56	714
3	183	178	162	28	51	35	59	228	381	107	55	270
4	164	648	150	27	55	37	58	233	303	98	57	153
5	148	840	188	26	70	39	57	356	295	98	57	198
6	148	292	173	24	78	43	57	624	278	103	68	515
7	139	202	[illegible]2	23	67	70	67	415	261	107	100	488
8	127	316	[illegible]9	23	62	275	80	339	289	107	115	267
9	117	550	88	27	82	148	129	308	319	105	129	157
10	112	569	80	40	80	100	124	341	311	110	86	136
11	105	431	74	49	64	73	96	608	301	100	71	159
12	503	306	69	48	56	61	84	401	278	153	96	110
13	560	238	65	100	50	55	98	292	251	159	70	80
14	550	186	64	550	47	51	98	241	221	226	59	743
15	837	139	71	220	44	49	98	254	196	183	53	295
16	330	112	112	90	43	48	136	267	178	159	50	171
17	1290	94	136	60	43	48	107	370	183	298	51	136
18	613	86	482	51	42	48	98	448	208	226	50	94
19	451	90	216	41	41	50	242	448	266	213	48	74
20	303	107	171	38	41	58	616	462	221	122	45	70
21	236	90	127	35	40	145	284	389	228	94	44	64
22	401	84	103	33	38	281	199	635	171	107	46	60
23	811	107	82	31	37	199	155	589	162	124	59	412
24	682	313	173	30	36	127	136	883	159	117	201	208
25	678	264	181	29	35	105	233	869	171	96	148	107
26	410	162	134	28	34	88	370	431	178	82	308	76
27	298	639	90	28	34	74	361	358	150	73	263	68
28	251	705	65	30	34	71	356	322	139	68	166	59
29	284	353	52	32	---	68	267	341	134	64	122	223
30	275	298	44	35	---	64	219	370	139	61	254	1080
31	275	---	38	39	---	61	---	410	---	61	436	---
TOTAL	11989	8926	4161	2878	1398	2639	5002	12634	7250	3893	3423	7845
MEAN	387	298	134	92.8	49 9	85.1	167	408	242	126	110	262
MAX	1290	840	482	1100	82	281	616	883	442	298	436	1080
MIN	105	84	38	23	34	34	57	194	134	61	44	59
CFSM	15.7	12.1	5.43	3.76	2.02	3.45	6.76	16.5	9.80	5.10	4.45	10.6
IN.	18.06	13.44	6.27	4.33	2.11	3.97	7.53	19.03	10.92	5.86	5.16	11.81
AC-FT	23780	17700	8250	5710	2770	5230	9920	25060	14380	7720	6790	15560

CAL YR 1981	TOTAL	86786	MEAN 238	MAX 1780	MIN 38	CFSM 9.64	IN 130.70	AC-FT 172100				
WTR YR 1982	TOTAL	72038	MEAN 197	MAX 1290	MIN 23	CFSM 7.98	IN 108.49	AC-FT 142900				

NOTE.--Fragmentary gage-height record during December and January.

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE

LOCATION.--Lat 57°39'46", long 135°11'06", in NW¼SE¼ sec.34, T.48 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 0.6 mi (1.0 km) above Hook Creek, 3.5 mi (5.6 km) upstream from mouth at Kadashan Bay, and 9 mi (14 km) south of Tenakee.

DRAINAGE AREA.--10.2 mi² (26.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1968 to September 1978, October 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 100 ft (30 m), from topographic map. Prior to Oct. 24, 1969, at site 90 ft (27.4 m) downstream at different datum; Oct. 24, 1969 to Sept. 30, 1978, at site 75 ft (22.9 m) downstream at datum 1.89 ft (0.564 m) higher.

REMARKS.--Records fair except those above 110 ft³/s (3.1 m³/s), which are poor.

AVERAGE DISCHARGE.--12 years, 63.3 ft³/s (1.793 m³/s) 84.28 in/yr (2.141 mm/yr), 45,900 acre-ft/yr (56.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft³/s (52.4 m³/s) Sept. 14, 1976, gage height, 6.60 ft (2.012 m), site and datum then in use, from rating curve extended above 950 ft³/s (26.9 m³/s) on basis of slope-area measurement at gage height 5.8 ft (1.77 m), site and datum then in use, from floodmarks; minimum daily, 3.8 ft³/s (0.11 m³/s) Jan. 20, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 750 ft³/s (21.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1915	*1,140	32.3	5.03	1.533	Nov. 5	0015	864	24.5	4.68	1.426

Minimum daily discharge, 7.2 ft³/s (0.20 m³/s) Mar. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	169	120	17	14	7.3	12	71	183	29	9.3	171
2	52	66	59	16	12	7.3	12	73	119	24	8.9	117
3	36	53	52	15	13	7.3	12	74	89	22	9.8	30
4	28	410	50	14	13	7.2	11	70	79	21	11	29
5	25	476	211	14	18	7.4	13	171	77	20	8.8	39
6	26	133	78	13	18	8.4	11	306	86	20	10	110
7	25	82	51	16	15	15	11	143	102	19	15	187
8	25	138	42	78	13	91	14	118	102	18	18	57
9	23	277	36	70	14	35	23	126	102	17	20	33
10	20	353	31	45	15	21	32	212	100	18	26	28
11	18	338	28	34	13	15	25	172	81	16	25	31
12	21	158	26	32	12	13	29	105	68	22	31	25
13	33	110	25	109	11	12	40	83	55	29	18	20
14	76	76	24	306	10	11	29	91	55	42	13	91
15	231	57	23	124	9.8	11	27	78	49	31	12	43
16	165	50	61	75	9.4	11	39	96	42	23	10	27
17	462	43	198	52	9.0	11	33	165	43	31	9.4	22
18	350	38	264	38	8.7	11	27	169	45	40	9.3	18
19	201	37	86	28	8.5	10	52	186	45	69	8.2	17
20	90	48	64	23	8.4	10	227	137	44	31	8.0	15
21	64	40	47	20	8.2	12	92	219	42	23	7.6	14
22	76	41	39	19	8.0	33	57	236	40	19	10	12
23	99	76	34	18	7.8	36	44	241	42	17	9.9	31
24	112	106	47	17	7.6	26	40	246	45	15	14	28
25	198	102	54	16	7.5	27	59	141	48	14	12	19
26	92	50	40	17	7.4	21	120	120	47	12	25	16
27	76	208	28	19	7.4	18	217	116	43	12	31	14
28	60	222	24	22	7.4	15	113	118	39	11	24	13
29	95	100	21	16	---	14	73	149	33	10	34	32
30	113	100	19	15	---	13	67	175	30	9.8	50	438
31	119	---	18	13	---	12	---	184	---	9.7	100	---
TOTAL	3164	4157	1900	1311	306.1	548.9	1560	4591	1975	694.5	598.2	1747
MEAN	102	139	61.3	42.3	10.9	17.7	52.0	148	65.8	22.4	19.3	58.2
MAX	462	476	264	306	18	91	227	306	183	69	100	438
MIN	18	37	18	13	7.4	7.2	11	70	30	9.7	7.6	12
CFSM	10.0	13.6	6.01	4.15	1.07	1.74	5.10	14.5	6.45	2.20	1.89	5.71
IN.	11.54	15.16	6.93	4.78	1.12	2.00	5.69	16.74	7.20	2.53	2.18	6.37
AC-FT	6280	8250	3770	2600	607	1090	3090	9110	3920	1380	1190	3470

CAL YR 1981	TOTAL 23796.0	MEAN 65.2	MAX 612	MIN 11	CFSM 6.39	IN 86.78	AC-FT 47200	
WTR YR 1982	TOTAL 22552.7	MEAN 61.8	MAX 476	MIN 7.2	CFSM 6.06	IN 82.24	AC-FT 44730	

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-72, 1974-77, 1981 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1967 to September 1978 and December 1981 to June 1982 (fragmentary).

INSTRUMENTATION.--Temperature recorder from Nov. 3, 1967 to Sept. 30, 1978 and since Dec. 3, 1981.

REMARKS.--Records good. No records Oct. 1 to Dec. 2, Jan. 2 to Feb. 18 and June 23 to Sept. 30 due to equipment malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum recorded, 14.0°C Aug. 2 and 3, 1978; minimum recorded 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded 8.5 °C June 18 and 19, minimum recorded 0.0°C on many days during the winter.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (UMHOS)	OXYGEN, DISSOLVED (MG/L)
SEP 17...	1230	10.0	86	12.2

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO JUNE 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1					---	---	.0	.0	---	---	.0	.0
2					---	---	---	---	---	---	.0	.0
3					2.[illegible]	2.5	---	---	---	---	.0	.0
4					2.5	1.0	---	---	---	---	.0	.0
5					2.5	1.5	---	---	---	---	.0	.0
6					1.5	.0	---	---	---	---	.0	.0
7					1.5	1.5	---	---	---	---	.0	.0
8					2.0	1.0	---	---	---	---	.5	.0
9					1.0	.5	---	---	---	---	.0	.0
10					1.0	.0	---	---	---	---	.0	.0
11					1.0	.5	---	---	---	---	.5	.0
12					1.0	.5	---	---	---	---	.0	.0
13					.5	.5	---	---	---	---	.0	.0
14					.5	.5	---	---	---	---	.0	.0
15					1.0	.0	---	---	---	---	.0	.0
16					.5	.0	---	---	---	---	.0	.0
17					1.5	.5	---	---	---	---	.0	.0
18					2.0	1.5	---	---	---	---	.0	.0
19					2.0	2.0	---	---	.0	.0	.0	.0
20					2.0	1.5	---	---	.0	.0	.0	.0
21					1.5	1.5	---	---	.5	.0	.0	.0
22					2.0	1.5	---	---	.0	.0	.0	.0
23					2.0	1.5	---	---	.0	.0	.5	.0
24					2.0	1.5	---	---	.0	.0	.5	.0
25					1.5	1.5	---	---	.0	.0	1.0	.0
26					1.5	.5	---	---	.0	.0	1.0	.5
27					1.0	.5	---	---	.5	.0	1.0	---
28					1.0	.0	---	---	.5	.0	1.0	---
29					.5	.0	---	---	---	---	1.0	---
30					.5	.0	---	---	---	---	.5	---
31					.0	.0	---	---	---	---	1.0	---
MONTH					2.5	.0					1.0	.0

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

15106980 TONALITE CREEK NEAR TENAKEE

LOCATION.--Lat 57°40'42", long 135°13'17", in SW¼ sec.28, T.48 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 2 mi (3.2 km) upstream from mouth and 9 mi (14 km) south of Tenakee.

DRAINAGE AREA.--14.5 mi² (37.6 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (15 m), from topographic map. Prior to Mar. 23, 1970, at site 40 ft (12 m) upstream on left bank at datum 0.30 ft (0.091 m) higher.

REMARKS.--Water-discharge records good except those for January through March which are fair.

AVERAGE DISCHARGE.--14 years, 96.5 ft³/s (2.733 m³/s), 90.38 in/yr (2,300 mm/yr), 69,910 acre-ft/yr (86.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,610 ft³/s (102 m³/s) Oct. 9, 1979, gage height, 9.72 ft (2.962 m) from floodmarks, from rating curve extended above 390 ft³/s (11 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 6.0 ft³/s (0.17 m³/s) Jan. 15-19, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	2215	*2,580	73.1	*8.18	2.493	Nov. 11	0400	1,610	45.6	6.47	1.972
Nov. 5	0915	1,550	43.9	6.35	1.935	Sept. 30	0800	1,140	32.3	5.53	1.686

Minimum discharge, 8.5 ft³/s (0.24 m³/s), Aug. 6, gage height, 1.23 ft (0.375 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186	232	167	23	17	10	17	92	290	30	11	212
2	74	107	84	22	17	10	16	89	287	26	10	200
3	54	79	73	21	17	10	16	95	207	23	10	99
4	45	549	64	20	18	10	18	92	136	22	12	58
5	40	944	253	19	22	10	16	211	122	21	9.2	61
6	40	196	105	19	24	12	15	377	114	20	8.9	109
7	39	125	65	25	21	30	15	195	117	19	14	253
8	38	168	51	70	18	100	19	150	133	20	15	100
9	34	379	43	84	19	30	33	155	142	19	18	60
10	30	483	35	76	20	15	44	209	142	20	15	46
11	28	689	32	73	17	13	35	272	140	18	16	48
12	32	206	29	77	16	12	38	176	122	22	21	43
13	45	140	27	139	15	11	56	121	107	32	16	35
14	92	101	26	310	14	11	39	106	92	49	13	139
15	317	79	25	180	13	11	35	109	80	42	11	83
16	302	69	72	105	13	12	42	106	70	30	11	53
17	822	60	189	75	13	14	39	161	73	42	11	41
18	680	52	369	52	12	16	34	217	83	53	11	34
19	322	51	116	37	12	15	72	227	86	114	10	30
20	132	62	86	32	12	16	347	233	72	50	10	27
21	90	56	63	27	11	18	147	236	59	33	9.2	24
22	99	54	48	25	11	48	84	339	53	27	10	23
23	140	79	41	24	11	56	61	347	54	24	11	26
24	176	111	58	22	11	39	53	395	56	22	14	27
25	451	152	78	23	11	45	64	377	56	19	15	23
26	151	80	55	24	10	32	127	208	54	17	26	21
27	108	267	38	26	10	26	172	173	48	16	48	20
28	87	426	32	26	10	22	144	163	42	14	32	20
29	123	159	29	22	---	20	97	167	36	13	27	23
30	161	151	27	20	---	19	83	209	32	12	41	629
31	153	---	25	18	---	18	---	279	---	12	107	---
TOTAL	5091	6306	2405	1716	415	711	1978	6286	3105	881	593.3	2567
MEAN	164	210	77.6	55.4	14.8	22.9	65.9	203	104	28.4	19.1	85.6
MIN	28	51	25	18	10	10	15	89	32	12	8.9	20
CFSM	11.3	14.5	5.35	3.82	1.02	1.58	4.55	14.0	7.17	1.96	1.32	5.90
IN.	13.06	16.18	6.17	4.40	1.06	1.82	5.07	16.13	7.97	2.26	1.52	6.59
AC-FT	10100	12510	4770	3400	823	1410	3920	12470	6160	1750	1180	5090

CAL YR 1981	TOTAL 38518.0	MEAN 106	MAX 1010	MIN 15	CFSM 7.31	IN 98.81	AC-FT 76400			
WTR YR 1982	TOTAL 32054.3	MEAN 87.8	MAX 944	MIN 8.9	CFSM 6.06	IN 82.23	AC-FT 63580			

15106980 TONALITE CREEK NEAR TENAKEE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1968 to current year.

INSTRUMENTATION.--Temperature recorder since June 27, 1968.

REMARKS.--Records good. No record, Dec. 14 to Mar. 16, June 6-21 and Aug. 13 to Sept. 30, due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 14.0°C Aug. 12, 1968; minimum, 0.0°C on many days during the winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 13.5°C July 26-29; minimum recorded, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT 07...	1340	37	41	52	6.4	6.0	11.6	21	6	7.2	.8	2.0

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT 07...	.2	15	<5.0	2.1	.0	7.0	.19	.090	.37	.46	.65	.020

15106980 TONALITE CREEK NEAR TENAKEE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO AUGUST 1982

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.0	1.0	3.0	2.0	6.0	4.5	11.5	1.5	13.0	12.0		
2	2.0	1.0	3.0	2.0	6.0	4.5	12.0	10.5	13.0	12.5		
3	2.0	.5	3.5	2.0	5.5	5.0	12.0	10.5	12.5	12.0		
4	1.5	.5	3.0	2.0	5.5	5.0	11.5	10.5	12.5	11.5		
5	1.5	.5	2.5	1.5	5.5	5.0	12.0	1.5	12.5	11.5		
6	2.0	1.0	2.0	1.5	---	---	13.0	1.5	12.5	12.0		
7	2.5	1.0	3.0	1.5	---	---	13.0	12.0	12.5	11.5		
8	2.5	1.5	3.0	2.0	---	---	12.0	3.0	12.5	12.0		
9	2.5	1.5	3.5	2.0	---	---	11.5	4.5	12.0	11.5		
10	2.0	1.5	3.0	2.5	---	---	12.0	11.0	12.0	11.5		
11	2.0	1.5	2.5	2.0	---	---	12.0	1.5	11.5	1.5		
12	2.0	1.5	3.0	2.5	---	---	11.0	1.5	11.5	1.5		
13	2.0	1.0	3.5	2.5	---	---	11.5	1.5	---	---		
14	2.5	1.5	4.0	2.5	---	---	11.5	1.5	---	---		
15	2.5	1.5	4.0	3.0	---	---	11.0	10.5	---	---		
16	2.5	1.5	4.0	3.0	---	---	11.0	10.5	---	---		
17	2.5	1.5	4.5	3.0	---	---	10.5	10.5	---	---		
18	3.0	1.5	3.5	3.0	---	---	10.5	10.0	---	---		
19	2.5	1.0	3.5	3.0	---	---	11.0	10.0	---	---		
20	1.0	.5	3.5	3.0	---	---	12.0	10.0	---	---		
21	1.5	.5	3.5	3.0	---	---	12.5	10.5	---	---		
22	2.5	1.5	3.5	3.0	9.5	6.0	12.5	1.5	---	---		
23	2.5	1.5	3.5	3.0	10.0	8.0	12.0	1.5	---	---		
24	3.0	2.0	3.5	3.0	10.5	8.5	13.0	1.5	---	---		
25	2.5	2.0	3.5	3.0	11.0	3.0	13.0	11.5	---	---		
26	2.0	1.5	4.5	3.5	11.5	10.0	13.5	11.5	---	---		
27	2.0	1.5	4.5	3.5	12.0	10.5	13.5	11.5	---	---		
28	2.0	1.5	5.5	4.0	12.0	11.0	13.5	12.0	---	---		
29	2.0	1.5	5.5	4.0	12.0	1.5	13.5	12.0	---	---		
30	2.5	1.5	5.5	4.0	11.5	10.5	13.0	12.5	---	---		
31	---	---	5.5	4.0	---	---	13.0	12.5	---	---		
MONTH	3.0	.5	5.5	1.5	12.0	1.5	13.5	1.5				

15107920 INDIAN RIVER NEAR TENAKEE

LOCATION.--Lat 57°49'50", long 135°16'00", in Hydrologic Unit 19060000, on Chichagof Island, in Tongas National Forest, on left bank 5 mi (8 km) upstream from mouth and 4 mi (6 km) northwest of Tenakee.

DRAINAGE AREA.--12.9 mi² (33.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to September 1982 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 330 ft (100 m), from topographic map.

REMARKS.--Records good except those for January, February, and March, which are fair.

AVERAGE DISCHARGE.--7 years, 83.3 ft³/s (2.359 m³/s), 87.69 in/yr (2,227 mm/yr), 60,350 acre-ft/yr (74.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s (53.8 m³/s) Sept. 15, 1976, gage height, 8.03 ft (2.478 m), from rating curve extended above 1,100 ft³/s (31 m³/s); minimum daily, 5.0 ft³/s (0.14 m³/s) Feb. 19 and 20, 1979.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 17	1930	808	22.9	5.20	1.585	Sept. 30	0600	767	21.7	4.90	1.494
Nov. 5	0500	*816	23.1	*5.25	1.600						

Minimum discharge, 7.5 ft³/s (0.212 m³/s) Aug. 20-22; gage height, 0.50 ft (0.152 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	170	103	16	15	13	14	72	259	59	9.5	161
2	88	103	76	15	15	13	14	70	259	49	9.0	159
3	66	82	64	15	15	12	14	78	209	39	9.5	92
4	55	297	57	15	14	12	14	74	161	36	11	68
5	49	521	82	15	14	13	14	112	143	34	9.5	78
6	49	188	68	15	17	14	14	197	132	27	10	99
7	47	136	53	15	15	16	15	143	139	27	12	168
8	45	157	45	42	14	60	16	125	148	25	23	103
9	39	237	36	34	14	35	20	125	159	25	27	76
10	34	277	29	26	14	24	30	152	159	23	15	66
11	31	287	27	20	14	17	26	168	161	18	12	61
12	34	179	26	18	14	15	30	139	159	29	12	53
13	47	136	25	80	14	14	39	114	141	34	11	47
14	82	114	24	170	14	13	31	108	125	51	9.5	88
15	200	97	24	90	14	13	28	105	112	39	9.0	66
16	118	84	25	60	13	13	38	105	107	31	8.5	53
17	401	74	49	50	13	13	35	146	105	53	8.5	45
18	349	64	132	40	13	13	28	181	116	68	8.5	39
19	232	61	72	35	13	13	40	173	126	66	8.0	34
20	148	57	53	32	13	13	136	173	108	36	8.0	29
21	118	51	42	29	13	14	92	164	93	27	7.5	25
22	116	47	31	26	13	30	59	186	84	25	8.5	23
23	136	47	27	24	13	35	45	204	82	20	9.0	42
24	134	78	29	22	13	26	34	284	88	16	9.5	42
25	164	93	36	21	13	25	49	281	92	14	9.0	29
26	119	64	27	20	13	21	80	191	90	13	49	25
27	103	166	21	19	13	18	90	172	82	12	76	27
28	90	227	19	21	13	16	99	162	76	12	36	23
29	107	118	18	18	---	15	78	166	66	11	23	34
30	121	99	17	16	---	14	66	202	64	10	36	369
31	112	---	16	15	---	14	---	242	---	10	88	---
TOTAL	3600	4311	1353	1034	386	577	1288	4814	3845	939	582.0	2224
MEAN	116	144	43.6	33.4	13.8	18.6	42.9	155	128	30.3	18.8	74.1
MAX	401	521	132	170	17	60	136	284	259	68	88	369
MIN	31	47	16	15	13	12	14	70	64	10	7.5	23
CFSM	8.99	11.2	3.38	2.59	1.07	1.44	3.33	12.0	9.92	2.35	1.46	5.74
IN.	10.38	12.43	3.90	2.98	1.11	1.66	3.71	13.88	11.09	2.71	1.68	6.41
AC-FT	7140	8550	2680	2050	766	1140	2550	9550	7630	1860	1150	4410

CAL YR 1981 TOTAL 32839.0 MEAN 90.0 MAX 613 MIN 16 CFSM 6.98 IN 94.69 AC-FT 65140
WTR YR 1982 TOTAL 24953.0 MEAN 68.4 MAX 521 MIN 7.5 CFSM 5.30 IN 71.95 AC-FT 49490

NOTE.--No gage-height record Dec. 28 to Apr. 19.

SOUTHEAST ALASKA

15107920 INDIAN RIVER NEAR TENAKEE--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 07...	0930	49	153	147	7.0	6.0	11.3	65	0

DATE	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)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 07...	24	1.4	2.1	.5	65	<5.0	2.1	.1	6.3

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 07...	.27	.090	.30	.39	.66	.010	2	.26

15200280 GULKANA RIVER AT SOURDOUGH

LOCATION.--Lat 62°31'15", long 145°31'51", in NE¼ sec.35, T.19 N., R.2 W., Hydrologic Unit 19050003, on left bank 0.3 mi (0.5 km) downstream from Sourdough Creek, and 0.8 mi (1.3 km) southwest of Sourdough.

DRAINAGE AREA.--1,770 mi² (4,580 km²).

PERIOD OF RECORD.--October 1972 to September 1978, May to September 1982 (discontinued).

REVISED RECORDS.--WRD AK-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,845.96 ft (562.649 m) National Geodetic Vertical Datum of 1929 (levels of Alyeska Engineering).

REMARKS.--Records good July 28 to September 25, fair otherwise.

AVERAGE DISCHARGE.--6 years (water years 1973-78), 1,063 ft³/s (30.10 m³/s), 8.16 in/yr (207 mm/yr), 770,100 acre-ft/yr (9.50 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,170 ft³/s (260 m³/s) June 2, 1977, gage height, 10.07 ft (3.069 m); maximum gage height, 16.03 ft (4.886 m) May 7, 1976, backwater from ice; minimum daily discharge, about 200 ft³/s (5.66 m³/s) Dec. 6, 1973 to Apr. 12, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,600 ft³/s (159 m³/s) May 18, gage height, 8.35 (2.545 m); maximum gage height, 12.16 ft (3.706 m) May 12-13, backwater from ice from flood marks; minimum daily discharge, during period May to September, about 700 ft³/s (20 m³/s) May 1.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								700	3500	1600	1910	878
2								800	3500	1500	1740	958
3								1000	3750	1500	1580	958
4								1200	4000	1450	1460	982
5								1500	3000	1400	1360	1090
6								1800	2850	1350	1270	1110
7								2300	2900	1150	1200	1080
8								2800	3250	1100	1140	1200
9								3500	3000	1150	1110	1840
10								3500	2550	1250	1090	2380
11								3600	2500	1150	1080	2190
12								3700	2400	1250	1050	1960
13								3700	2050	1700	1020	1850
14								3800	1840	2600	974	1760
15								3800	2100	2200	942	1670
16								3900	2900	1900	920	1620
17								4300	3450	1800	910	1610
18								4820	3750	2900	910	1560
19								4650	3900	2950	894	1480
20								4640	3800	2450	870	1410
21								4360	3950	2300	846	1370
22								4180	3800	2050	830	1300
23								3990	3650	1850	814	1260
24								3940	3100	1700	806	1220
25								4040	2600	1750	822	1190
26								4400	2300	1700	822	1200
27								4250	2200	1750	814	1150
28								4100	2050	1660	790	1130
29								3700	1850	1510	766	1100
30								3500	1800	1450	782	1300
31								3500	---	1620	806	---
TOTAL								103970	88290	53690	32328	41806
MEAN								3354	2943	1732	1043	1394
MAX								4820	4000	2950	1910	2380
MIN								700	1800	1100	766	878
CFSM								1.90	1.66	.98	.59	.79
IN.								2.19	1.86	1.13	.68	.88
AC-FT								206200	175100	106500	64120	82920

NOTE.--No gage-height record May 27 to June 30.

15200280 GULKANA RIVER AT SOURDOUGH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORDS.--Water years 1973 to 1978, 1982.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1972 to September 1978 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	TEMPERATURE, AIR (DEG C)
MAY							
26...	1345	218	4.00	4650	--	5.0	10.5
26...	1346	--	30.0	--	--	4.9	--
26...	1347	--	70.0	--	--	4.6	--
26...	1348	--	110	--	--	4.6	--
26...	1349	--	150	--	--	4.6	--
26...	1350	--	200	--	--	4.6	--
JUL							
01...	1500	201	--	1660	--	--	15.0
01...	1501	--	15.0	--	--	13.7	--
01...	1502	--	45.0	--	--	13.6	--
01...	1503	--	95.0	--	--	13.5	--
01...	1504	--	145	--	--	13.5	--
01...	1505	--	195	--	--	14.0	--
28...	1100	--	--	1650	138	15.0	--

15208000 TONSINA RIVER AT TONSINA

LOCATION.--Lat 61°39'41", long 145°11'02", in SW¼SW¼ sec.26, T.2 S., R.1 E., Hydrologic Unit 19050003, on right bank 0.2 mi (0.3 km) upstream from Richardson Highway crossing at Tonsina, 0.6 mi (1.0 km) upstream from Bernard Creek, and 0.8 mi (1.3 km) upstream from Squirrel Creek.

DRAINAGE AREA.--420 mi² (1,090 km²), approximately.

PERIOD OF RECORD.--May 1950 to December 1954, January to September 1955 (fragmentary), October 1955 to September 1982 (discontinued).

REVISED RECORDS.--WDR AK-75-1: 1974. WDR AK-81-1: 1975 (M), 1977 (M), 1980 (M).

GAGE.--Water-stage recorder. Altitude of gage is 1,500 ft (460 m), from topographic map. Prior to Oct. 16, 1957, at site 800 ft (240 m) downstream at different datum. Oct. 17, 1957 to Apr. 18, 1967, June 9, 1973 to Apr. 17, 1974, nonrecording gage and Apr. 19, 1967 to June 8, 1973, water-stage recorder at site 0.2 mi (0.3 km) downstream at prior datum. Apr. 18, 1974 to May 30, 1975, nonrecording gage at present site and datum.

REMARKS.--Records good except those for period of no gage-height record, Nov. 2 to May 25, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--31 years (water years 1951-54, 1956-82), 844 ft³/s (23.90 m³/s), 27.29 in/yr (693 mm/yr), 611,500 acre-ft/yr (754 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,490 ft³/s (240 m³/s) June 17, 1962, gage height, 4.91 ft (1.497 m), from graph based on gage readings, site and datum then in use; maximum gage height, 7.00 ft (2.134 m) June 8, 1957, from graph based on gage readings, site and datum then in use; minimum daily discharge, about 35 ft³/s (0.99 m³/s) Mar. 11 to Apr. 20, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,440 ft³/s (97.4 m³/s) June 29, gage height, 20.72 ft (6.316 m); minimum daily, about 110 ft³/s (3.1 m³/s) Apr. 8-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	470	618	220	170	140	120	120	140	1020	2930	2460	1100
2	451	550	220	170	140	120	120	150	1210	2680	2320	1040
3	406	550	220	160	140	120	120	160	1450	2420	2150	990
4	406	500	200	160	130	120	120	170	1620	2200	2010	932
5	406	480	200	160	130	120	120	180	1670	2060	1880	868
6	380	460	200	160	130	120	120	200	1750	1990	1840	868
7	366	440	200	160	130	120	120	240	2020	1990	1800	904
8	366	420	200	160	130	120	110	280	2540	2120	1790	894
9	354	400	200	160	130	120	110	340	2770	2330	1700	868
10	344	380	200	150	130	120	110	400	2930	2400	1620	826
11	352	360	190	150	130	120	110	440	3100	2450	1530	774
12	322	340	190	150	130	120	110	480	2970	2400	1450	732
13	580	340	190	150	130	120	110	500	2750	2340	1450	685
14	990	320	190	150	130	120	110	500	2460	2290	1410	792
15	1050	320	190	150	130	120	110	550	2190	2290	1450	999
16	1050	300	190	150	130	120	110	550	2010	2270	1540	1620
17	1080	300	190	150	130	120	110	550	1950	2230	1560	2810
18	1060	280	190	150	130	120	110	600	1870	2170	1540	2910
19	990	280	180	150	130	120	110	600	2150	2100	1480	2630
20	938	280	180	150	130	120	110	550	2290	2090	1380	2890
21	894	260	180	150	130	120	110	550	2160	2190	1360	2930
22	952	260	180	140	130	120	110	550	2090	2290	1340	2600
23	1030	260	180	140	130	120	120	550	2060	2340	1340	2150
24	1050	260	180	140	130	120	120	600	2060	2380	1360	1800
25	1100	240	180	140	130	120	120	600	2220	2500	1350	1540
26	1100	240	180	140	130	120	120	618	2520	2560	1330	1360
27	1080	240	170	140	130	120	120	655	2750	2400	1310	1220
28	990	240	170	140	130	120	130	708	3070	2340	1260	1080
29	894	220	170	140	---	120	130	749	3400	2360	1180	990
30	776	220	170	140	---	120	130	792	3210	2450	1160	932
31	685	---	170	140	---	120	---	876	---	2520	1150	---
TOTAL	22912	10358	5870	4660	3670	3720	3480	14828	68260	72080	48500	42734
MEAN	739	345	189	150	131	120	116	478	2275	2325	1565	1424
MAX	1100	618	220	170	140	120	130	876	3400	2930	2460	2930
MIN	322	220	170	140	130	120	110	140	1020	1990	1150	685
CFSM	1.76	.82	45	.36	.31	.29	.28	1.14	5.42	5.54	3.73	3.39
IN.	2.03	.92	.52	.41	.33	.33	.31	1.31	6.05	6.38	4.30	3.79
AC-FT	45450	20550	11640	9240	7280	7380	6900	29410	135400	143000	96200	84760

CAL YR 1981 TOTAL 394449 MEAN 1081 MAX 5250 MIN 85 CFSM 2.57 IN 34.94 AC-FT 782400
WTR YR 1982 TOTAL 301072 MEAN 825 MAX 3400 MIN 110 CFSM 1.96 IN 26.67 AC-FT 597200

15212000 COPPER RIVER NEAR CHITINA
(National stream-quality accounting network station)

LOCATION.--Lat 61°27'56", long 144°27'21", in SW¼NE¼ sec.2, T.5 S., R.5 E., Hydrologic Unit 19050003, on right bank at head of Woods Canyon, 0.5 mi (0.8 km) downstream from Taral Creek and abandoned Indian village of Taral, 2.2 mi (3.5 km) upstream from Tenas Creek, and 3.5 mi (5.6 km) south of Chitina.

DRAINAGE AREA.--20,600 mi² (53,400 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to September 1950, May to November 1952, October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 400 ft (122 m), from topographic map. Prior to June 2, 1952, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 1.4 ft (0.43 m) higher.

REMARKS.--Records good except those for July 18 to Aug. 23, which are fair and those for period of no gage-height record, Oct. 20 to May 26, which are poor. Streamflow augmented by glaciers, which cover 17 percent of the basin.

AVERAGE DISCHARGE.--27 years, 37,670 ft³/s (1,067 m³/s), 24.83 in/yr (631 mm/yr), 27,290,000 acre-ft/yr (33.7 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 380,000 ft³/s (10,800 m³/s) Aug. 8, 1981, gage height, 37.3 ft (11.37 m), from floodmarks, from rating curve extended above 170,000 ft³/s (4,800 m³/s) on basis of velocity-area study; minimum daily, about 2,000 ft³/s (57 m³/s) Mar. 1-31, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 174,000 ft³/s (4,930 m³/s) Aug 1., gage height, 22.1 ft (6.74 m); minimum daily, about 3,200 ft³/s (91 m³/s) Apr. 4-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21400	14000	6000	5000	4000	3500	3500	9500	45400	114000	167000	63600
2	21000	13000	6000	5000	4000	3500	3500	11000	50800	105000	144000	58500
3	19400	12000	6000	5000	4000	3500	3500	13000	52600	96200	130000	55400
4	19000	11000	6000	5000	4000	3500	3200	15000	55700	93200	123000	53500
5	18000	11000	6000	5000	4000	3500	3200	18000	54600	90800	120000	53200
6	17000	10000	6000	5000	4000	3500	3200	22000	55400	90800	120000	53200
7	17000	10000	6000	5000	4000	3500	3200	26000	64800	100000	110000	55000
8	16000	10000	6000	5000	4000	3500	3200	32000	76400	108000	110000	53500
9	15000	9500	6000	5000	4000	3500	3200	38000	78800	118000	110000	52600
10	15000	9500	5500	5000	4000	3500	3200	44000	78000	124000	110000	51.00
11	14000	9000	5500	4500	4000	3500	3200	40000	78800	122000	100000	49000
12	14000	9000	5500	4500	4000	3500	3200	36400	76800	119000	100000	47200
13	36000	8500	5500	4500	4000	3500	3200	34000	72400	114000	100000	45100
14	60700	8500	5500	4500	4000	3500	3200	34000	67600	109000	100000	46900
15	57100	8500	5500	4500	4000	3500	3200	32000	65200	110000	110000	50800
16	51400	8000	5500	4500	4000	3500	3200	32000	62000	108000	127000	60600
17	45400	8000	5500	4500	4000	3500	3200	32000	61600	107000	120000	74400
18	41200	7500	5500	4500	4000	3500	3500	34000	67600	105000	120000	72400
19	38200	7500	5500	4500	4000	3500	3500	36000	76400	105000	110000	69600
20	34000	7000	5500	4500	4000	3500	3500	36000	79600	106000	110000	75600
21	26000	7000	5000	4500	4000	3500	4000	34000	78000	105000	100000	77200
22	28000	7000	5000	4500	4000	3500	4000	34000	74000	110000	100000	72000
23	30000	7000	5000	4500	4000	3500	4500	32000	74400	120000	95000	67600
24	30000	6500	5000	4500	4000	3500	5000	32000	78000	130000	93200	59900
25	32000	6500	5000	4500	4000	3500	5500	34000	86800	140000	92400	55000
26	32000	6500	5000	4500	4000	3500	6000	34000	97600	150000	88400	50000
27	30000	6500	5000	4500	4000	3500	6500	35800	107000	140000	85200	46000
28	26000	6500	5000	4500	4000	3500	7000	37000	120000	150000	79600	42000
29	22000	6500	5000	4500	---	3500	7500	40000	130000	151000	76400	38000
30	19000	6000	5000	4500	---	3500	8500	40300	120000	158000	70400	34000
31	16000	---	5000	4500	---	3500	---	40900	---	153000	66800	---
TOTAL	861800	257500	169500	144500	112000	108500	124300	968900	2286300	3652000	3288400	1682900
MEAN	27800	8583	5468	4661	4000	3500	4143	31250	76210	117800	106100	56100
MAX	60700	14000	6000	5000	4000	3500	8500	44000	130000	158000	167000	77200
MIN	14000	6000	5000	4500	4000	3500	3200	9500	45400	90800	66800	34000
CFSM	1.35	.42	.27	.23	.19	.17	.20	1.52	3.70	5.72	5.15	2.72
IN.	1.56	.46	.31	.26	.20	.20	.22	1.75	4.13	6.59	5.94	3.04
AC-FT	1709000	510800	336200	286600	222200	215200	246500	1922000	4535000	7244000	6523000	3338000

CAL YR 1981 TOTAL 16612800 MEAN 45510 MAX 360000 MIN 5000 CFSM 2.21 IN 30.00 AC-FT 32950000
WTR YR 1982 TOTAL 13656600 MEAN 37420 MAX 167000 MIN 3200 CFSM 1.82 IN 24.66 AC-FT 27090000

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-58, 1963-72, 1974-75, and 1978 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July to September 1957 and June to September 1965, once-daily readings during open-water. May to September 1979, October 1980, and June to September 1981 (discontinued).
SUSPENDED SEDIMENT DISCHARGE: June to September 1957, October 1963 to September 1965 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURES: Maximum recorded, 14.5°C July 3, 1979 but may have been higher during periods of no record; minimum, 0.0°C on most days during winter periods. Maximum observed, 15.0°C July 26, 1965.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	PERCENT OF TOTAL DEPTH	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
OCT									
02...	1401	35.0	4.70	60.0	--	--	1.9	--	--
02...	1402	90.0	8.10	60.0	210	8.1	2.0	13.6	101
02...	1403	150	10.1	20.0	--	--	2.1	--	--
02...	1404	150	10.1	60.0	--	--	2.1	--	--
02...	1406	185	12.1	20.0	--	--	2.3	--	--
02...	1407	185	12.1	60.0	--	--	2.3	--	--
02...	1409	210	13.0	60.0	--	--	2.4	--	--
02...	1410	225	13.4	20.0	--	--	2.4	--	--
02...	1411	225	13.4	60.0	--	--	2.4	--	--
02...	1412	240	14.8	20.0	201	8.1	2.5	--	--
02...	1413	240	14.8	60.0	--	--	2.5	--	--
02...	1414	255	16.5	20.0	--	--	2.5	--	--
02...	1415	255	16.5	60.0	--	--	2.5	--	--
02...	1416	270	17.0	20.0	202	8.1	2.5	13.7	101
02...	1417	270	17.0	60.0	--	--	2.5	--	--
02...	1418	290	9.50	20.0	--	--	2.5	--	--
02...	1419	290	9.50	60.0	--	--	2.5	--	--
APR									
02...	1431	19.0	--	--	270	7.5	.0	12.3	84
02...	1432	45.0	--	--	269	7.6	.0	13.3	91
MAY									
28...	1701	50.0	--	--	--	--	8.0	--	--
28...	1703	150	--	--	--	--	8.0	--	--
28...	1705	195	--	--	172	--	8.0	11.7	99
28...	1707	265	--	--	160	--	8.2	--	--
28...	1709	300	--	--	152	--	8.4	11.5	98
28...	1711	335	--	--	152	--	8.4	--	--
28...	1713	360	--	--	150	--	8.4	11.6	99
JUL									
09...	1201	170	--	--	132	8.6	7.6	11.0	93
09...	1202	245	--	--	130	8.6	7.6	--	--
09...	1203	295	--	--	130	8.5	7.7	10.9	93
09...	1204	340	--	--	132	8.5	7.8	--	--
09...	1205	395	--	--	135	8.4	8.4	--	--
09...	1206	450	--	--	140	8.4	9.4	10.7	95
09...	1207	505	--	--	142	8.4	10.3	--	--
09...	1208	565	--	--	145	8.4	10.9	--	--
09...	1209	615	--	--	145	8.3	11.2	--	--
09...	1210	660	--	--	148	8.2	11.3	10.3	95
30...	1331	60.0	--	--	--	--	6.3	--	--
30...	1332	170	--	--	132	8.6	6.2	11.8	96
30...	1333	215	--	--	132	8.6	6.3	--	--
30...	1334	295	--	--	132	8.6	6.2	--	--
30...	1335	340	--	--	132	8.6	6.5	--	--
30...	1336	395	--	--	135	8.6	7.4	--	--
30...	1337	450	--	--	138	8.6	7.8	11.3	96
30...	1338	500	--	--	140	8.6	8.5	--	--
30...	1339	560	--	--	145	8.6	9.2	--	--
30...	1340	595	--	--	145	8.5	9.7	--	--
30...	1341	685	--	--	142	8.5	10.0	10.7	96
SEP									
30...	1501	50.0	--	--	190	8.0	5.3	--	--
30...	1502	140	--	--	190	8.2	5.3	--	--
30...	1503	310	--	--	200	8.2	5.2	--	--
30...	1504	385	--	--	200	8.2	5.0	--	--
30...	1505	485	--	--	205	8.2	4.9	--	--

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	TEMPER-ATURE, AIR (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT											
02...	1400	310	21000	215	6.5	31	754	--	--	95	29
APR											
02...	1430	--	E3500	320	-2.0	6.8	759	K1	K10	130	39
MAY											
28...	1700	400	35700	166	--	92	761	K4	K9	68	21
JUL											
09...	1200	720	119000	140	20.0	1200	748	K22	K28	61	20
30...	1330	745	160000	149	16.5	1300	751	K17	K63	62	20
SEP											
30...	1500	620	32700	194	7.0	33	--	--	--	86	27

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT											
02...	5.4	6.8	1.8	73	27	12	.2	7.3	134	134	.15
APR											
02...	7.6	12	1.8	100	28	20	.1	14	179	183	--
MAY											
28...	3.8	4.8	1.4	58	6.0	5.9	.1	6.7	100	85	--
JUL											
09...	2.7	3.0	1.3	56	13	2.4	<.1	3.9	75	80	--
30...	3.0	3.2	1.5	66	14	2.8	.1	3.7	95	88	--
SEP											
30...	4.4	5.4	1.3	69	23	5.7	.1	6.4	104	115	--

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)
OCT											
02...	.21	.200	.160	.11	<.21	.27	.48	.020	.030	--	4
APR											
02...	.15	--	.090	--	.31	--	--	<.010	<.010	.020	3
MAY											
28...	<.10	--	.120	--	.50	--	--	.470	.070	<.010	5
JUL											
09...	<.10	--	.150	--	1.20	--	--	1.90	.020	.020	20
30 ..	<.10	--	.090	--	1.60	--	--	3.30	.020	.020	20
SEP											
30...	<.10	--	.130	--	.50	--	--	.100	.030	.010	4

DATE	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
OCT											
02...	2	2	200	200	0	2	0	2	10	10	0
APR											
02...	0	3	100	60	40	<1	--	<3	10	0	10
MAY											
28...	3	2	100	80	19	<1	--	<3	20	--	<10
JUL											
09...	18	2	600	600	19	<1	--	<1	60	--	<10
30...	19	1	600	600	19	<1	--	<1	90	--	<10
SEP											
30...	2	2	100	80	24	<1	--	1	10	0	20

E ESTIMATED
K NON-IDEAL COLONY COUNT

15212000 COPPER RIVER NEAR CHITINA AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)
OCT											
02...	2	1	1	37	31	6	4200	4100	60	7	5
APR											
02...	1	--	<1	5	1	4	460	440	21	<1	--
MAY											
28...	7	--	<1	60	52	8	15000	15000	79	3	--
JUL											
09...	25	--	<1	140	130	6	56000	56000	71	<1	--
30...	18	--	<1	190	190	3	77000	77000	80	5	4
SEP											
30...	3	--	<1	290	290	4	6500	6500	27	11	10

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)
OCT											
02...	2	90	80	10	.3	.3	.0	7	7	0	0
APR											
02...	<1	10	6	4	.1	--	<.1	<1	--	<1	1
MAY											
23...	<1	310	300	12	.3	.2	.1	19	--	<1	1
JUL											
09...	<1	1300	1300	7	.5	--	<.1	33	31	2	<1
30...	1	1800	1800	6	.4	--	<.1	40	--	<1	<1
SEP											
30...	1	130	120	7	.2	--	<.1	13	8	5	1

DATE	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT											
02...	0	0	0	0	0	60	40	20	135	7650	--
APR											
02...	0	1	<1	--	1	10	0	13	--	--	--
MAY											
28...	--	<1	<1	--	<1	60	30	29	743	71600	55
JUL											
09...	--	<1	<1	--	<1	250	230	20	2860	919000	73
30...	--	<1	<1	--	<1	260	250	6	4050	1750000	72
SEP											
30...	0	1	<1	--	<1	80	60	25	232	20500	44

15216000 POWER CREEK NEAR CORDOVA

LOCATION.--Lat 60°35'14", long 145°37'05", Hydrologic Unit 19050003, on right bank at old bridge site, 1 mi (1.6 km) upstream from Eyak Lake, and 5.5 mi (8.8 km) northeast of Cordova.

DRAINAGE AREA.--20.5 mi² (53.1 km²).

PERIOD OF RECORD.--July to November 1913 (fragmentary), August 1947 to current year.

REVISED RECORDS.--WDR AK-81-1: 1972 (M), 1975 (M), 1980 (P).

GAGE.--Water-stage recorder. Datum of gage is 33.5 ft (10.21 m) National Geodetic Vertical Datum of 1929 (river profile survey). July to November 1913, nonrecording gage 0.5 mi (0.8 km) upstream at different datum. August 1947 to March 1960, water-stage recorder on left bank at same datum.

REMARKS.--Records good except those for the periods of no gage-height record, Dec. 25 to Mar. 17 and Sept. 18-30, which are poor. Streamflow augmented by glaciers, which cover 27 percent of the basin.

AVERAGE DISCHARGE.--35 years, 251 ft³/s (7,108 m³/s), 166.27 in/yr (4,223 mm/yr), 181,800 acre-ft/yr (224 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 5,540 ft³/s (157 m³/s) Sept. 25, 1949, gage height, 7.65 ft (2.332 m), from rating curve extended above 2,300 ft³/s (65 m³/s); minimum recorded, 13 ft³/s (0.37 m³/s) Apr. 29, 1950, gage height, 1.50 ft (0.457 m), but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft³/s (48 m³/s), and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 13	0400	4,820	136	6.57	2.003
Sept. 6	0530	2,000	56.6	5.40	1.646
Sept. 16	0700	*a5,330	151	*6.86	2.091
Sept. 19	Unknown	Unknown		Unknown	

a From rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-area measurement at gage height, 6.71 ft (2.045 m).

Minimum discharge, 15 ft³/s (0.42 m³/s) Mar. 21, result of temporary storage from snow slide, but may have been less during period of no gage-height record in March.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	312	155	122	55	40	30	25	47	372	730	423	430
2	281	152	108	50	40	30	24	45	425	551	381	342
3	260	145	100	50	45	35	24	43	386	475	370	333
4	340	155	95	45	45	35	24	42	353	477	330	288
5	420	140	90	45	50	35	24	42	311	548	330	455
6	305	130	85	[illegible]	50	35	24	45	291	472	325	1190
7	266	125	80	45	45	35	25	50	501	466	321	504
8	254	121	80	45	45	35	26	53	457	504	480	382
9	333	143	75	50	45	40	25	60	462	454	470	327
10	275	731	70	50	45	35	25	67	607	443	338	294
11	287	528	80	45	40	30	25	76	704	436	301	263
12	812	388	84	45	40	25	24	82	758	407	322	235
13	2470	240	78	45	40	25	23	101	546	392	357	808
14	850	188	74	45	40	25	24	113	430	410	333	765
15	600	163	71	45	35	25	24	120	374	387	343	1240
16	500	146	89	45	35	28	23	124	339	434	330	2190
17	700	130	164	40	35	28	23	132	317	453	290	650
18	500	120	427	40	35	30	23	138	404	395	284	1200
19	400	120	225	40	35	35	26	149	461	357	283	1700
20	300	110	152	40	35	45	41	162	424	377	295	600
21	1000	110	123	40	35	41	34	174	385	386	290	800
22	800	100	109	40	30	51	31	181	363	371	279	600
23	700	100	117	40	30	58	29	189	375	437	305	500
24	500	90	110	35	30	42	30	192	409	458	305	400
25	400	90	95	35	30	38	44	210	464	424	282	300
26	300	100	90	35	30	34	42	206	504	386	261	350
27	250	170	85	35	30	31	71	186	532	389	280	250
28	207	135	75	35	30	30	72	193	699	421	288	300
29	192	116	65	40	---	29	58	213	661	510	440	350
30	180	111	60	40	---	27	51	236	798	597	654	450
31	165	---	55	40	---	26	---	305	---	577	869	---
TOTAL	15159	5252	3333	1325	1065	1048	964	3976	14112	14024	11159	18496
MEAN	489	175	108	42.7	38.0	33.8	32.1	128	470	452	360	617
MAX	2470	731	427	55	50	58	72	305	798	730	869	2190
MIN	165	90	55	35	30	25	23	42	291	357	261	235
CFSM	23.9	8.54	5.27	2.08	1.85	1.65	1.57	6.24	22.9	22.0	17.6	30.1
IN.	27.51	9.53	6.05	2.40	1.93	1.90	1.75	7.21	25.61	25.45	20.25	33.56
AC-FT	30070	10420	6610	2630	2110	2080	1910	7890	27990	27820	22130	36690

CAL YR 1981 TOTAL 139374 MEAN 382 MAX 3610 MIN 45 CFSM 18.6 IN 252.90 AC-FT 276400
WTR YR 1982 TOTAL 89913 MEAN 246 MAX 2470 MIN 23 CFSM 12.0 IN 163.15 AC-FT 178300

15237020 MAIN BAY CREEK NEAR PORT NELLIE JUAN

LOCATION.--Lat 60°31'08", long 148°05'32", in SW¼SW¼ sec.17, T.5 N., R.8 E., Hydrologic Unit 19050003, in Chugach National Forest, on right bank 300 ft (90 m) upstream from mouth at head of Main Bay, 4 mi (6 km) southeast of Port Nellie Juan, and 27 mi (43 km) southeast of Whittier.

DRAINAGE AREA.--5.93 mi² (15.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (15 m), from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 835 ft³/s (23.6 m³/s), Aug. 20, 1981, gage height 3.12 ft (0.951 m), from rating curve extended above 230 ft³/s (6.5 m³/s); minimum daily, 5.8 ft³/s (0.164 m³/s) Mar. 4, 5, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 491 ft³/s (13.9 m³/s) Oct. 21, gage height, 2.91 ft (0.887 m); minimum daily, 5.8 ft³/s (0.164 m³/s) Mar. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	65	89	17	17	6.6	11	58	125	191	47	103
2	31	60	72	16	20	6.4	9.5	51	129	153	42	84
3	26	51	66	14	40	6.2	8.9	45	122	118	36	84
4	36	53	56	13	86	5.8	8.3	41	115	103	33	74
5	118	44	48	11	70	5.8	7.5	37	106	98	29	172
6	97	36	38	11	58	7.2	7.2	34	138	87	26	298
7	78	44	32	11	55	8.6	6.9	36	234	82	39	246
8	63	47	27	10	51	8.6	6.9	41	188	81	133	186
9	67	81	22	10	42	9.5	7.2	58	252	76	120	131
10	67	366	18	10	36	9.9	7.5	108	382	75	98	112
11	115	349	18	10	29	11	8.6	101	337	75	151	101
12	164	357	29	9.5	24	11	8.3	87	345	68	127	80
13	183	262	78	9.4	21	10	8.3	76	246	66	93	270
14	142	178	71	9.2	18	10	8.3	67	188	65	75	231
15	120	118	67	8.3	16	10	11	58	151	60	72	275
16	118	82	120	8.0	15	10	18	57	127	110	63	292
17	129	63	213	7.5	14	10	18	56	113	108	53	243
18	98	50	285	6.9	14	10	16	54	136	89	44	216
19	72	39	186	6.6	13	10	21	75	162	84	37	225
20	90	32	129	6.0	12	12	45	101	140	72	32	157
21	341	26	93	6.0	11	20	66	100	120	66	27	183
22	324	21	72	6.0	10	25	48	90	113	60	24	149
23	332	19	87	6.5	10	24	42	90	110	55	36	101
24	216	22	74	6.5	9.5	27	42	110	112	54	44	74
25	146	22	58	6.5	9.5	24	55	106	113	53	41	57
26	100	24	47	6.9	8.9	19	51	95	117	48	37	56
27	74	35	37	6.9	8.0	17	85	110	120	44	31	48
28	84	31	31	13	7.2	16	109	112	162	42	66	45
29	135	27	26	15	---	15	87	98	140	46	104	160
30	112	52	22	14	---	13	71	95	222	57	162	115
31	81	---	19	14	---	12	---	112	---	50	118	---
TOTAL	3797	2656	2230	305.7	725.1	390.6	897.4	2359	5065	2436	2042	4568
MEAN	122	88.5	71.9	9.86	25.9	12.6	29.9	76.1	169	78.6	65.9	152
MAX	341	366	285	17	86	27	108	112	382	191	162	298
MIN	26	19	18	6.0	7.2	5.8	6.9	34	106	42	24	45
CFSM	20.6	14.9	12.1	1.66	4.37	2.13	5.04	12.8	28.5	13.3	11.1	25.6
IN.	23.82	16.66	13.99	1.92	4.55	2.45	5.63	14.80	31.77	15.28	12.81	28.65
AC-FT	7530	5270	4420	606	1440	775	1780	4680	10050	4830	4050	9060

CAL YR 1981 TOTAL 35503.9 MEAN 97.3 MAX 612 MIN 8.4 CFSM 16.4 IN 222.69 AC-FT 70420
WTR YR 1982 TOTAL 27471.8 MEAN 75.3 MAX 382 MIN 5.8 CFSM 12.7 IN 172.31 AC-FT 54490

15238820 BARBARA CREEK NEAR SELDOVIA

LOCATION.--Lat 59°28'50", long 151°38'42", in SW¼ sec.15, T.8 S., R.14 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 0.5 mi (0.8 km) upstream from mouth and 3.7 mi (6.0 km) northeast of Seldovia.

DRAINAGE AREA.--20.7 mi² (53.6 km²).

PERIOD OF RECORD.--June 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map. Prior to Nov. 6, 1980, at site 50 ft (15 km) upstream at same datum.

REMARKS.--Records good except those for Dec. 10 to May 4, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--10 years, 107 ft³/s (3.030 m³/s), 70.20 in/yr (1,783 mm/yr), 77,520 acre-ft/yr (95.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft³/s (37.1 m³/s) Oct. 22, 1980, gage height, 4.96 ft (1.512 m), from floodmarks, site then in use, from rating curve extended above 470 ft³/s (13.3 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 5.05 ft (1.539 m), Feb. 18, 1982, backwater from ice; minimum discharge, 5.4 ft³/s (0.15 m³/s) Apr. 18 and 22, 1982, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 900 ft³/s (25 m³/s) Sept. 15, gage height, 3.3 ft (1.01 m), from rating curve extended above 360 ft³/s (10.2 m³/s); maximum gage height, 5.05 ft (1.539 m) Feb. 18, backwater from ice; minimum discharge, 5.4 ft³/s (0.15 m³/s) Apr. 18 and 22, gage height, 0.88 ft (0.268 m), from rating curve extended below 37 ft³/s (1.05 m³/s), result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	92	85	40	24	25	34	34	249	192	75	34
2	61	85	69	40	33	20	33	24	249	189	73	33
3	57	77	63	35	69	20	33	18	257	174	69	31
4	55	73	61	35	89	20	32	16	257	164	65	30
5	53	71	60	35	82	20	32	38	354	164	63	75
6	53	67	60	35	73	20	32	48	275	157	61	80
7	52	82	65	35	67	20	33	43	266	161	59	67
8	50	87	70	35	65	20	34	41	262	157	57	59
9	48	85	90	35	63	17	34	67	257	154	53	57
10	45	273	80	35	61	17	34	75	271	145	53	57
11	46	285	75	35	60	17	34	77	257	138	50	55
12	63	235	70	35	55	17	33	69	227	126	47	55
13	87	204	70	32	55	17	32	75	219	121	47	107
14	82	175	65	30	50	17	32	75	208	118	43	107
15	82	154	65	30	50	26	30	75	189	113	43	403
16	82	135	60	30	45	24	28	80	178	113	40	359
17	82	118	60	30	45	53	15	82	171	107	40	275
18	80	110	55	30	40	41	8.4	87	171	104	38	257
19	73	100	55	30	40	71	21	87	171	102	38	215
20	77	95	55	30	35	65	25	92	178	102	37	212
21	138	90	50	30	35	55	12	97	192	102	37	392
22	157	85	50	25	30	53	10	104	204	102	37	257
23	212	80	50	25	30	50	18	107	196	102	35	249
24	189	73	45	25	30	47	29	110	192	104	34	223
25	167	69	45	25	30	43	37	121	192	102	34	200
26	154	77	45	25	25	40	37	142	204	99	34	208
27	142	75	40	25	25	40	41	160	212	94	34	189
28	129	67	40	25	25	37	40	227	244	92	33	171
29	118	63	40	25	---	37	29	212	223	87	34	161
30	110	89	40	25	---	35	30	212	200	85	34	145
31	102	---	40	25	---	34	---	235	---	80	34	---
TOTAL	2909	3371	1818	952	1331	1018	872.4	2930	6725	3850	1432	4763
MEAN	93.8	112	58.6	30.7	47.5	32.8	29.1	94.5	224	124	46.2	159
MAX	212	285	90	40	89	71	41	235	354	192	75	403
MIN	45	63	40	25	24	17	8.4	16	171	80	33	30
CFSM	4.53	5.41	2.83	1.48	2.30	1.59	1.41	4.57	10.8	5.99	2.23	7.68
IN.	5.23	6.06	3.27	1.71	2.39	1.83	1.57	5.27	12.08	6.92	2.57	8.56
AC-FT	5770	6690	3610	1890	2640	2020	1730	5810	13340	7640	2840	9450

CAL YR 1981 TOTAL 50304.0 MEAN 138 MAX 600 MIN 25 CFSM 6.67 IN 90.40 AC-FT 99780
WTR YR 1982 TOTAL 31971.4 MEAN 87.6 MAX 403 MIN 8.4 CFSM 4.23 IN 57.45 AC-FT 63420

NOTE.--No gage-height record for Dec. 10 to Jan 12.

15238990 UPPER BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°42'15", long 150°42'15", Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 1.2 mi (1.9 km) downstream of Nuka Glacier terminus, 2.5 mi (4.0 km) upstream of mouth at Kachemak Creek, 3.5 mi (5.6 km) southeast of Bradley Lake, and 29 mi (47 km) east of Homer.

DRAINAGE AREA.--About 10 mi² (26 km²). Drainage area varies according to position of glacier terminus.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 1,200 ft (370 m), from topographic map.

REMARKS.--Water-discharge records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,820 ft³/s (193 m³/s) Sept. 15, 1982, gage height, 8.98 ft (2.737 m), from rating curve extended above 450 ft³/s (12.7 m³/s); no flow Dec. 25, 1979 to Jan. 19, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,820 ft³/s (193 m³/s) Sept. 15, gage height, 8.98 ft (2.737 m), from rating curve extended above 450 ft³/s (12.7 m³/s); minimum daily, about 1.0 ft³/s (0.030 m³/s) Apr. 6-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	39	13	4.0	3.0	3.0	2.0	2.0	100	400	620	462
2	49	38	12	4.0	3.0	3.0	2.0	2.0	100	350	575	449
3	44	37	12	4.0	4.0	3.0	2.0	2.0	100	300	506	437
4	45	36	10	4.0	4.0	3.0	2.0	2.0	90	250	480	338
5	43	35	9.0	4.0	4.0	3.0	2.0	2.0	90	200	409	1670
6	39	34	9.0	4.0	5.0	3.0	1.0	2.0	100	250	377	1280
7	37	33	9.0	4.0	5.0	3.0	1.0	3.0	90	300	372	758
8	36	32	8.0	4.0	10	3.0	1.0	3.0	100	377	367	513
9	33	31	8.0	4.0	9.0	3.0	1.0	3.0	200	311	320	449
10	31	150	8.0	4.0	8.0	3.0	1.0	4.0	250	281	281	449
11	33	100	8.0	3.0	7.0	3.0	1.0	4.0	200	281	289	362
12	50	70	8.0	3.0	6.0	3.0	1.0	5.0	200	311	367	251
13	73	50	10	3.0	5.0	3.0	1.0	5.0	150	281	353	968
14	41	37	10	3.0	5.0	3.0	1.0	6.0	150	261	372	643
15	61	31	10	3.0	5.0	3.0	1.0	7.0	150	235	340	2800
16	58	26	10	3.0	5.0	2.0	1.0	8.0	100	338	310	3520
17	53	23	15	3.0	4.0	2.0	1.0	9.0	100	289	280	1980
18	45	21	20	3.0	4.0	2.0	1.0	10	100	261	250	2180
19	40	20	15	3.0	4.0	2.0	1.0	15	100	443	269	1390
20	49	20	10	3.0	4.0	2.0	1.0	20	100	534	253	1570
21	164	18	8.0	3.0	4.0	2.0	1.0	25	100	506	242	2850
22	140	18	8.0	3.0	4.0	2.0	1.0	30	150	506	281	1150
23	191	18	6.0	3.0	4.0	2.0	1.0	50	150	583	404	651
24	135	15	6.0	3.0	4.0	2.0	1.0	70	150	520	443	449
25	103	15	5.0	3.0	4.0	2.0	1.0	90	200	554	404	415
26	89	15	5.0	3.0	3.0	2.0	1.0	80	200	487	398	480
27	77	15	5.0	3.0	3.0	2.0	1.0	70	300	499	404	320
28	67	14	5.0	3.0	3.0	2.0	1.0	70	350	468	372	311
29	61	15	5.0	3.0	---	2.0	2.0	80	350	576	568	338
30	53	15	5.0	3.0	---	2.0	2.0	150	400	561	667	210
31	50	---	5.0	3.0	---	2.0	---	100	---	583	547	---
TOTAL	2043	1021	277.0	103.0	133.0	77.0	37.0	929.0	4920	12096	12120	29653
MEAN	65.9	34.0	8.94	3.32	4.75	2.48	1.23	30.0	164	390	391	988
MAX	191	150	20	4.0	10	3.0	2.0	150	400	583	667	3520
MIN	31	14	5.0	3.0	3.0	2.0	1.0	2.0	90	200	242	210
AC-FT	4050	2030	549	204	264	153	73	1840	9760	23990	24040	58820

CAL YR 1981 TOTAL 54584.0 MEAN 150 MAX 1000 MIN 1.0 AC-FT 108300
WTR YR 1982 TOTAL 63409.0 MEAN 174 MAX 3520 MIN 1.0 AC-FT 125800

NOTE.--No gage-height record Jan. 9 to May 11.

15238990 UPPER BRADLEY RIVER NEAR HOMER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1980 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1979 to current year (fragmentary).

INSTRUMENTATION.--Temperature recorder since October, 1979.

REMARKS.--Missing record due to recorder malfunction, icing at probe, or probe out of water. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross sections on July 7 and Aug. 18. A maximum variation of 1.0°C was found within the cross section. The mean temperatures of the cross sections were within 0.2°C of probe temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum observed, 6.0°C, Sept. 11, 1981; minimum, 0.0°C on most days during winter periods which extends through June.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 4.0°C Aug. 17, Sept. 4; minimum, 0.0°C on most days during winter period which extends through June.

REVISIONS.--Temperatures for Oct. to Dec. 1980, June 3 to July 9 and Sept. 22-30, 1981 were reported in error. Probe out of water.

WATER QUALITY DATA, JULY 1982 TO SEPTEMBER 1982

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE (DEG C)
JUL					
07...	1100	51.0	5.00	319	2.5
07...	1101	--	15.0	--	2.5
07...	1102	--	25.0	--	2.5
07...	1103	--	35.0	--	3.0
07...	1104	--	45.0	--	3.0
AUG					
18...	0945	42.0	5.00	230	1.5
18...	0946	--	14.0	--	1.5
18...	0947	--	19.0	--	1.5
18...	0948	--	24.0	--	1.5
18...	0949	--	29.5	--	1.5
18...	0950	--	36.0	--	2.0
18...	0951	--	42.0	--	2.5

TEMPERATURE, WATER (DEG. C), JULY 1982 TO SEPTEMBER 1982

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1							---	---	.5	.0	1.0	.0
2							---	---	.5	.0	2.5	.0
3							---	---	1.0	.0	2.0	1.0
4							---	---	2.0	.0	4.0	.0
5							---	---	2.5	.5	3.5	.5
6							---	---	2.0	.5	2.0	.0
7							2.5	.5	1.5	.5	.0	.0
8							1.0	.5	1.0	.5	1.0	.0
9							1.5	.5	3.5	.5	1.0	.5
10							1.0	.0	1.5	1.0	.5	.0
11							2.0	.5	3.5	1.0	3.5	.5
12							2.0	.5	2.5	.0	2.0	.0
13							3.0	.0	2.5	.0	1.0	.0
14							2.0	.0	2.0	.5	.0	.0
15							1.5	1.0	2.0	.5	2.5	.0
16							1.0	.5	2.0	.5	.0	.0
17							2.5	.0	4.0	.5	.0	.0
18							3.5	.5	2.5	.5	.5	.0
19							1.0	.0	3.5	.0	.0	.0
20							1.0	.0	3.0	.0	.0	.0
21							.5	.0	3.5	1.0	1.0	.0
22							.5	.0	2.0	1.0	.0	.0
23							.5	.0	1.0	.0	.0	.0
24							.5	.0	.0	.0	.0	.0
25							.5	.0	.5	.0	.0	.0
26							1.0	.0	1.5	.0	.0	.0
27							1.0	.0	1.5	.0	.5	.0
28							.5	.0	1.5	.5	.0	.0
29							.0	.0	1.0	.0	.5	.0
30							.0	.0	.0	.0	1.0	.0
31							.5	.0	.0	.0	---	---
MONTH							3.5	.0	4.0	.0	4.0	.0

15239000 BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°45'20", long 150°51'00", in NE¼SW¼ sec.8, T.5 S., R.9 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on right bank at Bradley Lake outlet, 3.5 mi (5.6 km) upstream from Bradley River tributary, and 26 mi (42 km) northeast of Homer.

DRAINAGE AREA.--54 mi² (240 km²), approximately. Drainage area varies according to position of glacier terminus in headwaters and could be about 4 mi² (10 km²) greater.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to August 1955, October 1957 to current year.

REVISED RECORDS.--WSP 2136: 1960(M), 1965. WDR AK-77-1: 1958, 1961, 1963(M), 1966, 1967, 1970, 1972, 1974, 1976.

GAGE.--Water-stage recorder. Altitude of gage is 1,050 ft (320 m), from topographic map. July 13-22, 1955, non-recording lake gage at site 1 mi (1.6 km) upstream and July 23 to Aug. 5, 1955, at site 3 mi (4.8 km) upstream at different datums. Prior to Nov. 4, 1980, water-stage recorder 800 ft (250 m) downstream at different datum.

REMARKS.--Water-discharge records fair. Corps of Engineers meteor-burst telemeter at station. Glaciers cover 36 percent of the basin.

AVERAGE DISCHARGE.--25 years, 438 ft³/s (12.40 m³/s), 317,300 acre-ft/yr (391 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,020 ft³/s (170 m³/s) Aug. 10, 1979, gage height, 9.46 ft (2.883 m), site and datum then in use; minimum daily, about 16 ft³/s (0.45 m³/s) Mar. 26 to Apr. 25, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,830 ft³/s (165 m³/s) Sept. 16, gage height, 16.16 ft (4.926 m); minimum, 36 ft³/s (1.02 m³/s) Apr. 19-21, gage height, 6.73 ft (2.051 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	307	274	113	74	43	54	39	38	553	1210	1280	1080
2	282	260	110	70	43	53	39	38	586	1180	1220	977
3	264	249	108	69	47	52	38	38	587	1050	1150	871
4	253	231	99	67	59	51	38	38	590	934	1070	776
5	242	208	94	64	72	50	38	39	556	896	1000	1040
6	226	190	94	61	81	48	38	39	615	858	935	2380
7	213	177	94	59	87	48	37	41	617	908	898	2380
8	200	164	87	58	92	47	37	45	586	994	888	1840
9	188	165	77	56	97	47	37	51	570	1040	888	1410
10	181	326	77	56	97	45	37	58	717	1050	887	1180
11	172	556	73	55	96	44	37	60	866	1050	852	1030
12	172	559	74	53	93	44	37	58	844	1050	829	879
13	182	553	82	51	92	43	37	60	769	1050	825	1090
14	191	457	83	51	90	43	36	62	684	1050	825	1490
15	198	398	82	49	87	42	36	64	615	1040	825	2710
16	208	343	87	48	83	41	36	68	560	997	825	5720
17	218	300	102	47	79	44	36	74	532	995	825	4320
18	214	268	125	46	76	44	36	79	524	977	825	3100
19	210	240	132	45	72	44	36	83	527	956	795	2660
20	196	197	132	45	69	46	36	100	527	999	777	2160
21	280	168	129	45	69	46	36	117	530	1060	767	3010
22	424	161	127	45	69	45	36	138	541	1110	748	3030
23	608	146	123	43	65	44	36	160	588	1200	754	2040
24	622	139	114	43	63	44	36	190	629	1310	821	1410
25	622	122	105	42	61	43	36	232	660	1340	877	1060
26	521	143	99	41	59	42	37	275	697	1360	884	947
27	455	147	92	42	58	42	37	339	762	1350	884	819
28	400	146	88	43	55	41	38	401	1080	1340	873	696
29	362	118	83	42	---	41	38	413	1200	1320	897	661
30	329	115	80	42	---	40	38	415	1210	1330	1010	619
31	303	---	77	43	---	40	---	467	---	1310	1080	---
TOTAL	9243	7520	3042	1595	2054	1398	1109	4280	20322	34314	28014	53385
MEAN	298	251	98.1	51.5	73.4	45.1	37.0	158	677	1107	904	1780
MAX	622	559	132	74	97	54	39	467	1210	1360	1280	5720
MIN	172	115	73	41	43	40	36	38	524	858	748	619
AC-FT	18330	14920	6030	3160	4070	2770	2200	8710	40310	68060	55570	105900

CAL YR 1981 TOTAL 221450 MEAN 607 MAX 2990 MIN 73 AC-FT 439200
WTR YR 1982 TOTAL 166890 MEAN 457 MAX 5720 MIN 36 AC-FT 331000

15239000 BRADLEY RIVER NEAR HOMER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1968, 1970-73, and 1979 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1979 to October 1980, August and September 1981, October to August 1982 (fragmentary).

INSTRUMENTATION.--Temperature recorder since Oct. 23, 1979.

REMARKS.--Missing record due to equipment malfunction.

EXTREMES FOR PERIODS OF DAILY RECORD.--Maximum recorded, 12.0°C Aug. 20, 1982; minimum, 0.0°C most days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 12.0°C Aug. 20; minimum, 0.0°C most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
MAR 18...	1315	8.00	42	38	4.3

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO AUGUST 1982

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

15239000 BRADLEY RIVER NEAR HOMER--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO AUGUST 1982

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1							---	---	3.0	3.0		
2							---	---	4.5	3.0		
3							---	---	4.0	4.0		
4							---	---	4.0	4.0		
5							---	---	4.0	4.0		
6							---	---	4.0	4.0		
7							---	---	4.0	4.0		
8							4.0	1.5	4.0	4.0		
9							5.5	3.5	5.5	4.0		
10							3.5	3.5	5.5	5.5		
11							3.5	3.0	5.5	5.0		
12							3.0	3.0	5.0	5.0		
13							3.0	3.0	5.0	4.0		
14							3.0	3.0	4.0	4.0		
15							3.0	3.0	4.0	4.0		
16							3.0	3.0	6.5	4.0		
17							3.0	3.0	7.0	5.5		
18							3.0	3.0	---	---		
19							3.0	3.0	11.0	10.0		
20							5.0	3.0	12.0	10.0		
21							3.0	3.0	11.5	11.5		
22							4.0	3.0	11.5	11.0		
23							4.0	3.5	11.0	11.0		
24							3.5	3.5	11.0	11.0		
25							4.5	3.5	11.0	11.0		
26							4.5	3.5	11.0	11.0		
27							3.5	3.5	11.0	10.0		
28							3.5	3.5	---	---		
29							3.5	3.5	---	---		
30							3.5	3.0	---	---		
31							3.0	3.0	---	---		
MONTH							5.5	1.5	12.0	3.0		
YEAR	12.0	.0										

15239050 BRADLEY RIVER TRIBUTARY NEAR HOMER

LOCATION.--Lat 59°46'42", long 150°45'15", in NW¼NE¼ sec.2, T.5 S., R.9 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 6.0 mi (9.6 km) upstream from mouth and 27 mi (43 km) east of Homer.

DRAINAGE AREA.--9.25 mi² (23.97 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,300 ft (700 m), from topographic map.

REMARKS.--Records good except those for Oct. 26 to Mar. 23, which are fair. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 908 ft³/s (25.7 m³/s) July 11, 1980, gage height, 8.05 ft (2.454 m), but probably was more during period of no gage-height record, Aug. 10-12, 1980, maximum gage height recorded, 9.57 ft (2.917 m) Feb. 4, 1982, backwater from snow; minimum discharge recorded, 3.3 ft³/s (0.093 m³/s) Apr. 17, 1982, gage height, 5.67 ft (1.728 m), but may have been less during period of no gage-height record in December 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 857 ft³/s (24.3 m³/s) Sept. 15, gage height, 8.01 ft (2.441 m); maximum gage height, 9.57 ft (2.917 m) Feb. 4, backwater from snow; minimum discharge, 3.3 ft³/s (0.093 m³/s) Apr. 17, gage height, 5.67 (1.728 m).

Peak discharges above base of 300 ft³/s (8.5 m³/s) for the period of daily record were computed and are shown below. Annual maximums (*) are also shown below.

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 1, 1979	1300	450	12.7	7.59	2.313
Oct. 2, 1979	1600	429	12.1	7.56	2.304
July 6, 1980	0200	310	8.78	7.37	2.246
July 11, 1980	2200	908	25.7	8.05	2.454
Aug. 11, 1980	Unknown	*Unknown		*Unknown	
Sept. 15, 1980	1100	408	11.5	7.53	2.295
Sept. 26, 1980	1530	698	19.8	7.87	2.399
Feb. 24, 1981	2330	ice jam		*7.87	2.399
July 10, 1981	1930	457	12.9	7.60	2.316
July 15, 1981	2200	*609	17.2	7.78	2.371
July 24, 1981	2330	497	14.1	7.63	2.326
Aug. 8, 1981	1700	465	13.2	7.58	2.310
Aug. 12, 1981	2300	310	8.78	7.28	2.219
Jan. 28, 1982	0800	ice jam		7.65	2.332
Feb. 4, 1982	0700	ice jam		*9.57	2.917
Sept. 5, 1982	2330	529	15.0	7.69	2.344
Sept. 15, 1982	1900	*857	24.3	8.01	2.441
Sept. 21, 1982	0930	321	9.09	7.39	2.252

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	40	20	7.6	12	6.0	3.7	3.9	29	105	153	105
2	32	35	20	7.3	13	5.5	3.7	3.9	26	88	144	88
3	31	35	15	7.1	15	5.5	3.7	3.9	26	75	136	78
4	29	35	15	7.1	30	5.5	3.7	3.7	29	68	124	70
5	28	35	15	6.8	20	5.5	3.7	3.7	43	70	122	223
6	27	35	13	7.0	12	5.5	3.7	3.9	52	78	114	232
7	25	35	11	7.0	10	5.6	3.7	4.4	55	141	112	130
8	25	35	10	7.0	9.6	5.3	3.7	4.8	50	138	110	100
9	22	50	10	6.8	9.6	5.2	3.7	9.0	71	147	107	84
10	22	90	10	6.8	9.6	5.1	3.7	9.6	96	130	102	80
11	23	80	11	6.6	8.6	4.9	3.7	7.6	71	122	100	73
12	25	50	15	6.6	7.9	4.9	3.7	6.1	53	124	98	65
13	27	30	20	6.6	7.1	4.9	3.6	5.6	57	130	100	127
14	27	24	15	6.5	7.0	4.5	3.6	5.6	39	122	112	147
15	27	21	15	6.5	7.0	4.0	3.6	5.6	35	127	112	419
16	26	20	20	6.5	7.0	4.0	3.6	5.8	35	153	105	375
17	24	18	30	6.8	7.0	3.7	3.6	6.6	38	136	100	195
18	23	17	20	6.6	7.0	3.7	3.7	6.8	42	112	90	203
19	22	17	15	6.1	6.0	6.0	3.6	6.6	49	133	88	177
20	20	17	12	5.8	6.0	10	3.6	6.8	52	167	86	138
21	49	16	10	7.0	6.0	8.0	3.6	6.6	59	184	86	236
22	59	15	10	8.0	6.0	6.0	3.7	7.9	68	180	98	144
23	105	15	9.0	7.3	6.0	4.8	3.7	8.3	90	211	133	114
24	92	20	9.0	6.3	6.0	4.2	3.8	7.6	92	203	130	94
25	68	30	8.5	6.3	6.0	4.2	4.0	10	100	199	117	82
26	52	50	8.5	5.8	6.0	4.2	4.1	12	102	180	102	75
27	50	40	8.5	7.0	6.0	4.1	3.9	10	124	180	105	63
28	45	36	7.9	8.0	6.0	4.1	3.9	11	180	184	105	60
29	45	30	7.6	10	---	3.9	4.1	13	144	195	138	57
30	40	25	7.6	11	---	3.9	4.1	17	110	117	141	56
31	40	---	7.6	11	---	3.7	---	28	---	173	122	---
TOTAL	1164	996	406.2	222.8	259.4	156.4	112.2	245.3	2017	4462	3492	4090
MEAN	37.5	33.2	13.1	7.19	9.26	5.05	3.74	7.91	67.2	144	113	136
MAX	105	90	30	11	30	10	4.1	28	180	211	153	419
MIN	20	15	7.6	5.8	6.0	3.7	3.6	3.7	26	68	86	56
CFSM	4.05	3.59	1.42	.78	1.00	.55	.40	.86	7.27	15.6	12.2	14.7
IN.	4.68	4.01	1.63	.90	1.04	.63	.45	.99	8.11	17.94	14.04	16.45
AC-FT	2310	1980	806	442	515	310	223	487	4000	8850	6930	8110

CAL YR 1981 TOTAL 22395.1 MEAN 61.4 MAX 429 MIN 3.9 CFSM 6.64 IN 90.05 AC-FT 44420
WTR YR 1982 TOTAL 17623.3 MEAN 48.3 MAX 419 MIN 3.6 CFSM 5.22 IN 70.87 AC-FT 34960

15239900 ANCHOR RIVER NEAR ANCHOR POINT

LOCATION.--Lat 59°44'50", long 151°45'11", in NE¼ sec.13, T.5 S., R.15 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on right bank at downstream side of bridge on Sterling Highway, and 3.3 mi (5.3 km) southeast of Anchor Point.

DRAINAGE AREA.--137 mi² (355 km²).

PERIOD OF RECORD.--June 1964 to September 1973 and annual maximum, water year 1974. September 1978 to current year.

REVISED RECORDS.--WSP 2136: 1965 (M). WDR AK-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 168.64 ft (51.401 m) National Geodetic Vertical Datum of 1929. Prior to June 5, 1981, on left bank at same datum.

REMARKS.--Records good except those for Jan. 29 to May 11, which are poor.

AVERAGE DISCHARGE.--12 years, 207 ft³/s (5.862 m³/s), 20.51 in/yr (521 mm/yr), 150,000 acre-ft/yr (185 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,680 ft³/s (133 m³/s) Oct. 22, 1980, gage height, 8.45 ft (2.576 m) site then in use, from rating curve extended above 1,800 ft³/s (51 m³/s) on basis of contracted-opening measurement of peak flow; maximum gage height, 10.86 ft (3.310 m) at former site, Dec. 3, 1978, backwater from ice; minimum daily discharge, about 28 ft³/s (0.79 m³/s) Jan. 1-31, 1969.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 11	0030	1,750	49.6	4.77	1.454	Sept. 13	1400	*1,920	54.4	*4.95	1.509
June 6	0900	1,100	31.2	4.05	1.234	Sept. 15	1400	1,200	34.0	4.15	1.265
Sept. 6	0600	829	23.5	3.72	1.134						

Minimum discharge, 64 ft³/s (1.81 m³/s) Aug. 22, gage height 1.65 ft (0.503 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	128	100	110	100	110	90	200	296	128	88	170
2	162	137	100	110	100	110	90	200	271	127	81	156
3	154	127	100	100	150	110	100	200	239	119	75	134
4	168	130	100	100	250	110	100	300	392	117	73	130
5	192	134	100	100	200	110	100	300	477	111	70	258
6	197	114	90	100	170	100	100	)	940	107	70	659
7	188	158	90	100	170	100	100	400	640	105	71	408
8	162	199	90	100	150	100	100	400	421	111	75	256
9	156	181	90	100	150	100	100	500	360	117	84	188
10	150	839	90	100	150	100	100	600	319	107	79	206
11	168	1290	90	100	140	100	100	580	290	117	92	218
12	216	646	90	100	140	100	90	560	256	112	84	179
13	268	517	90	100	140	90	90	559	234	105	73	1420
14	211	363	100	100	140	90	90	522	218	96	69	867
15	183	248	100	100	130	90	90	533	206	96	68	1070
16	175	192	150	90	130	90	90	533	206	130	67	891
17	181	150	200	90	130	90	90	538	190	144	66	496
18	164	146	170	90	130	90	90	588	183	116	69	379
19	143	135	150	90	130	90	90	565	248	100	68	375
20	152	111	150	90	130	90	100	582	223	88	66	306
21	394	102	130	90	120	100	100	559	197	83	65	309
22	439	90	130	90	120	100	100	559	188	83	64	313
23	622	90	130	90	120	100	100	605	172	88	65	262
24	416	90	120	90	120	100	100	511	162	98	67	223
25	293	100	120	90	120	100	100	522	154	100	68	206
26	231	150	120	90	120	100	150	570	148	107	92	231
27	188	130	120	90	110	90	150	452	143	88	83	216
28	199	120	120	90	110	90	150	416	148	81	78	221
29	197	110	110	90	---	90	150	360	144	93	134	356
30	183	100	110	90	---	90	200	326	135	124	226	363
31	177	---	110	100	---	90	---	337	---	105	221	---
TOTAL	6901	7027	3560	2970	3870	3020	3200	14177	8200	3303	2651	11466
MEAN	223	234	115	95.8	138	97.4	107	457	273	107	85.5	382
MAX	622	1290	200	110	250	110	200	605	940	144	226	1420
MIN	143	90	90	90	100	90	90	200	135	81	64	130
CFSM	1.63	1.71	.84	.70	1.01	.71	.78	3.34	1.99	.78	.62	2.79
IN.	1.87	1.91	.97	.81	1.05	.82	.87	3.85	2.23	.90	.72	3.11
AC-FT	13690	13940	7060	5890	7680	5990	6350	28120	16260	6550	5260	22740

CAL YR 1981 TOTAL 93944 MEAN 257 MAX 1290 MIN 90 CFSM 1.88 IN 25.51 AC-FT 186300
WTR YR 1982 TOTAL 70345 MEAN 193 MAX 1420 MIN 64 CFSM 1.41 IN 19.10 AC-FT 139500

NOTE.--No gage-height record Mar. 4 to May 11.

15241600 NINILCHIK RIVER AT NINILCHIK

LOCATION.--Lat 60°02'56", long 151°39'48", in NE¼ sec.34, T.1 S., R.14 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on downstream side of bridge at Ninilchik and 0.9 mi (1.4 km) upstream from mouth.

DRAINAGE AREA.--131 mi² (339 km²).

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

GAGE.--Nonrecording gage. Altitude of gage is 30 ft (9 m), from topographic map. Prior to Oct. 1, 1965, at site 0.2 mi (0.3 km) upstream at different datum.

REMARKS.--Records fair except those for the period of no gage-height record, Nov. 14 to May 5, which are poor.

AVERAGE DISCHARGE.--19 years, 109 ft³/s (3.087 m³/s), 11.30 in/yr (287 mm/yr), 78,970 acre-ft/yr (97.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,240 ft³/s (35.1 m³/s) Apr. 24, 1974, gage height, 6.04 ft (1.841 m), from graph based on gage readings; maximum gage height observed, 8.69 ft (2.649 m) Apr. 14, 1969, backwater from ice; minimum discharge observed, 30 ft³/s (0.85 m³/s) July 20, 1966, gage height, 3.64 ft (1.109 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 652 ft³/s (18.5 m³/s) Sept. 16, gage height, 5.36 ft (1.634 m); maximum gage height observed, 7.05 ft (2.149 m) Nov. 23, backwater from ice; minimum daily discharge, 56 ft³/s (1.59 m³/s) Aug. 22-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	130	80	80	80	75	75	150	208	75	73	88
2	105	110	80	80	90	75	75	200	208	73	69	90
3	105	100	80	80	100	75	80	200	220	75	64	84
4	115	90	80	80	150	75	80	250	181	73	62	84
5	361	85	80	80	140	75	80	250	160	71	60	97
6	256	85	80	75	130	75	80	310	237	69	60	147
7	181	85	80	75	120	75	80	332	251	69	64	132
8	144	150	80	75	110	75	80	384	208	69	67	115
9	123	150	80	75	100	75	80	361	200	73	69	95
10	110	361	75	75	100	75	80	332	181	73	86	107
11	153	316	75	75	100	75	80	321	135	73	73	115
12	192	305	75	73	90	75	80	316	129	71	65	95
13	269	265	75	70	90	75	80	290	123	67	62	361
14	212	200	75	70	90	75	80	274	120	67	64	367
15	204	150	75	70	90	75	80	251	120	67	64	643
16	192	130	100	70	90	77	80	246	110	129	62	652
17	177	110	150	70	80	77	75	228	105	107	60	349
18	153	110	130	70	80	77	75	208	95	90	60	260
19	135	100	110	70	80	80	80	188	102	79	60	295
20	126	100	100	70	80	80	80	192	100	67	60	269
21	170	100	100	70	80	80	90	160	97	65	58	224
22	208	90	100	70	80	80	90	144	95	64	56	204
23	634	90	100	70	80	80	100	147	93	71	56	171
24	384	90	90	70	80	80	100	144	90	71	60	141
25	251	90	90	70	80	75	100	138	84	69	62	120
26	188	100	90	70	80	75	100	150	79	65	64	120
27	167	90	90	70	80	75	100	135	82	64	64	120
28	160	90	90	70	80	75	150	135	79	64	73	123
29	144	90	90	70	---	75	150	132	77	77	84	181
30	141	90	80	70	---	75	150	129	77	97	135	265
31	144	---	80	70	---	75	---	188	---	79	115	---
TOTAL	6011	4052	2760	2253	2630	2361	2710	6885	4046	2323	2131	6114
MEAN	194	135	89.0	72.7	93.9	76.2	90.3	222	135	74.9	68.7	204
MAX	634	361	150	80	150	80	150	384	251	129	135	652
MIN	105	85	75	70	80	75	75	129	77	64	56	84
CFSM	1.48	1.03	.68	.56	.72	.58	.69	1.70	1.03	.57	.52	1.56
IN.	1.71	1.15	.78	.64	.75	.67	.77	1.96	1.15	.66	.61	1.74
AC-FT	11920	8040	5470	4470	5220	4680	5380	13660	8030	4610	4230	12130

CAL YR 1981 TOTAL 45664 MEAN 125 MAX 634 MIN 50 CFSM .95 IN 12.97 AC-FT 90570
WTR YR 1982 TOTAL 44276 MEAN 121 MAX 652 MIN 56 CFSM .92 IN 12.57 AC-FT 87820

15258000 KENAI RIVER AT COOPER LANDING

LOCATION.--Lat 60°29'34", long 149°48'28", in SE¼ sec.28, T.5 N., R.3 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, in midstream 10 ft (3 m) downstream of bridge on Sterling Highway, 0.9 mi (1.4 km) east (upstream) of Cooper Landing, Bean Creek, and at Kenai Lake outlet.

DRAINAGE AREA.--634 mi² (1,642 km²).

PERIOD OF RECORD.--May 1947 to current year.

REVISED RECORDS.--WSP 2136: 1964 (M).

GAGE.--Recording gage. Altitude of gage is 419.92 ft (127.992 m) National Geodetic Vertical Datum of 1929, (levels by Alaska Department of Transportation). See WSP 2136 for history of changes prior to Aug. 28, 1965. Aug. 28, 1965 to Jan. 21, 1974 at site 10 ft (3) upstream at present datum. Jan. 22, 1974 to Sept. 30, 1981, nonrecording gage at site 40 ft (12 m) upstream at present datum.

REMARKS.--Records good. Diversion from Cooper Lake to Kenai Lake above gage through Cooper Lake powerplant began May 1961.

COOPERATION.--Records of diversion furnished by Chugach Electric Association.

AVERAGE DISCHARGE.--35 years. 2,830 ft³/s (80.15 m³/s), 60.62 in/yr (1,540 mm/yr), 2,050,000 acre-ft/yr (2.53 km³/yr), adjusted to exclude diversion from Cooper Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,100 ft³/s (654 m³/s) Sept. 21, 1974, gage height, 17.18 ft (5.236 m), result of release of stored water from glacier-dammed lake at head of unnamed glacier in the Snow River basin; no flow Mar. 27, 28, 1964, caused by earthquake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,500 ft³/s (439 m³/s) Sept. 29, gage height, 14.64 ft (4.462 m); minimum, 343 ft³/s (9.71 m³/s) Apr. 15, gage height, 5.16 ft (1.573 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3690	2560	1880	1300	701	634	400	432	2270	6340	6940	4480
2	3470	2470	1840	1260	698	618	394	436	2490	6360	6860	4450
3	3280	2400	1790	1230	695	600	388	451	2750	6180	6660	4380
4	3130	2340	1740	1210	702	587	382	465	3000	5900	6400	4210
5	2980	2250	1690	1180	715	570	378	475	3170	5770	6200	4130
6	2850	2200	1650	1150	723	562	375	489	3280	5640	6000	4770
7	2710	2170	1580	1110	724	541	371	516	3530	5540	5860	5720
8	2590	2080	1540	1100	728	532	367	547	3840	5680	5900	6120
9	2490	2020	1500	1070	713	528	362	583	4100	5880	6080	6180
10	2390	2240	1450	1020	726	513	364	619	4510	6120	6100	5940
11	2310	2790	1410	1010	731	506	358	673	5020	6290	5920	5680
12	2220	3270	1400	981	729	489	353	725	5340	6360	5750	5450
13	2180	3610	1380	951	725	479	352	772	5430	6330	5570	5460
14	2180	3740	1360	949	716	482	354	815	5330	6350	5450	6060
15	2170	3720	1340	930	709	465	352	870	5140	6380	5300	6560
16	2150	3600	1310	882	708	461	351	913	4930	6330	5230	9000
17	2100	3440	1340	858	706	448	349	973	4730	6370	5160	10700
18	2080	3250	1430	852	702	436	354	1040	4590	6300	5010	11100
19	2060	3080	1530	846	696	446	351	1090	4580	6200	4820	11400
20	2050	2900	1580	839	694	449	360	1140	4560	6180	4670	11500
21	2070	2740	1610	839	686	448	367	1190	4540	6310	4590	11500
22	2320	2600	1620	817	680	438	366	1240	4490	6390	4460	12000
23	2590	2500	1640	796	680	436	372	1290	4450	6460	4430	11600
24	2730	2440	1640	778	670	429	376	1360	4470	6540	4460	11300
25	2820	2340	1600	766	670	427	380	1440	4590	6620	4500	11200
26	2850	2270	1580	757	660	426	390	1550	4740	6670	4460	11600
27	2830	2180	1510	760	660	422	400	1640	4950	6720	4460	12500
28	2820	2080	1460	751	654	419	405	1710	5400	6730	4420	14100
29	2800	1990	1420	731	---	417	411	1790	5820	6850	4420	15000
30	2750	1960	1370	719	---	412	421	1870	6120	6940	4420	14000
31	2670	---	1330	713	---	406	---	2040	---	6990	4480	---
TOTAL	80330	79230	47520	29155	19601	15026	11203	31144	132160	195720	164980	258090
MEAN	2591	2641	1533	940	700	485	373	1005	4405	6314	5322	8603
MAX	3690	3740	1880	1300	731	634	421	2040	6120	6990	6940	15000
MIN	2050	1960	1310	713	654	406	349	432	2270	5540	4420	4130
AC-FT	159300	157200	94260	57830	38880	29800	22220	61770	262100	388200	327200	511900

CAL YR 1981 TOTAL 1482075 MEAN 4060 MAX 12900 MIN 760 AC-FT 2940000
WTR YR 1982 TOTAL 1064159 MEAN 2916 MAX 15000 MIN 349 AC-FT 2111000

ADJUSTED TO EXCLUDE DIVERSION FROM COOPER LAKE

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2465	2482	1331	722	501	433	319	939	4267	6125	5137	8491
CFSM	3.89	3.91	2.10	1.14	0.79	0.68	0.50	1.48	6.73	9.66	8.10	13.39
IN.	4.48	4.37	2.42	1.31	0.82	0.79	0.56	1.71	7.51	11.14	9.34	14.94
AC-FT	151600	147700	81840	44420	27850	26610	19010	57710	253900	376600	315900	505300

CAL YR 1981 MEAN 3919 CFSM 6.18 IN 83.90 AC-FT 2837000
WTR YR 1982 MEAN 2774 CFSM 4.38 IN 59.39 AC-FT 2008000

15266300 KENAI RIVER AT SOLDOTNA

LOCATION.--Lat 60°28'39", long 151°04'46", Kenai Peninsula Borough, Hydrologic Unit 19050002, near center of span on downstream side of bridge on Sterling Highway, 1.0 mi (1.6 km) southwest of Soldotna.

DRAINAGE AREA.--2,010 mi² (5,210 km²).

PERIOD OF RECORD.--May 1965 to current year.

GAGE.--Nonrecording gage. Datum of gage is 35.34 ft (10.772 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for Dec. 27 to Apr. 12, which are fair.

AVERAGE DISCHARGE.--17 years, 5,941 ft³/s (168.2 m³/s), 40.14 in/yr (1,020 mm/yr), 4,304,000 acre-ft/yr (5.31 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,700 ft³/s (954 m³/s) Sept. 9, 1977, gage height, 13.45 ft (4.100 m), from graph based on gage readings; maximum gage height, 22.62 ft (6.895 m) Jan. 18, 1969, backwater from ice; minimum daily discharge, 770 ft³/s (21.8 m³/s) Apr. 1-4, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,700 ft³/s (586 m³/s) Sept. 22, 23, gage height, 11.19 ft (3.411 m); maximum gage height, 12.15 ft (3.703 m) Dec. 30, backwater from ice; minimum daily discharge, about 1,200 ft³/s (34.0 m³/s) Mar. 26 to Apr. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8350	4800	3870	2700	2000	1800	1200	1620	3100	10100	14300	10900
2	7900	4870	3750	2700	2000	1800	1200	1570	3320	10400	14100	10700
3	7480	4650	3620	2700	2000	1800	1200	1560	3730	10500	13900	10500
4	7360	4500	3550	2700	2000	1800	1300	1580	3920	10200	13600	10500
5	7150	4500	3500	2600	2000	1600	1300	1580	4130	10200	13500	10400
6	6820	4400	3350	2600	2000	1600	1300	1580	4620	10100	13100	11700
7	6520	4320	3300	2600	2000	1600	1300	1630	4620	10100	12900	12800
8	6190	4370	3200	2600	2000	1600	1300	1730	4900	10400	12800	12500
9	5890	4350	3100	2600	2000	1600	1300	1790	5170	10900	12700	12500
10	5680	4800	3000	2600	2000	1600	1500	1850	5590	11100	12300	12800
11	5500	5800	2900	2600	2000	1600	1500	1920	6850	11200	12200	12800
12	5260	6040	2800	2600	2000	1600	1500	2000	6430	11200	12200	12700
13	5380	6010	2760	2400	2000	1600	1600	2060	6550	11300	12100	13300
14	5350	6010	2640	2400	2000	1600	1520	2060	6730	11300	11700	13100
15	5200	5860	2600	2400	2000	1400	1480	2070	7030	11300	11500	13700
16	5030	5650	2720	2400	2000	1400	1440	2080	7090	11700	11600	14900
17	4950	5500	2560	2400	2000	1400	1420	2080	7240	11900	11400	16300
18	4750	5320	2700	2400	2000	1400	1400	2130	7240	11900	11000	17200
19	4620	5150	2800	2400	2000	1400	1400	2180	7600	11700	10800	18300
20	4500	4950	2840	2400	2000	1400	1360	2180	7690	11500	10600	19300
21	4700	4800	2720	2200	2000	1400	1420	2240	7630	11900	10300	20000
22	4850	4650	2680	2200	2000	1400	1480	2220	7630	12100	10200	20700
23	5150	4580	2640	2200	1800	1400	1520	2300	7570	12500	10200	20700
24	5260	4500	2700	2200	1800	1400	1560	2370	7690	13100	10400	20500
25	5260	4400	2640	2200	1800	1400	1580	2370	7690	13300	10500	20000
26	5260	4350	2600	2200	1800	1200	1540	2500	8050	13500	10400	19700
27	5120	4300	2600	2200	1800	1200	1630	2780	8290	13600	10200	19200
28	5200	4250	2800	2200	1800	1200	1630	2620	9100	13600	10100	18800
29	5200	4070	2700	2200	---	1200	1620	2660	10400	13800	10300	18800
30	5150	3900	2700	2200	---	1200	1600	2700	9820	14300	10500	19700
31	5150	---	2700	2000	---	1200	---	2860	---	14500	10900	---
TOTAL	176180	145650	91040	74800	54800	45800	43100	64870	197420	365200	362300	465000
MEAN	5683	4855	2937	2413	1957	1477	1437	2093	6581	11780	11690	15500
MAX	8350	6040	3870	2700	2000	1800	1630	2860	10400	14500	14300	20700
MIN	4500	3900	2560	2000	1800	1200	1200	1560	3100	10100	10100	10400
CFSM	2.83	2.42	1.46	1.20	.97	.74	.72	1.04	3.27	5.86	5.82	7.71
IN.	3.26	2.70	1.68	1.38	1.01	.85	.80	1.20	3.65	6.76	6.71	8.61
AC-FT	349500	288900	180600	148400	108700	90840	85490	128700	391600	724400	718600	922300

CAL YR 1981 TOTAL 2776310 MEAN 7606 MAX 22800 MIN 1700 CFSM 3.78 IN 51.38 AC-FT 5507000
WTR YR 1982 TOTAL 2086160 MEAN 5716 MAX 20700 MIN 1200 CFSM 2.84 IN 38.61 AC-FT 4138000

NOTE.--No gage-height record Dec. 31 to Mar. 30.

15267900 RESURRECTION CREEK NEAR HOPE

LOCATION.--Lat 60°53'40", long 149°38'13", in SW¼SE¼ sec.4, T.9 N., R.3 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, on right bank 2.1 mi (3.4 km) upstream from mouth on south shore of Turnagain Arm and 1.8 mi (2.9 km) south of Hope.

DRAINAGE AREA.--149 mi² (386 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (55 m), from topographic map. Prior to Apr. 3, 1981 at site 300 ft (90 m) upstream at different datum.

REMARKS.--Records good except those for Nov. 18 to Apr. 18, which are poor.

AVERAGE DISCHARGE.--15 years, 283 ft³/s (8.015 m³/s), 25.79 in/yr (655 mm/yr), 205,000 acre-ft/yr (253 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,380 ft³/s (95.7 m³/s) July 12, 1980, gage height, 8.71 ft (2.655 m) site and datum then in use, from rating curve extended above 2,100 ft³/s (59 m³/s); maximum gage height, 8.96 ft (2.731 m) June 18, 1977, site and datum then in use; minimum daily discharge, 46 ft³/s (1.30 m³/s) Mar. 26 to Apr. 13, 1975.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 10	1200	*1,180	33.4	*5.24	1.597	June 28	0600	828	23.4	4.95	1.509
June 10	2000	838	23.7	4.96	1.512						

Minimum discharge, 63 ft³/s (1.78 m³/s) Apr. 20, gage height 3.45 ft (1.052 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	218	120	150	90	110	80	88	434	625	421	266
2	218	210	120	150	120	110	80	93	490	574	395	248
3	211	200	120	130	150	110	80	95	497	527	376	244
4	218	195	120	130	200	110	80	95	476	511	359	235
5	215	190	100	130	170	110	80	95	483	519	354	252
6	211	190	100	130	170	110	70	104	519	483	348	376
7	203	190	100	130	150	110	70	149	625	511	342	354
8	192	195	100	130	150	110	70	172	625	543	331	326
9	196	222	100	130	150	110	70	175	660	543	326	310
10	185	827	100	130	150	110	70	207	785	535	315	305
11	188	599	90	122	150	110	70	207	764	504	342	290
12	211	519	90	110	150	110	70	192	651	497	315	270
13	290	427	90	110	150	110	70	196	582	504	295	342
14	257	359	90	110	130	110	65	192	551	483	290	359
15	248	305	90	110	130	110	65	185	519	476	310	440
16	239	252	90	110	130	107	65	203	497	543	295	599
17	226	235	100	110	130	100	65	244	490	535	275	519
18	226	200	150	110	130	100	65	226	543	497	261	490
19	211	200	300	100	130	100	68	222	566	468	257	490
20	211	170	250	100	130	100	65	248	558	476	252	461
21	261	170	250	100	130	100	68	252	566	476	248	447
22	315	170	200	100	130	100	70	261	551	476	248	421
23	454	170	200	100	130	100	70	266	566	543	248	402
24	414	140	200	100	130	90	68	266	599	599	248	376
25	370	140	200	100	130	90	72	305	625	551	252	365
26	331	140	150	90	130	90	72	315	651	519	244	359
27	305	140	150	90	110	90	73	320	696	497	230	342
28	300	140	150	90	110	90	90	326	806	483	226	331
29	290	120	150	90	---	90	86	320	706	497	252	331
30	261	120	150	90	---	80	86	365	651	490	266	342
31	248	---	150	90	---	80	---	414	---	454	275	---
TOTAL	7935	7353	4370	3472	3860	3157	2173	6798	17732	15939	9196	10892
MEAN	256	245	141	112	138	102	72.4	219	591	514	297	363
MAX	454	827	300	150	200	110	90	414	806	625	421	599
MIN	185	120	90	90	90	80	65	88	434	454	226	235
CFSM	1.72	1.64	.95	.75	.93	.69	.49	1.47	3.97	3.45	1.99	2.44
IN.	1.98	1.84	1.09	.87	.96	.79	.54	1.70	4.43	3.98	2.30	2.72
AC-FT	15740	14580	8670	6890	7660	6260	4310	13480	35170	31610	18240	21600

CAL YR 1981	TOTAL 141460	MEAN 388	MAX 1270	MIN 75	CFSM 2.60	IN 35.32	AC-FT 280600			
WTR YR 1982	TOTAL 92877	MEAN 254	MAX 827	MIN 65	CFSM 1.71	IN 23.19	AC-FT 184200			

15271000 SIXMILE CREEK NEAR HOPE

LOCATION.--Lat 60°49'15", long 149°25'31", in SW¼SE¼ sec.34, T.8 N., R.1 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, on left bank 6.0 mi (9.7 km) upstream from mouth at Turnagain Arm and 10.6 mi (17.1 km) southeast of Hope.

DRAINAGE AREA.--234 mi² (606 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map. Prior to Nov. 26, 1979, recording gage at site 0.8 mi (1.3 km) downstream at different datum.

REMARKS.--Records good except those for Nov. 3 to Mar. 21, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded discharge, 8,070 ft³/s (229 m³/s) July 12, 1980, gage height, 13.22 ft (4.029 m); but was probably more sometime during period Nov. 25 to Jan. 9, 1980 on release of storage behind snow-avalanche dam upstream from former gage site. This flood destroyed the gage and reached a stage of about 29.0 ft (8.8 m), site and datum then in use. Minimum discharge, 123 ft³/s (3.48 m³/s) Apr. 13, 1982, gage height 7.73 ft (2.356 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 1969 reached a stage of 20.8 ft (6.34 m), former site and datum, from floodmarks, discharge, 7,300 ft³/s (207 m³/s) from rating curve extended above 2,500 ft³/s (71 m³/s) on basis of slope-area measurement at gage height of 17.62 ft (5.371 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3550 ft³/s (101 m³/s) June 28, gage height, 11.66 ft (3.554 m), no peak above base of 4,500 ft³/s (127 m³/s); minimum, 123 ft³/s (3.48 m³/s) Apr. 13, gage height, 7.73 ft (2.356 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	641	541	300	300	200	160	148	186	1910	2360	1420	855
2	609	546	300	300	233	160	150	201	2050	1920	1320	791
3	584	450	300	300	280	160	150	218	2090	1650	1260	743
4	599	400	300	250	376	160	153	221	1960	1690	1180	707
5	589	400	300	250	324	150	148	223	1870	1800	1170	898
6	565	350	250	250	272	150	137	263	1980	2000	1170	1980
7	541	350	250	250	248	150	142	373	2180	2110	1240	1470
8	514	350	250	250	240	150	140	492	2170	2420	1260	1170
9	518	500	250	250	233	150	137	615	2410	2390	1220	1030
10	496	2000	250	250	220	150	134	679	2940	2300	1070	1000
11	509	1500	250	220	200	150	134	772	2790	2060	1110	931
12	546	1000	250	200	200	150	130	685	2320	1980	1030	862
13	696	900	250	200	200	150	130	696	2040	1940	1020	1290
14	674	800	250	200	200	150	130	702	1820	1980	1060	1360
15	636	700	250	200	200	150	130	691	1700	1940	1160	1910
16	620	600	250	200	200	140	135	778	1620	2100	1060	2600
17	609	500	300	200	200	140	135	882	1650	1930	960	1930
18	584	500	400	200	180	140	134	889	2000	1690	895	1690
19	546	450	500	200	180	140	134	868	2110	1630	855	1760
20	541	450	450	200	180	140	142	916	2070	1910	842	1520
21	702	400	400	200	180	140	146	952	2000	2020	848	1410
22	875	400	400	200	180	143	143	982	1920	1790	862	1320
23	1270	400	400	200	180	143	143	1050	2000	1870	895	1190
24	997	350	350	200	180	146	143	1080	2240	2010	938	1070
25	916	350	350	200	160	143	153	1200	2390	1850	902	989
26	804	350	350	200	160	150	154	1270	2540	1720	848	938
27	742	350	350	200	160	153	176	1280	2730	1710	822	875
28	713	350	300	200	160	142	194	1320	3280	1770	816	829
29	674	300	300	200	---	153	192	1320	2600	1840	924	835
30	641	300	300	200	---	146	184	1450	2520	1830	974	816
31	594	---	300	200	---	153	---	1790	---	1590	931	---
TOTAL	20545	16837	9700	6870	5926	4602	4401	25044	65900	58800	32062	36769
MEAN	663	561	313	222	212	148	147	808	2197	1929	1034	1226
MAX	1270	2000	500	300	[illegible]	160	194	1790	3280	2420	1420	2600
MIN	496	300	250	200	[illegible]	140	130	186	1620	1590	816	707
CFSM	2.83	2.40	1.34	.95	[illegible]	.63	.63	3.45	9.39	8.24	4.42	5.24
IN.	3.27	2.68	1.54	1.09	[illegible]	.73	.70	3.98	10.48	9.51	5.10	5.85
AC-FT	40750	33400	19240	13630	11750	9130	8730	49670	130700	118600	63590	72930

CAL YR 1981 TOTAL 441851 MEAN 1211 MAX 6230 MIN 192 CFSM 5.18 IN 70.24 AC-FT 876400
WTR YR 1982 TOTAL 288456 MEAN 790 MAX 3280 MIN 130 CFSM 3.38 IN 45.86 AC-FT 572200

NOTE.--No gage-height record Nov. 11 to Jan. 10.

15273095 LITTLE RABBIT CREEK ABOVE GOLDENVIEW DRIVE AT ANCHORAGE

LOCATION.--Lat 61°04'58", long 149°45'41", in SE¼SW¼ sec.35, T.12 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank beneath driveway bridge, 0.4 mi (0.6 km) above Goldenview Drive, and 10.5 mi (16.9 km) south of Anchorage.

DRAINAGE AREA.--5.06 mi² (13.1 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is about 745 ft (227.1 m), from topographic map.

REMARKS.--Records good except those for Nov. 14 to May 1, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 202 ft³/s (5.72 m³/s) Nov. 10, 1981, gage height, 2.09 ft (0.637 m); minimum, about 1.0 ft³/s (0.03 m³/s) Feb. 11 to Apr. 8, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 202 ft³/s (5.72 m³/s) Nov. 10, gage height, 2.09 ft (0.637 m); minimum, about 1.0 ft³/s (0.03 m³/s) Feb. 11 to Apr. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	8.8	4.0	2.0	2.0	1.0	1.0	6.0	6.7	12	7.4	8.8
2	3.1	8.8	4.0	2.0	2.0	1.0	1.0	7.7	6.7	10	6.4	8.4
3	3.1	8.4	4.0	2.0	2.0	1.0	1.0	7.1	6.4	8.0	5.9	11
4	3.3	8.4	4.0	2.0	2.0	1.0	1.0	6.2	5.9	7.0	5.1	11
5	3.5	8.4	4.0	2.0	2.0	1.0	1.0	5.2	6.7	5.0	4.8	11
6	3.5	8.4	4.0	2.0	2.0	1.0	1.0	7.1	15	4.8	4.6	22
7	3.3	7.7	4.0	2.0	2.0	1.0	1.0	13	23	4.6	4.1	16
8	3.3	6.4	4.0	2.0	2.0	1.0	1.0	11	23	5.6	4.3	14
9	7.4	6.2	4.0	2.0	2.0	1.0	2.0	22	24	5.6	3.7	12
10	2.9	72	4.0	2.0	2.0	1.0	2.0	14	27	5.3	3.9	11
11	4.1	34	4.0	2.0	1.0	1.0	2.0	15	23	6.4	6.4	11
12	7.1	25	4.0	2.0	1.0	1.0	2.0	13	18	7.0	5.1	10
13	21	19	4.0	2.0	1.0	1.0	2.0	9.2	11	6.4	3.9	48
14	14	14	4.0	2.0	1.0	1.0	2.0	7.7	9.0	5.3	3.5	23
15	8.4	10	4.0	2.0	1.0	1.0	2.0	7.7	8.0	5.0	5.6	25
16	7.4	8.0	4.0	2.0	1.0	1.0	2.0	7.4	7.0	10	5.1	25
17	6.2	7.0	4.0	2.0	1.0	1.0	2.0	6.4	7.0	11	4.3	20
18	5.6	6.0	4.0	2.0	1.0	1.0	2.0	6.4	7.0	7.4	4.1	18
19	5.3	5.0	4.0	2.0	1.0	1.0	2.0	5.9	11	5.6	3.7	25
20	5.3	4.0	4.0	2.0	1.0	1.0	2.0	5.6	10	4.3	3.3	21
21	28	4.0	4.0	2.0	1.0	1.0	2.0	4.8	8.0	3.9	3.1	17
22	25	4.0	4.0	2.0	1.0	1.0	2.0	4.8	7.0	4.1	2.9	17
23	33	4.0	3.0	2.0	1.0	1.0	2.0	5.1	6.0	11	2.7	15
24	19	4.0	3.0	2.0	1.0	1.0	2.0	5.1	6.0	20	3.1	14
25	17	4.0	3.0	2.0	1.0	1.0	2.0	5.9	6.0	14	5.6	13
26	15	4.0	3.0	2.0	1.0	1.0	2.0	6.4	6.0	11	6.2	14
27	14	4.0	3.0	2.0	1.0	1.0	2.0	12	7.0	9.2	4.3	13
28	13	4.0	3.0	2.0	1.0	1.0	2.0	6.7	10	8.4	3.5	11
29	11	4.0	2.0	2.0	---	1.0	3.0	5.9	20	9.2	11	14
30	10	4.0	2.0	2.0	---	1.0	4.0	6.2	14	11	14	19
31	8.8	---	2.0	2.0	---	1.0	---	7.1	---	9.6	14	---
TOTAL	314.9	315.5	112.0	62.0	38.0	31.0	55.0	253.6	345.4	247.7	165.6	498.2
MEAN	10.2	10.5	3.61	2.00	1.36	1.00	1.83	8.18	11.5	7.99	5.34	16.6
MAX	33	72	4.0	2.0	2.0	1.0	4.0	22	27	20	14	48
MIN	2.9	4.0	2.0	2.0	1.0	1.0	1.0	4.8	5.9	3.9	2.7	8.4
CFSM	2.02	2.08	.71	.40	.27	.20	.36	1.62	2.27	1.58	1.06	3.28
IN.	2.31	2.32	.82	.46	.28	.23	.40	1.86	2.54	1.82	1.22	3.66
AC-FT	625	626	222	123	75	61	109	503	685	491	328	988

CAL YR 1981 TOTAL 2469.7 MEAN 6.77 MAX 72 MIN 1.5 CFSM 1.34 IN 18.15 AC-FT 4900
WTR YR 1982 TOTAL 2438.9 MEAN 6.68 MAX 72 MIN 1.0 CFSM 1.32 IN 17.93 AC-FT 4840

NOTE.--No gage height record Nov. 17 to Mar. 23.

15274300 NORTH FORK CAMPBELL CREEK NEAR ANCHORAGE

LOCATION.--Lat 61°10'10", long 149°45'43", in SW¼ sec.35, T.13 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank 40 ft (12 m) upstream from Campbell Airstrip road, 2.5 mi (4.0 km) upstream from confluence with South Fork, and 5.5 mi (8.8 km) southeast of Anchorage Post Office.

DRAINAGE AREA.--13.4 mi² (34.7 km²).

PERIOD OF RECORD.--Annual maximum, water years 1967-74. June 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 300 ft (91 m), from topographic map. May 7, 1967 to June 5, 1974, crest-stage gage at site 25 ft (7.6 m) downstream at same datum.

REMARKS.--Records good except those for period of no gage-height record, Dec. 22 to May 16, which are poor.

AVERAGE DISCHARGE.--8 years, 18.4 ft³/s (0.521 m³/s), 18.65 in/yr (474 mm/yr), 13,330 acre-ft/yr (16.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 107 ft³/s (3.03 m³/s) Aug. 9, 1971; maximum gage height, 12.18 ft (3.712 m) Aug. 9, 1971, July 12, 1980; minimum daily discharge, about 1.0 ft³/s (0.03 m³/s) Dec. 8, 9, 1976 and Feb. 24 to Mar. 15, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 89 ft³/s (2.52 m³/s) Nov. 10, gage height, 11.92 ft (3.633 m); minimum daily, about 1.0 ft³/s (0.03 m³/s) Feb. 24 to Mar. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	19	12	6.5	6.0	1.0	4.0	3.5	8.6	39	36	32
2	18	17	12	6.5	6.0	1.0	4.0	3.5	8.9	37	33	30
3	18	15	12	6.0	5.5	1.0	4.0	3.5	9.5	31	31	29
4	17	13	12	6.0	5.5	1.0	4.0	3.5	9.5	28	30	28
5	17	11	12	6.0	5.0	1.0	4.0	3.5	11	28	30	29
6	16	11	12	6.0	4.5	1.0	4.0	3.5	16	29	29	39
7	16	13	12	6.0	4.0	1.0	4.0	3.5	41	28	29	40
8	19	15	12	6.0	4.0	1.0	4.0	3.5	37	31	28	35
9	15	25	12	6.0	4.0	1.0	4.0	3.5	37	39	28	33
10	18	60	12	6.0	3.5	1.0	4.0	3.5	44	36	27	31
11	15	29	12	6.0	3.5	1.0	4.0	3.5	46	34	29	29
12	18	25	12	6.0	3.0	1.0	4.0	3.5	37	33	26	30
13	26	23	13	6.0	3.0	1.0	4.0	3.5	31	33	24	51
14	24	21	13	6.0	3.0	1.0	4.0	3.5	25	34	23	49
15	21	20	13	6.0	2.5	1.0	4.0	3.5	22	32	26	69
16	19	17	13	6.0	2.5	1.5	4.0	3.5	21	34	26	67
17	19	15	13	6.0	2.0	1.5	3.5	4.1	20	36	24	66
18	19	13	13	6.0	2.0	1.5	3.5	4.1	21	34	23	60
19	18	12	13	6.5	2.0	1.5	3.5	3.9	25	31	22	59
20	17	12	12	6.5	1.5	1.5	3.5	4.1	30	32	21	61
21	20	12	12	6.5	1.5	1.5	3.5	4.1	35	35	21	59
22	22	12	12	6.5	1.5	2.0	3.5	3.9	28	35	20	53
23	26	12	11	6.5	1.5	2.0	3.5	4.4	29	38	21	53
24	25	12	10	7.0	1.0	2.0	3.5	4.4	30	54	20	50
25	24	12	9.0	7.0	1.0	2.0	3.5	5.3	39	48	21	48
26	25	12	8.5	7.0	1.0	2.5	3.5	5.1	46	42	22	48
27	24	12	8.0	6.5	1.0	2.5	3.5	6.9	48	38	21	44
28	24	12	7.5	6.5	1.0	3.0	3.5	6.9	58	37	20	44
29	24	12	7.0	6.5	---	3.5	3.5	6.7	53	40	27	42
30	23	12	6.5	6.5	---	3.5	3.5	6.4	44	42	30	42
31	21	---	6.5	6.5	---	4.0	---	8.1	---	40	33	---
TOTAL	626	506	345.0	195.0	82.5	51.0	113.0	134.4	910.5	1108	801	1350
MEAN	20.2	16.9	11.1	6.29	2.95	1.65	3.77	4.34	30.4	35.7	25.8	45.0
MAX	26	60	13	7.0	6.0	4.0	4.0	8.1	58	54	36	69
MIN	15	11	6.5	6.0	1.0	1.0	3.5	3.5	8.6	28	20	28
CFSM	1.51	1.26	.83	.47	.22	.12	.28	.32	2.27	2.66	1.93	3.36
IN.	1.74	1.40	.96	.54	.23	.14	.31	.37	2.53	3.08	2.22	3.75
AC-FT	1240	1000	684	387	164	101	224	267	1810	2200	1590	2680

CAL YR 1981 TOTAL 6697.7 MEAN 18.3 MAX 93 MIN 4.0 CFSM 1.37 IN 18.59 AC-FT 13280
WTR YR 1982 TOTAL 6222.4 MEAN 17.0 MAX 69 MIN 1.0 CFSM 1.27 IN 17.27 AC-FT 12340

15274600 CAMPBELL CREEK NEAR SPENARD

LOCATION.--Lat 61°08'17", long 149°55'20", on line between sec.11 and 14, T.12 N., R.4 W., Municipality of Anchorage, Hydrologic Unit 19050002, on upstream right wingwall of bridge at Dimond Boulevard crossing, 2.0 mi (3.2 km) upstream from mouth, and 4.3 mi (6.9 km) south of Spenard.

DRAINAGE AREA.--69.7 mi² (180.5 km²).

RERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 18.04 ft (5.499 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record, Nov. 1 to May 27, which are poor.

AVERAGE DISCHARGE.--16 years, 65.2 ft³/s (1.846 m³/s), 12.70 in/yr (323 mm/yr), 47,240 acre-ft/yr (58.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 451 ft³/s (12.8 m³/s) Aug. 13, 1981, gage height, 3.54 ft (1.079 m); maximum gage height recorded, 5.29 ft (1.612 m) Apr. 20, 1976, backwater from ice; minimum daily discharge, 2.2 ft³/s (0.062 m³/s) Feb. 5, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 358 ft³/s (10.1 m³/s) Sept. 16, gage height, 2.85 ft (0 869 m); minimum daily, about 13 ft³/s (0.37 m³/s) Mar. 1-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	85	50	25	25	13	18	45	45	137	133	141
2	62	85	50	20	25	13	18	45	45	125	118	129
3	61	85	50	20	30	13	19	45	45	113	110	128
4	69	85	45	20	35	13	19	45	48	107	104	119
5	66	85	45	20	30	13	20	45	52	114	100	115
6	64	90	45	20	25	13	21	45	62	110	96	191
7	61	100	45	20	25	13	22	45	144	113	93	196
8	59	120	45	20	25	13	23	45	166	125	93	165
9	58	140	45	20	25	13	24	45	168	137	90	150
10	56	200	45	20	25	13	25	45	208	125	86	140
11	59	170	45	20	25	13	26	45	178	124	105	133
12	69	150	45	20	25	13	27	45	138	123	96	128
13	105	120	45	20	20	14	28	45	117	124	88	251
14	113	90	45	20	20	14	29	45	104	122	86	251
15	102	70	45	20	20	14	30	45	97	117	96	291
16	91	60	45	20	19	14	31	47	92	133	98	335
17	83	55	45	20	18	14	32	47	88	146	90	295
18	83	50	45	20	17	15	33	48	96	130	88	256
19	75	50	45	20	16	15	34	48	107	119	85	279
20	73	45	45	25	15	15	35	48	117	114	84	264
21	93	45	45	25	15	15	36	48	116	114	80	241
22	128	45	45	25	14	15	37	48	109	119	79	223
23	154	45	45	25	14	16	38	47	110	129	80	211
24	148	45	45	25	14	16	39	46	119	212	79	197
25	125	50	40	25	14	16	40	45	138	185	84	188
26	111	50	35	25	14	16	42	44	152	164	87	184
27	101	50	35	25	14	17	44	43	164	141	82	180
28	101	50	30	25	14	17	45	42	191	128	80	167
29	96	50	30	25	---	17	45	42	173	133	100	177
30	89	50	25	25	---	18	45	43	146	160	146	202
31	84	---	25	25	---	18	---	44	---	154	165	---
TOTAL	2704	2415	1315	685	578	452	925	1405	3535	4097	3001	5927
MEAN	87.2	80.5	42.4	22.1	20.6	14.6	30.8	45.3	118	132	96.8	198
MAX	154	200	50	25	35	18	45	48	208	212	165	335
MIN	56	45	25	20	14	13	18	42	45	107	79	115
CFSM	1.25	1.16	.61	.32	.30	.21	.44	.65	1.69	1.89	1.39	2.84
IN.	1.44	1.29	.70	.37	.31	.24	.49	.75	1.89	2.19	1.60	3.16
AC-FT	5360	4790	2610	1360	1150	897	1830	2790	7010	8130	5950	11760

CAL YR 1981 TOTAL 31302 MEAN 85.8 MAX 437 MIN 25 CFSM 1.23 IN 16.71 AC-FT 62090
WTR YR 1982 TOTAL 27039 MEAN 74.1 MAX 335 MIN 13 CFSM 1.06 IN 14.43 AC-FT 53630

15274798 SOUTH BRANCH OF SOUTH FORK CHESTER CREEK NEAR EAST 20TH AVENUE AT ANCHORAGE

LOCATION.--Lat 61°12'21", long 149°42'55", in SW¼NW¼ sec.19, T.13 N., R.2 W., Municipality of Anchorage, Hydrologic Unit 19050002, Fort Richardson Military Reservation, on left bank 150 ft (46 m) downstream of East 20th Avenue, extended, and 6.1 mi (9.8 km) east of Anchorage Post Office.

DRAINAGE AREA.--9.39 mi² (24.3 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 280 ft (85 m), from topographic map.

REMARKS.--Records good except those for periods of no gage-height record, Nov. 1 to May 21, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24 ft³/s (0.68 m³/s) Sept. 20, 1982, gage height, 4.98 ft (1.518 m); maximum gage height, 5.11 (1.558 m) Aug. 16, 1981; minimum daily discharge, about 3.0 ft³/s (0.08 m³/s) Jan. 11 to Mar. 3, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24 ft³/s (0.68 m³/s) Sept. 20, gage height, 4.98 ft (1.518 m); minimum daily, about 3.0 ft³/s (0.08 m³/s) Jan. 11 to Mar. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	7.5	4.0	3.0	3.0	5.0	4.0	5.2	6.9	8.2	9.1
2	11	12	7.5	4.0	3.0	3.0	5.0	4.0	5.2	6.7	7.9	8.4
3	11	11	7.5	3.5	3.0	3.0	5.0	4.0	5.1	6.6	7.8	9.7
4	11	10	7.5	3.5	3.0	3.5	5.0	4.0	5.1	6.7	7.7	9.0
5	10	9.5	7.5	3.5	3.0	3.5	5.0	4.0	5.0	6.7	7.7	8.7
6	10	9.5	7.5	3.5	3.0	3.5	5.0	4.0	6.9	6.7	7.7	13
7	9.9	9.5	7.5	3.5	3.0	3.5	5.0	4.0	15	6.5	7.7	11
8	9.9	11	7.5	3.5	3.0	3.5	5.0	4.0	11	6.9	7.7	9.9
9	9.6	14	7.5	3.5	3.0	3.5	4.5	4.0	9.0	7.0	7.5	9.4
10	9.6	20	7.5	3.5	3.0	3.5	4.5	4.0	9.0	6.9	7.5	9.3
11	9.7	17	7.5	3.0	3.0	4.0	4.5	4.0	7.5	7.5	9.3	9.4
12	11	16	7.5	3.0	3.0	4.0	4.5	4.0	7.1	7.7	8.2	9.4
13	19	13	7.5	3.0	3.0	4.0	4.5	4.0	6.6	7.1	7.4	16
14	16	12	7.5	3.0	3.0	4.0	4.5	4.0	6.5	6.4	7.1	18
15	14	11	7.5	3.0	3.0	4.0	4.5	4.0	6.5	6.2	7.8	20
16	13	10	8.0	3.0	3.0	4.0	4.0	4.2	6.4	7.5	7.7	20
17	12	9.5	8.0	3.0	3.0	4.0	4.0	4.2	6.4	8.5	7.3	18
18	12	9.5	8.0	3.0	3.0	4.5	4.0	4.5	6.6	7.4	7.0	18
19	12	9.0	8.0	3.0	3.0	4.5	4.0	4.5	6.7	6.9	6.9	21
20	11	8.5	8.0	3.0	3.0	4.5	4.0	4.8	7.8	6.6	6.6	23
21	12	8.0	8.0	3.0	3.0	4.5	4.0	4.8	6.9	6.6	6.5	20
22	19	8.0	8.0	3.0	3.0	4.5	4.0	4.8	6.9	7.0	6.5	19
23	18	8.0	7.5	3.0	3.0	4.5	4.0	5.0	6.7	7.9	6.5	18
24	17	7.5	7.5	3.0	3.0	4.5	4.0	4.9	6.6	10	6.4	17
25	16	7.5	7.0	3.0	3.0	4.5	4.0	5.2	6.6	8.4	6.6	17
26	15	7.5	6.0	3.0	3.0	5.0	4.0	5.5	6.7	8.2	7.1	17
27	14	7.5	5.5	3.0	3.0	5.0	4.0	5.9	6.7	7.8	6.6	17
28	14	7.5	5.0	3.0	3.0	5.0	4.0	5.3	6.7	7.7	6.4	16
29	14	7.5	4.5	3.0	---	5.0	4.0	5.1	6.6	8.4	7.5	16
30	13	7.5	4.5	3.0	---	5.0	4.0	5.1	6.9	9.6	8.8	19
31	13	---	4.0	3.0	---	5.0	---	5.2	---	8.8	10	---
TOTAL	397.7	310.5	220.0	99.0	84.0	127.5	131.5	139.0	211.9	229.8	231.6	446.3
MEAN	12.8	10.4	7.10	3.19	3.00	4.11	4.38	4.48	7.06	7.41	7.47	14.9
MAX	19	20	8.0	4.0	3.0	5.0	5.0	5.9	15	10	10	23
MIN	9.6	7.5	4.0	3.0	3.0	3.0	4.0	4.0	5.0	6.2	6.4	8.4
CFSM	1.36	1.11	.76	.34	.32	.44	.47	.48	.75	.79	.80	1.59
IN.	1.58	1.23	.87	.39	.33	.51	.52	.55	.84	.91	.92	1.77
AC-FT	789	616	436	196	167	253	261	276	420	456	459	885

CAL YR 1981 TOTAL 2962.6 MEAN 8.12 MAX 20 MIN 4.0 CFSM .87 IN 11.74 AC-FT 5880
WTR YR 1982 TOTAL 2628.8 MEAN 7.20 MAX 23 MIN 3.0 CFSM .77 IN 10.41 AC-FT 5210

15274798 SOUTH BRANCH OF SOUTH FORK CHESTER CREEK NEAR EAST 20TH AVENUE AT ANCHORAGE--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH LAB (UNITS)	TEMPER-ATURE (DEG C)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (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)	ALKA-LINITY LAB (MG/L AS CACO3)
AUG 03...	1300	7.9	121	7.9	--	<1	55	17	3.1	1.8	.3	53
SEP 08...	0810	9.2	117	8.2	4.5	K10	54	16	3.4	2.4	.6	46

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
AUG 03...	11	.6	<.1	10	80	76	.24	.23	.110	.100	.79	.70
SEP 08...	11	.9	<.1	10	85	73	.30	.28	.220	.160	.78	.64

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)
AUG 03...	.90	.10	.80	1.1	1.0	.040	.020	--	260	210	50	<1
SEP 08...	1.00	.20	.80	1.3	1.1	.040	.070	4.7	70	30	40	<1

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
AUG 03...	<1	<1	6	<10	§1	3	0	5	430	330	100	1
SEP 08...	<1	<1	10	<10	1	2	0	3	130	10	120	<1

DATE	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
AUG 03...	0	2	30	20	11	<1	<1	10	2	8	19	.41
SEP 08...	--	<1	20	0	20	3	<1	<10	--	20	1	.02

K NON-IDEAL COLONY COUNT

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE

LOCATION.--Lat 61°12'19", long 149°53'43", on line between sec.19, R.3 W., and sec.24, R.4 W., T.13 N., Municipality of Anchorage, Hydrologic Unit 19050002, on upstream right bank wingwall of bridge on Arctic Boulevard at Anchorage.

DRAINAGE AREA.--27.2 mi² (70.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1966 to current year.

REVISED RECORDS.--WRD Alaska 1972: Drainage area.

GAGE.--Water-stage recorder and culvert control. Datum of gage is 16.02 ft (4.883 m) National Geodetic Vertical Datum of 1929 (from USC&GS, datum of 1968).

REMARKS.--Records good except those for the period of no gage-height record, Nov. 16 to Mar. 30, which are poor.

AVERAGE DISCHARGE.--16 years, 17.9 ft³/s (0.507 m³/s), 8.94 in/yr (227 mm/yr), 12,970 acre-ft/yr (16.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 136 ft³/s (3.85 m³/s), revised, Sept. 24, 1981, gage height, 4.98 ft (1.518 m), and Sept. 3, 1982, gage height, 4.95 ft (1.509 m); minimum daily, about 1.6 ft³/s (0.045 m³/s) Feb. 12-14, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 136 ft³/s (3.85 m³/s) Sept. 3, gage height, 4.95 ft (1.509 m); minimum daily, about 4.5 ft³/s (0.13 m³/s) Jan. 26 to Feb. 2.

REVISIONS.--The maximum discharges for the water years 1979 and 1981 have been revised to 132 ft³/s (3.74 m³/s) June 27, 1979, gage height, 4.83 ft (1.472 m), and 136 ft³/s (3.85 m³/s) Sept. 24, 1981, gage height, 4.98 ft (1.518 m), superseding figures published in reports for 1979 and 1981.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	25	21	10	4.5	7.0	20	15	15	16	19	24
2	25	26	20	10	4.5	7.0	20	15	15	16	18	24
3	25	25	20	9.5	15	7.0	20	15	15	16	18	42
4	39	25	20	9.5	55	7.0	19	15	14	16	17	26
5	29	24	20	9.0	29	7.0	18	15	14	16	17	29
6	26	23	19	8.5	24	7.0	18	15	42	16	17	39
7	25	23	19	8.0	20	7.0	18	16	55	16	17	27
8	24	23	19	7.5	18	7.0	19	17	29	17	17	24
9	24	23	18	7.5	17	7.0	18	26	28	16	17	24
10	23	80	18	7.0	16	7.0	16	22	26	18	19	24
11	32	53	18	6.5	14	7.0	15	26	21	21	28	23
12	51	40	18	6.5	12	7.0	15	20	20	18	19	22
13	74	35	18	6.5	10	7.0	15	18	19	18	17	96
14	49	30	18	6.0	9.0	7.5	14	17	19	17	16	61
15	40	28	18	6.0	8.0	7.5	14	18	18	17	23	72
16	35	27	17	5.5	7.5	8.0	15	17	18	30	18	58
17	33	26	17	5.5	7.5	8.0	14	17	17	20	17	40
18	39	26	17	5.5	7.5	8.0	14	16	18	17	16	45
19	31	25	17	5.5	7.5	8.0	14	16	18	17	18	61
20	30	25	17	5.0	7.5	8.5	14	16	20	16	18	49
21	49	24	17	5.0	7.5	9.0	15	16	18	16	17	41
22	46	24	16	5.0	7.5	9.0	16	16	18	16	17	39
23	53	23	16	5.0	7.5	9.5	15	16	18	29	17	36
24	42	23	16	5.0	7.5	10	14	16	17	22	17	34
25	38	23	14	5.0	7.5	10	15	16	17	20	22	34
26	36	22	14	4.5	7.0	11	15	16	17	19	19	39
27	35	22	13	4.5	7.0	12	15	16	17	18	18	35
28	33	21	13	4.5	7.0	13	16	16	17	18	18	36
29	32	21	12	4.5	---	15	16	15	16	24	45	52
30	31	21	12	4.5	---	17	15	15	17	28	39	58
31	30	---	11	4.5	---	18	---	15	---	20	35	---
TOTAL	1106	836	523	197.0	352.0	280.0	482	525	613	584	630	1214
MEAN	35.7	27.9	16.9	6.35	12.6	9.03	16.1	16.9	20.4	18.8	20.3	40.5
MAX	74	80	21	10	55	18	20	26	55	30	45	96
MIN	23	21	11	4.5	4.5	7.0	14	15	14	16	16	22
CFSM	1.31	1.03	.62	.23	.46	.33	.59	.62	.75	.69	.75	1.49
IN.	1.51	1.14	.72	.27	.48	.38	.66	.72	.84	.80	.86	1.66
AC-FT	2190	1660	1040	391	698	555	956	1040	1220	1160	1250	2410

CAL YR 1981 TOTAL 8705.0 MEAN 23.8 MAX 86 MIN 11 CFSM .88 IN 11.90 AC-FT 17270
WTR YR 1982 TOTAL 7342.0 MEAN 20.1 MAX 96 MIN 4.5 CFSM .74 IN 10.04 AC-FT 14560

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-73, 1975-77, and 1980 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1981 to current year.
WATER TEMPERATURE: October 1981 to current year.

INSTRUMENTATION.--USGS mini-monitor and multiparameter recorder since October 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,380 micromhos Mar. 17; minimum 70 micromhos Sept. 13.
WATER TEMPERATURE: Maximum, 15.5°C July 20; minimum 0°C many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH LAB (UNITS)	TEMPER-ATURE (DEG C)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (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)	ALKA-LINITY LAB (MG/L AS CACO3)
AUG												
03...	1415	18	255	7.9	--	180	110	32	7.2	6.0	.8	90
SEP												
08...	0925	27	243	8.1	7.5	380	110	31	7.6	7.1	.9	77
13...	0820	124	63	7.7	--	5400	24	7.2	1.4	2.4	.9	21
13...	1010	129	69	7.6	--	4700	26	7.6	1.6	2.9	1.0	21
13...	1430	119	95	7.5	--	K6200	34	10	2.3	4.1	1.2	27

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
AUG												
03...		10	<.1	12	159	143	.45	.45	.110	.110	.79	.79
SEP												
08...	<3	10	<.1	12	135	140	.40	.46	.240	.220	.56	.18
13...	6.0	3.3	<.1	2.9	33	37	.10	<.10	.080	--	1.6	--
13...	8.0	4.0	<.1	3.6	62	42	.10	.12	.100	.090	1.9	.51
13...	10	6.6	<.1	4.9	69	56	.10	.12	.070	.070	2.0	.73

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-CEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)
AUG												
03...	.90	.00	.90	1.4	1.4	.060	.030	--	450	420	30	1
SEP												
08...	.80	.40	.40	1.2	.86	.050	.060	5.1	290	270	20	1
13...	1.70	--	--	1.8	--	.100	--	15	7800	7800	40	1
13...	2.00	1.4	.60	2.1	.72	.110	.060	17	9200	9100	60	1
13...	2.10	1.3	.80	2.2	.92	.100	.020	--	6800	6700	60	1

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
AUG												
03...	<1	<1	4	<10	<1	4	3	1	1200	1000	180	2
SEP												
08...	<1	<1	7	<10	<1	5	2	3	1400	1200	210	4
13...	<1	<1	26	<10	7	41	37	4	14000	14000	73	60
13...	<1	<1	26	<10	7	43	37	6	16000	16000	120	95
13...	<1	<1	23	<10	5	35	29	6	12000	12000	110	39

K NON-IDEAL COLONY COUNT

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
AUG												
03...	<1	160	60	98	<1	--	<1	40	20	22	38	1.8
SEP												
08...	<1	160	40	120	4	3	1	40	0	40	14	1.0
13...	<1	560	520	43	37	35	2	160	140	21	282	94
13...	<1	690	640	46	48	46	2	160	140	16	318	111
13...	<1	560	510	50	33	31	2	110	90	19	238	76

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	283	260	225	222	235	221	216	211	---	---
2	282	279	267	253	223	218	222	217	242	214	---	---
3	289	270	267	243	221	218	223	218	544	241	---	---
4	281	204	252	245	222	218	224	219	575	486	---	---
5	269	234	252	237	223	221	220	213	483	421	---	---
6	276	268	236	232	230	219	224	216	421	362	---	---
7	277	274	239	231	239	230	228	222	362	322	---	---
8	293	274	237	230	236	217	227	220	325	291	---	---
9	279	266	240	234	225	214	224	216	293	273	---	---
10	285	273	241	230	223	212	222	215	274	268	---	---
11	274	209	237	211	224	217	216	209	269	265	---	---
12	259	141	221	214	218	215	215	211	268	264	---	---
13	221	144	226	221	223	214	218	213	269	263	---	---
14	238	212	234	225	226	213	224	217	267	257	---	---
15	250	238	241	230	226	220	230	222	264	258	---	---
16	253	239	241	237	229	223	231	226	265	260	---	---
17	258	252	244	234	301	219	229	226	269	262	1380	930
18	257	215	246	242	450	303	229	226	270	265	940	430
19	265	246	243	239	303	232	234	227	---	---	730	450
20	270	260	248	242	232	222	235	230	---	---	480	320
21	266	188	248	245	223	217	237	231	---	---	330	230
22	240	203	248	245	219	217	235	229	---	---	310	240
23	240	196	252	248	219	217	228	225	---	---	310	280
24	258	233	252	250	218	216	229	223	---	---	340	290
25	265	244	252	244	218	215	227	221	---	---	330	290
26	264	246	244	233	224	213	230	223	---	---	330	290
27	266	256	237	231	237	223	227	216	---	---	320	300
28	278	256	234	225	241	235	217	212	---	---	320	300
29	277	265	225	221	242	240	219	215	---	---	330	300
30	274	260	225	222	245	242	219	212	---	---	330	300
31	299	259	---	---	245	235	219	210	---	---	340	290
MONTH	299	141	283	211	450	212	237	209	575	211	1380	230

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	320	280	350	280	283	273	272	262	289	249	274	254
2	340	290	309	289	283	263	273	263	290	270	274	234
3	330	280	308	288	293	273	283	263	290	260	244	164
4	330	280	327	287	294	284	274	264	290	260	265	195
5	310	280	316	286	294	274	284	264	291	251	255	185
6	300	270	305	275	314	144	284	264	271	261	225	165
7	310	270	294	264	215	135	295	275	272	252	245	215
8	470	260	373	233	245	225	305	275	272	252	255	235
9	370	320	382	232	265	215	286	266	273	253	255	245
10	340	300	281	231	265	205	286	266	273	223	266	246
11	330	300	270	200	276	256	266	206	254	184	267	247
12	330	300	259	239	276	266	277	257	264	234	268	238
13	330	300	268	248	276	266	287	277	275	255	210	70
14	330	310	277	257	277	267	287	277	276	266	220	150
15	330	310	286	256	277	267	288	278	278	178	231	151
16	330	290	285	265	287	267	288	188	269	229	232	182
17	320	290	284	264	288	268	269	199	270	260	243	223
18	570	300	283	263	278	268	279	269	270	260	254	184
19	410	300	282	262	278	248	290	280	260	250	225	195
20	710	320	281	261	269	239	300	280	260	250	246	196
21	460	290	280	260	269	259	300	290	270	250	247	237
22	300	270	290	270	279	259	310	280	271	251	248	238
23	320	260	300	260	280	260	291	181	271	251	259	239
24	310	290	310	270	280	270	262	192	271	261	259	249
25	310	280	280	260	280	270	263	253	282	192	260	250
26	310	260	280	250	281	271	273	270	272	232	260	220
27	310	290	281	251	281	261	294	264	272	262	250	220
28	300	270	281	261	271	261	305	285	273	263	250	240
29	310	260	282	262	272	262	286	186	273	153	260	140
30	300	280	282	272	272	252	247	167	263	173	250	150
31	---	---	282	262	---	---	288	238	264	184	---	---
MONTH	710	260	382	200	314	135	310	167	291	153	274	70
YEAR	1380	70										

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.0	.0	9.0	2.0	12.5	8.0	11.5	7.5	14.5	10.0	11.5	9.0
2	.0	.0	8.5	2.5	13.0	8.5	12.5	8.0	14.0	9.0	11.0	8.5
3	.5	.0	9.0	3.0	14.0	7.5	13.5	7.5	14.0	9.0	11.0	9.0
4	2.0	.0	7.0	3.5	11.0	7.0	12.0	9.5	14.0	11.5	10.5	8.0
5	3.5	.0	6.0	3.0	9.0	8.0	12.5	8.0	13.5	10.0	11.0	8.5
6	4.0	1.0	8.5	3.5	11.0	7.5	12.0	8.5	13.5	9.5	10.0	8.5
7	4.5	1.5	9.0	5.0	9.5	8.0	15.5	8.5	11.5	10.0	10.0	7.5
8	3.0	1.0	8.0	4.0	11.0	6.5	12.5	10.5	11.5	9.0	10.0	7.5
9	4.5	1.0	8.0	5.0	11.0	8.5	12.5	9.0	12.5	8.5	10.5	8.0
10	3.5	1.0	6.5	4.5	10.5	8.0	11.0	9.5	11.0	9.0	9.0	8.0
11	4.0	1.5	6.5	4.0	9.0	7.5	12.5	9.5	12.0	10.0	10.0	8.0
12	4.5	.0	6.5	4.0	10.5	6.5	11.0	9.0	13.0	8.0	8.5	6.5
13	4.0	.0	7.5	4.0	10.5	7.0	13.0	9.0	13.5	9.0	9.5	7.5
14	4.0	.5	9.0	4.0	10.5	7.5	13.0	8.0	13.5	10.0	10.5	8.5
15	3.5	1.5	10.5	5.0	12.0	7.5	11.5	9.5	12.5	10.0	10.5	9.5
16	5.0	1.5	11.0	5.0	10.0	7.5	12.0	9.5	13.0	9.5	10.5	9.0
17	3.5	1.5	9.5	5.5	14.0	8.0	14.0	9.0	11.5	9.0	8.5	8.0
18	4.5	1.0	8.5	4.5	10.0	9.0	11.5	9.5	13.0	10.0	9.0	7.0
19	2.5	.5	9.5	5.0	12.5	7.0	15.0	8.5	13.0	8.5	10.0	8.0
20	4.5	1.0	9.5	5.0	10.5	9.0	15.5	9.5	13.0	8.5	8.5	7.5
21	6.5	1.5	11.0	4.5	11.0	7.0	12.5	10.5	13.0	9.0	8.5	7.0
22	6.0	1.0	11.0	5.0	10.0	8.0	12.0	9.0	12.5	8.5	8.0	6.0
23	4.0	1.0	9.0	6.0	14.5	8.0	14.0	9.5	12.0	10.0	7.0	5.5
24	4.5	2.5	12.5	6.0	15.0	9.0	12.0	10.0	12.0	9.5	6.0	4.5
25	5.5	2.0	13.0	7.0	14.5	9.5	12.5	9.5	15.0	9.5	6.0	4.5
26	5.0	1.5	10.0	7.5	13.5	9.5	12.5	9.0	12.0	10.0	7.5	5.5
27	5.0	2.5	11.5	6.5	11.0	9.0	14.5	10.0	12.5	8.0	7.0	5.5
28	7.5	2.5	12.0	7.0	14.5	8.5	13.0	10.0	12.0	9.0	5.5	4.5
29	6.5	2.5	10.5	6.0	14.0	8.5	14.0	10.0	13.5	10.0	7.0	5.0
30	3.5	1.5	12.0	7.0	10.5	9.0	13.0	11.0	12.0	9.5	6.5	6.0
31	---	---	14.0	6.5	---	---	14.0	10.0	11.5	9.5	---	---
MONTH	7.5	.0	14.0	2.0	15.0	6.5	15.5	7.5	15.0	8.0	11.5	4.5
YEAR	15.5	.0										

15276000 SHIP CREEK NEAR ANCHORAGE

LOCATION.--Lat 61°13'25", long 149°37'55", in NE¼ sec.16, T.13 N., R.2 W., Municipality of Anchorage, Hydrologic Unit 19050002, in Fort Richardson Military Reservation, at diversion dam and Fort Richardson water-supply intake building, 3.5 mi (5.6 km) upstream from North Fork Ship Creek, and 8.5 mi (13.7 km) east of Anchorage.
DRAINAGE AREA.--90.5 mi² (234.4 km²).

PERIOD OF RECORD.--October 1946 to current year.
REVISED RECORDS.--WSP 1936: Drainage area.
GAGE.--Water-stage recorder and masonry dam. Prior to May 10, 1976, spillway elevation was about 4 ft (1.2 m) lower. Datum of gage is 530 ft (161.5 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). See WSP 1936 for history of changes prior to Oct. 1, 1954. Level of dam lowered by 0.58 ft (0.177 m) during 1982 WY for cleaning of reservoir.
REMARKS.--Records good except those for Oct. 1 to May 26, which are fair. Discharge data represent the net flow remaining after diversion for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage. Average diversion for water year 1982, 16.9 ft³/s (0.48 m³/s). Diversion began in 1944.
COOPERATION.--Gage inspected and records of diversion furnished by Office of Post Engineers, Fort Richardson.
AVERAGE DISCHARGE.--36 years, 163 ft³/s (4.616 m³/s), 24.46 in/yr (621 mm/yr), 118,100 acre-ft/yr (146 hm³/yr), adjusted to include diversion.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft³/s (52.7 m³/s) June 21, 1949, gage height, 3.44 ft (1.049 m), site and datum then in use; no flow at times.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 890 ft³/s (25.2 m³/s) Sept. 16, gage height, 6.99 ft (2.131 m); minimum daily, about 15 ft³/s (0.42 m³/s) Feb. 21 to Apr. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	138	70	25	25	15	15	30	280	366	300	169
2	135	165	70	25	25	15	15	30	324	319	272	159
3	130	128	70	25	25	15	15	30	335	285	252	150
4	135	173	70	25	25	15	15	35	333	275	235	140
5	135	128	65	25	25	15	15	35	357	280	223	144
6	135	130	65	25	20	15	20	40	406	267	209	333
7	135	160	65	25	20	15	20	40	491	282	200	303
8	130	193	65	25	20	15	20	45	454	330	191	272
9	130	130	65	25	20	15	25	50	494	327	182	250
10	140	372	60	25	20	15	25	50	578	300	171	233
11	180	254	60	25	20	15	25	50	529	287	200	216
12	230	205	60	25	20	15	25	45	442	303	169	200
13	216	171	65	25	20	15	25	45	374	306	154	327
14	189	150	65	25	20	15	25	40	349	300	150	349
15	164	93	65	25	20	15	25	45	327	295	176	629
16	163	85	70	25	20	15	25	45	306	293	174	826
17	157	80	70	25	20	15	25	45	306	282	163	639
18	146	70	65	25	20	15	25	45	341	264	148	526
19	119	65	65	25	20	15	25	45	333	245	136	533
20	120	65	60	25	20	15	25	45	357	242	124	485
21	209	65	60	25	15	15	25	45	341	257	119	436
22	247	65	60	25	15	15	25	50	322	262	111	409
23	352	65	55	25	15	15	25	50	322	327	109	377
24	324	65	50	25	15	15	25	60	374	488	109	344
25	293	70	45	25	15	15	25	70	457	442	109	319
26	264	70	40	25	15	15	25	90	504	394	106	306
27	240	70	35	25	15	15	25	146	526	341	95	285
28	230	70	30	25	15	15	30	144	602	316	91	270
29	209	70	30	25	---	15	30	148	523	333	154	275
30	191	70	30	25	---	15	30	191	418	349	161	275
31	163	---	25	25	---	15	---	254	---	335	178	---
TOTAL	5746	3635	1770	775	545	465	700	2083	12105	9692	5171	10179
MEAN	185	121	57.1	25.0	19.5	15.0	23.3	67.2	404	313	167	339
MAX	352	372	70	25	25	15	30	254	602	488	300	826
MIN	119	65	25	25	15	15	15	30	280	242	91	140
AC-FT	11400	7210	3510	1540	1080	922	1390	4130	24010	19220	10260	20190

CAL YR 1981 TOTAL 70649 MEAN 194 MAX 863 MIN 25 AC-FT 140100
WTR YR 1982 TOTAL 52866 MEAN 145 MAX 826 MIN 15 AC-FT 104900

ADJUSTED TO INCLUDE DIVERSION

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	201	136	76.2	45.9	39.0	32.4	37.1	81.4	418	329	186	356
CFSM	2.22	1.50	0.84	0.51	0.43	0.36	0.41	0.90	4.62	3.64	2.06	3.93
IN.	2.56	1.67	0.97	0.58	0.45	0.41	0.46	1.04	5.15	4.19	2.37	4.39
AC-FT	12,380	8,080	4,680	2,820	2,170	1,990	2,210	5,010	24,870	20,220	11,460	21,210

CAL YR 1981 MEAN 212 CFSM 2.34 IN 31.75 AC-FT 153270
WTR YR 1982 MEAN 162 CFSM 1.79 IN 24.26 AC-FT 117100

15277410 PETERS CREEK NEAR BIRCHWOOD

LOCATION.--Lat 61°25'08", long 149°29'20", in NW¼SE¼ sec.5, T.15 N., R.1 W., Municipality of Anchorage, Hydrologic Unit 19050002, on left bank at Alaska Railroad bridge, 0.5 mi (0.8 km) downstream from unnamed tributary, 0.8 mi (1.3 km) upstream from mouth, and 1.0 mi (1.6 km) north of Birchwood.

DRAINAGE AREA.--87.8 mi² (227.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 75 ft (22.9 m), from topographic map. Prior to Oct. 18, 1979 at site 50 ft (15 m) upstream at same datum.

REMARKS.--Records fair except those for periods of no gage-height record, Nov. 19 to Apr. 22, which are poor.

AVERAGE DISCHARGE.--9 years, 120 ft³/s (3.398 m³/s), 18.56 in/yr (471 mm/yr), 86,940 acre-ft/yr (107 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft³/s (34.0 m³/s) Sept. 16, 1980, gage height, 5.73 ft (1.746 m); maximum gage height, 10.37 ft (3.161 m) Jan. 7, 1978, site then in use, backwater from ice; minimum discharge, 10 ft³/s (0.28 m³/s) Feb. 16, 1977, gage height, 3.72 ft (1.134 m), site then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) Sept. 16, gage height, 5.04 ft (1.536 m); minimum daily, about 35 ft³/s (0.99 m³/s) Dec. 28 to Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	107	50	35	50	50	40	46	92	331	416	167
2	102	107	50	35	50	50	40	45	99	291	400	162
3	107	101	50	35	50	50	40	46	104	275	364	152
4	107	128	45	35	50	50	40	45	104	260	318	146
5	107	102	45	35	50	50	40	46	116	253	305	153
6	105	102	45	35	50	50	40	50	183	235	298	350
7	102	124	45	35	50	50	40	56	302	257	282	336
8	101	113	45	35	50	50	40	60	238	282	268	249
9	99	111	45	35	50	50	40	72	249	285	246	218
10	98	168	45	35	50	45	40	67	285	288	221	191
11	98	142	45	35	50	45	40	70	268	285	215	172
12	99	128	45	35	50	45	40	65	225	305	194	162
13	118	119	45	35	50	45	40	62	199	336	185	225
14	111	100	45	35	50	45	40	58	185	318	202	305
15	107	85	45	35	50	45	40	59	172	298	215	515
16	104	70	45	35	50	45	40	61	167	282	196	819
17	102	60	45	35	50	45	40	62	162	268	183	593
18	104	55	45	35	50	45	40	62	196	264	172	484
19	98	45	45	40	50	45	40	61	199	249	170	472
20	99	45	45	40	50	45	40	61	212	264	162	466
21	105	45	45	40	50	45	40	60	199	275	162	405
22	111	45	45	40	50	45	40	61	196	285	155	369
23	126	50	45	40	50	45	42	62	202	314	160	318
24	128	50	45	45	50	45	42	62	257	426	167	288
25	131	50	45	45	50	45	43	66	314	438	165	272
26	129	50	40	45	50	45	43	70	341	416	157	246
27	110	50	40	50	50	45	45	75	410	405	150	235
28	129	50	35	50	50	40	47	74	484	395	144	220
29	128	50	35	50	---	40	47	73	454	410	167	235
30	122	50	35	50	---	40	46	75	374	438	175	235
31	113	---	35	50	---	40	---	85	---	421	183	---
TOTAL	3410	2502	1360	1215	1400	1420	1235	1917	6988	9849	6797	9160
MEAN	110	83.4	43.9	39.2	50.0	45.8	41.2	61.8	233	318	219	305
MAX	131	168	50	50	50	50	47	85	484	438	416	819
MIN	98	45	35	35	50	40	40	45	92	235	144	146
CFSM	1.25	.95	.50	.45	.57	.52	.47	.70	2.65	3.62	2.49	3.47
IN.	1.44	1.06	.58	.51	.59	.60	.52	.81	2.96	4.17	2.88	3.88
AC-FT	6760	4960	2700	2410	2780	2820	2450	3800	13860	19540	13480	18170

CAL YR 1981 TOTAL 48569 MEAN 133 MAX 930 MIN 29 CFSM 1.52 IN 20.58 AC-FT 96340
WTR YR 1982 TOTAL 47253 MEAN 129 MAX 819 MIN 35 CFSM 1.49 IN 20.20 AC-FT 93730

152774100 PETERS CREEK NEAR BIRCHWOOD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1965, 1968, 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 06...	1500	110	198	7.9	2.0	15.1	111	752	K5

DATE	HARD-NESS (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)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 06...	91	28	5.2	3.2	.5	71	26	.6	<.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 06...	6.7	.32	.010	108	114	<10	<1	1	.30

K NON-IDEAL COLONY COUNT

15281000 KNIK RIVER NEAR PALMER

LOCATION.--Lat 61°30'18", long 149°01'50", in NE¼SE¼ sec.2, T.16 N., R.2 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, near right bank on downstream side of bridge on Old Glenn Highway, 7 mi (11 km) south of Palmer, 7 mi (11 km) upstream from Alaska Railroad bridge, 9 mi (14 km) downstream from Friday Creek, and about 17 mi (27 km) downstream from Knik Glacier.

DRAINAGE AREA.--1,180 mi² (3,060 km²), approximately.

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WDR AK-77-1: 1974-75 (M).

GAGE.--Water-stage recorder. Datum of gage is 30.2 ft (9.20 m) National Geodetic Vertical Datum of 1929. Prior to June 27, 1960, nonrecording gage, and June 27, 1960 to Apr. 25, 1974, water-stage recorder at old bridge 100 ft (30 m) upstream at present datum. Apr. 26, 1974 to Apr. 18, 1976, nonrecording gage at site 0.4 mi (0.6 km) upstream at different datum.

REMARKS.--Records good except those for period of no gage-height record, Oct. 18 to Apr. 19, which are poor. Flood peaks due to outbreak of Lake George, 1948-62, 1964, 1965, published in WSP 1936. Streamflow augmented by glaciers, which cover 54 percent of the basin.

AVERAGE DISCHARGE.--23 years, 6,952 ft³/s (196.9 m³/s), 80.02 in/yr (2,033 mm/yr), 5,037,000 acre-ft/yr (6.21 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 355,000 ft³/s (10,100 m³/s) July 26, 1961, gage height, 24.3 ft (7.41 m), site then in use, caused by release of stored water (Lake George) behind Knik Glacier; maximum gage height, 24.35 ft (7.422 m), site then in use, July 17, 1960; minimum daily discharge, about 260 ft³/s (7.4 m³/s) Mar. 1-31, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1948, 359,000 ft³/s (10,200 m³/s) July 18, 1958, stage, 25.30 ft (7.711 m), site then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33,600 ft³/s (952 m³/s) Sept. 17, gage height, 11.53 ft (3.514 m); minimum daily, about 580 ft³/s (16 m³/s) Jan. 24-31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2100	1500	950	900	600	700	800	1610	7040	24900	24600	13000
2	1900	1400	950	850	650	700	800	1610	7550	22700	23300	12100
3	1700	1300	950	850	750	680	800	1620	7550	20400	21700	11500
4	1700	1300	950	800	950	680	850	1650	7950	19300	21700	10100
5	1600	1300	900	800	900	680	850	1650	8350	18000	21600	9950
6	1600	1400	900	800	850	680	850	1710	8700	17500	21200	14200
7	1500	1400	900	750	800	660	900	2130	8900	17900	21700	16700
8	1500	1500	900	750	800	660	900	2540	8900	20100	20200	16200
9	1400	1600	900	700	850	660	1000	2830	10200	20100	19000	14800
10	1400	1700	900	700	800	660	1000	3100	11000	19300	18500	13500
11	1320	1700	900	700	750	660	900	3060	12200	17900	16700	11600
12	1270	1600	900	700	750	640	950	3130	12400	16900	15000	9700
13	1700	1500	900	680	750	640	1000	2980	13100	16700	15300	9100
14	1790	1400	900	660	750	660	1000	2960	12700	18200	16600	11500
15	1730	1300	950	660	750	660	1100	2870	11000	19700	17700	15500
16	1470	1300	950	640	750	680	1100	2920	9850	19400	16500	26100
17	1760	1200	950	640	750	700	1200	3220	9500	18300	15300	32900
18	1500	1100	1000	640	750	750	1200	3220	10200	18200	14500	31000
19	1300	1100	1000	620	750	800	1200	3320	11000	17300	14700	29500
20	1200	1100	1000	620	750	800	1260	3300	12000	19300	15600	28000
21	1500	1000	1100	600	700	800	1350	3500	10000	22400	16400	25000
22	1900	1000	1100	600	700	750	1340	3550	10900	23200	17300	22500
23	2400	1000	1100	600	700	750	1270	3700	11600	24100	17900	16800
24	3100	1000	1000	580	700	750	1210	3820	13300	25700	18900	13000
25	3000	1000	1000	580	700	750	1290	4270	15200	25000	18200	10400
26	2600	1000	950	580	700	800	1440	5000	17300	24200	16400	9300
27	2200	1000	950	580	700	800	1390	5400	19000	23600	14900	8800
28	2000	1000	950	580	700	800	1500	5880	22700	24800	15000	7750
29	1800	950	950	580	---	800	1710	5960	25600	26400	15800	7240
30	1700	950	900	580	---	800	1680	5800	26100	27600	15500	7120
31	1600	---	900	580	---	800	---	6200	---	26100	14500	---
TOTAL	55240	37600	29550	20900	21050	22350	33840	104510	371790	655200	552200	464860
MEAN	1782	1253	953	674	752	721	1128	3371	12390	21140	17810	15500
MAX	3100	1700	1100	900	950	800	1710	6200	26100	27600	24600	32900
MIN	1200	950	900	580	600	640	800	1610	7040	16700	14500	7120
CFSM	1.51	1.06	.81	.57	.64	.61	.96	2.86	10.5	17.9	15.1	13.1
IN.	1.74	1.19	.93	.66	.66	.70	1.07	3.29	11.72	20.66	17.41	14.65
AC-FT	109600	74580	58610	41460	41750	44330	67120	207300	737400	1300000	1095000	922000

CAL YR 1981 TOTAL 2979132 MEAN 8162 MAX 55300 MIN 852 CFSM 6.92 IN 93.92 AC-FT 5909000
WTR YR 1982 TOTAL 2369090 MEAN 6491 MAX 32900 MIN 580 CFSM 5.50 IN 74.69 AC-FT 4699000

15290000 LITTLE SUSITNA RIVER NEAR PALMER

LOCATION.--Lat 61°42'32", long 149°13'36", in NW¼ sec.26, T.19 N., R.1 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 40 ft (12 m) downstream from highway bridge on Wasilla-Fishhook Road, 1.5 mi (2.4 km) north of road junction, 1.8 mi (2.9 km) downstream from unnamed tributary, and 8 mi (13 km) northwest of Palmer.

DRAINAGE AREA.--61.9 mi² (160.3 km²).

PERIOD OF RECORD.--July 1948 to current year. Low-flow records not equivalent prior to January 1962, because most measurements below 300 ft³/s (8 m³/s) were made at site 3.4 mi (5.6 km) downstream.

GAGE.--Water-stage recorder. Datum of gage is 918.6 ft (279.99 m) National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Aug. 16, 1948, nonrecording gage and Aug. 17, 1948 to May 15, 1972, water-stage recorder on left bank. Prior to Oct. 1, 1974, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records fair except those for Nov. 15 to May 25, which are poor. Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE.--34 years, 208 ft³/s (5.891 m³/s), 45.63 in/yr (1,159 mm/yr), 150,700 acre-ft/yr (186 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,840 ft³/s (222 m³/s) Aug. 10, 1971, gage height, 9.84 ft (2.999 m) in gage well, 12.30 ft (3.749 m), top of needle peak in gage well, about 13 ft (4.0 km) from floodmarks, present datum, from rating curve extended above 4,600 ft³/s (130 m³/s) on basis of slope-area measurement of peak flow; minimum daily, about 8 ft³/s (0.23 m³/s) Apr. 1-20, 1956 and Mar. 11, 12, 1957.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
June 6	2200	1,480	41.9	6.07	1.850	July 25	1500	*2,950	83.5	*8.31	2.533
June 25	2100	1,530	42.3	6.16	1.878	July 30	Unknown	1,360	38.5	5.82	1.774
						Sept. 15	0300	2,000	56.6	6.96	2.121

Minimum daily discharge, about 20 ft³/s (0.57 m³/s) Apr. 20 to 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	100	33	40	40	35	23	27	736	664	850	406
2	77	106	33	39	44	34	23	28	914	582	800	346
3	74	96	33	39	48	33	23	29	776	596	704	370
4	76	109	33	39	50	32	23	30	752	606	660	358
5	74	104	30	39	50	31	23	32	836	574	602	322
6	71	123	30	38	49	30	23	33	1140	543	560	301
7	69	150	30	38	48	30	23	34	1210	599	546	316
8	67	110	30	38	46	29	22	36	972	712	501	288
9	65	94	30	38	44	28	22	38	1040	585	470	278
10	63	97	30	38	43	28	22	40	1050	628	427	258
11	66	84	30	38	41	29	22	45	892	712	424	290
12	77	76	28	38	41	30	22	50	836	676	388	278
13	165	70	28	38	40	29	21	55	708	592	379	798
14	116	61	28	37	40	28	21	60	664	546	382	814
15	100	56	28	37	39	27	21	70	624	522	379	1700
16	96	51	30	37	39	27	21	75	543	526	343	1430
17	92	47	34	37	39	26	21	85	568	585	316	1020
18	88	44	38	36	39	25	21	95	748	526	295	832
19	80	42	40	36	38	25	21	110	748	494	285	844
20	82	39	40	36	38	24	20	120	932	522	272	820
21	128	37	42	36	38	24	20	140	732	515	270	728
22	156	36	44	36	38	24	20	160	668	582	258	624
23	208	36	45	36	38	23	21	180	788	1360	260	526
24	284	36	44	36	38	23	22	217	1050	1840	255	473
25	219	35	43	36	37	22	23	250	1260	2270	252	484
26	183	38	42	36	37	22	23	292	1220	1740	252	462
27	162	40	42	36	37	22	24	391	1060	1250	250	448
28	153	41	41	37	36	22	24	388	990	1030	228	403
29	139	37	41	37	---	23	25	292	848	999	292	394
30	116	34	41	36	---	23	26	409	748	1200	433	382
31	96	---	40	36	---	23	---	557	---	950	501	---
TOTAL	3521	2029	1101	1154	1155	831	666	4368	26053	25526	12834	16993
MEAN	114	67.6	35.5	37.2	41.3	26.8	22.2	141	868	823	414	566
MAX	284	150	45	40	50	35	26	557	1230	2270	850	1700
MIN	63	34	28	36	36	22	20	27	543	494	228	258
CFSM	1.84	1.09	.57	.60	.67	.43	.36	2.28	14.0	13.3	6.69	9 14
IN.	2.12	1.22	.66	.69	.69	.50	.40	2.62	15.66	15.34	7.71	10.21
AC-FT	6980	4020	2180	2290	2290	1650	1320	8660	51680	50630	25460	33710

CAL YR 1981 TOTAL 77192 MEAN 211 MAX 1750 MIN 15 CFSM 3.41 IN 46.39 AC-FT 153100
WTR YR 1982 TOTAL 96231 MEAN 264 MAX 2270 MIN 20 CFSM 4.27 IN 57.83 AC-FT 190900

15291000 SUSITNA RIVER NEAR DENALI

LOCATION.--Lat 63°06'14", long 147°30'57", in NE¼ sec.10, T.21 S., R.1 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on upstream right pier of bridge on Denali Highway, 0.2 mi (0.3 km) downstream from Windy Creek, 3.3 mi (5.3 km) upstream from Butte Creek, and 5.3 mi (8.5 km) southwest of Denali.

DRAINAGE AREA.--950 mi² (2,460 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1957 to September 1966, July 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,440 ft (744 m), from topographic map. See WSP 2136 for history of changes prior to July 4, 1968. July 4, 1968 to Aug. 28, 1974, on left upstream wingwall, at present datum.

REMARKS.--Water-discharge records poor for period of no gage-height record prior to May 17, fair thereafter. Streamflow augmented by glaciers, which cover 25 percent of the basin.

AVERAGE DISCHARGE.--23 years (water years 1958-66, 1969-82), 2,756 ft³/s (78.05 m³/s), 39.40 in/yr (1,001 mm/yr), 1,997,000 acre-ft/yr (2.46 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,200 ft³/s (1,080 m³/s) Aug. 10, 1971, gage height, 13.32 ft (4.060 m) from rating curve extended above 19,000 ft³/s (540 m³/s); maximum gage height, 13.58 ft (4.139 m) May 11, 1970, backwater from ice; minimum daily discharge, about 34 ft³/s (0.96 m³/s) Mar. 16-31, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 14 or 15, 1967 reached a stage of 12.7 ft (3.87 m), from floodmarks, discharge, 28,200 ft³/s (799 m³/s), from rating curve extended above 19,000 ft³/s (540 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 14,000 ft³/s (400 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 13or14	Unknown	Unknown		*a12.05	3.673	July 26	0430	14,100	399	11.58	3.530
July 13	0900	14,700	416	11.64	3.548	July 31	0030	*16,300	462	11.79	3.594

a From floodmarks, backwater from ice.

Minimum daily discharge, about 110 ft³/s (3.1 m³/s) Apr. 9-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	600	380	260	180	140	120	240	3520	7460	9580	4950
2	950	600	380	260	180	140	120	280	4420	6380	7770	3780
3	950	550	380	260	180	130	120	300	4620	5700	7580	3980
4	950	550	380	260	180	130	120	350	3610	5900	7220	3490
5	900	550	360	260	170	130	120	400	3520	6560	7400	2860
6	900	550	360	260	170	130	120	500	3860	6260	7640	2720
7	900	550	360	260	170	130	120	600	6200	6680	7580	2770
8	850	550	360	240	170	130	120	800	7220	8120	7700	3520
9	850	500	360	240	170	130	110	1000	5500	9820	7340	3780
10	800	500	340	240	160	130	110	1500	4950	9500	5900	3310
11	800	500	340	240	160	130	110	2000	5500	12700	5500	2770
12	800	500	340	240	160	130	110	3000	4860	13100	5960	2950
13	850	500	340	240	160	130	110	4500	4620	13900	6380	3740
14	950	480	340	240	160	130	110	6000	4180	11900	7460	7160
15	950	480	320	240	150	130	110	5500	3900	12300	7280	8400
16	900	480	320	220	150	130	110	5000	4020	9980	6320	10400
17	850	460	320	220	150	130	110	4800	4620	8890	6260	7220
18	800	460	320	220	150	130	110	4620	4860	8890	5550	5400
19	800	460	320	220	150	130	110	3740	5050	9180	5150	5700
20	750	440	300	220	150	130	110	3160	6920	9580	5500	7980
21	750	440	300	220	140	120	110	2260	6680	10200	5750	7040
22	800	440	300	220	140	120	110	1830	5500	9340	5600	5800
23	850	440	300	200	140	120	110	2160	4900	8400	6200	4780
24	900	420	300	200	140	120	110	2470	5850	9900	6440	3670
25	850	420	300	200	140	120	110	2550	8330	10600	6140	3280
26	800	420	280	200	140	120	120	2690	9180	12700	5350	3100
27	750	400	280	200	140	120	140	2660	10400	10900	5500	2600
28	700	400	280	190	140	120	150	3400	11400	9980	5250	2200
29	650	400	280	190	---	120	170	2860	9820	11000	4950	2100
30	600	400	280	190	---	120	200	2210	7980	13500	5200	2000
31	600	---	280	190	---	120	---	2800	---	12900	6620	---
TOTAL	25750	14440	10100	7040	4390	3940	3610	76180	175990	302220	200070	133450
MEAN	831	481	326	227	157	127	120	2457	5866	9749	6454	4448
MAX	1000	600	380	260	180	140	200	6000	11400	13900	9580	10400
MIN	600	400	280	190	140	120	110	240	3520	5700	4950	2000
CFSM	.88	.51	.34	.24	.17	.13	.13	2.59	6.18	10.3	6.79	4.68
IN.	1.01	.57	.40	.28	.17	.15	.14	2.98	6.89	11.83	7.83	5.23
AC-FT	51080	28640	20030	13960	8710	7810	7160	151100	349100	599500	396800	264700

CAL YR 1981	TOTAL	1212360	MEAN	3322	MAX	22000	MIN	200	CFSM	3.50	IN 47.47	AC-FT	2405000
WTR YR 1982	TOTAL	957180	MEAN	2622	MAX	13900	MIN	110	CFSM	2.76	IN 37.48	AC-FT	1899000

15291000 SUSITNA RIVER NEAR DENALI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-66, 1968-69, 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1974 to current year (seasonal records).

INSTRUMENTATION.--Temperature recorder since Aug. 29, 1974.

REMARKS.--Records poor. No record Oct. 1 to May 18, when temperature sensor froze in ice. Records represent water temperature at sensor within 0.5°C. Temperature measurements obtained on May 25, June 30 and Sept. 29 indicated a maximum variation of 3.2°C within the cross sections.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 12.0°C June 4-5, 1980; minimum, 0.0°C on most days during winter period.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--Minimum temperatures of 0.0°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 10.0°C July 7, 8; minimum, 0.0°C on most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	TEMPERATURE (DEG C)
MAR			
30...	1500	--	.0
MAY			
25...	1731	25.0	1.5
25...	1732	95.0	2.6
25...	1733	165	4.1
25...	1734	515	4.5
25...	1735	715	4.6
25...	1736	785	4.6
25...	1737	840	4.6
25...	1738	900	4.6
25...	1739	930	4.5
JUN			
30...	1410	5.00	8.6
30...	1412	125	8.5
30...	1414	205	8.4
30...	1416	445	8.4
30...	1418	665	7.4
30...	1420	775	6.5
30...	1422	845	5.4
30...	1424	905	5.4
30...	1426	935	5.4
AUG			
26...	1500	--	4.0
SEP			
27...	1916	30.0	3.6
27...	1917	80.0	3.5
27...	1918	380	3.5
27...	1919	470	3.4
27...	1920	530	3.4
27...	1921	680	3.3
27...	1922	755	3.4
27...	1923	788	3.4
27...	1924	830	3.4
27...	1925	905	3.4

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE, AIR (DEG C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
MAR								
30...	1500	--	120	--	8	2.6	--	--
MAY								
25...	1730	945	2390	11.0	269	1740	13	13
JUN								
30...	1330	--	8150	--	858	18900	25	30
JUL								
27...	1230	--	10700	--	955	27600	19	19
AUG								
26...	1500	--	5410	--	675	9860	26	26
SEP								
27...	1915	800	2600	5.5	127	892	--	--

15291000 SUSITNA RIVER NEAR DENALI--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
MAR 30...	--	--	--	--	--	--	--	--
MAY 25...	13	27	40	51	58	78	94	100
JUN 30...	38	40	53	56	62	80	98	100
JUL 27...	28	39	46	56	64	77	93	100
AUG 26...	31	39	49	54	59	75	87	100
SEP 27...	--	--	--	--	--	--	--	--

TEMPERATURE, WATER (DEG. C), MAY 1982 TO SEPTEMBER 1982

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

15291200 MACLAREN RIVER NEAR PAXSON

LOCATION.--Lat 63°07'10", long 146°31'45", Matanuska-Susitna Borough, Hydrologic Unit 19050002, near left bank on downstream side of bridge on Denali Highway, 1.5 mi (2.4 km) downstream from Boulder Creek, and 34 mi (55 km) west of Paxson.

DRAINAGE AREA.--280 mi² (730 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 2,865.84 ft (873.508 m) National Geodetic Vertical Datum (Alaska Department of Public Works bench mark). See WSP 2136 for history of changes prior to Aug. 23, 1968.

REMARKS.--Records poor for period of no gage-height record prior to June 30, fair thereafter. Streamflow augmented by Maclaren Glacier, which covers 19 percent of the basin. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--24 years, 978 ft³/s (27.70 m³/s), 47.43 in/yr (1,205 mm/yr), 708,600 acre-ft/yr (874 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,260 ft³/s (262 m³/s) Aug. 11, 1971, gage height, 8.24 ft (2.512 m), from rating curve extended above 5,300 ft³/s (150 m³/s); maximum gage height, 9.10 ft (2.774 m) in May 1964, from flcodmarks, backwater from ice; minimum daily discharge, about 40 ft³/s (1.1 m³/s) Mar. 1-25, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,360 ft³/s (152 m³/s) about June 28, gage height, 6.20 ft (1.890 m), from floodmarks, only peak above base of 4,200 ft³/s (120 m³/s); minimum daily, about 65 ft³/s (1.8 m³/s) Apr. 18-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	580	300	190	150	110	80	75	70	1100	2480	2470	1510
2	560	280	190	150	110	80	75	70	1400	2030	2220	1120
3	560	280	190	150	110	80	75	70	1700	1890	2010	1120
4	540	280	190	150	110	80	75	70	1400	2010	2020	1000
5	540	260	180	150	110	80	75	70	1200	2070	1910	928
6	500	260	180	150	110	80	70	75	1700	1850	1820	872
7	480	260	180	150	100	80	70	75	2200	2090	1770	888
8	480	260	180	150	100	80	70	80	2000	2580	1830	1160
9	460	240	180	140	100	80	70	85	1900	3260	1620	1140
10	460	240	180	140	100	80	70	95	1800	3020	1630	952
11	440	240	180	140	95	80	70	110	1600	3440	1600	777
12	460	240	180	140	95	80	70	120	1500	3610	1560	888
13	480	240	170	140	90	80	70	150	1400	3380	1540	1250
14	500	220	170	140	90	75	70	180	1400	2900	2000	2230
15	500	220	170	140	90	75	70	220	1300	3240	2130	3840
16	480	220	170	140	90	75	70	280	1400	2810	1950	3790
17	460	220	170	140	90	75	70	320	1600	2720	1790	3060
18	420	220	170	140	85	75	65	380	1800	2960	1450	2280
19	400	220	170	140	85	75	65	460	2000	2670	1400	2460
20	380	220	160	140	85	75	65	550	2200	2480	1380	2900
21	400	200	160	130	85	75	65	700	2000	2620	1330	2200
22	400	200	160	130	80	75	65	900	1800	2670	1360	1900
23	420	200	160	130	80	75	65	950	1600	2820	1600	1600
24	440	200	160	130	80	75	65	1100	1900	2850	1620	1400
25	400	200	160	130	80	75	65	1200	2200	2790	1530	1200
26	380	200	160	130	80	75	65	1300	2600	3040	1480	1000
27	360	200	160	130	80	75	65	1400	3300	2940	1470	900
28	340	190	150	120	80	75	65	1500	4400	2820	1450	812
29	320	190	150	120	---	75	65	1100	3200	2940	1300	800
30	300	190	150	120	---	75	65	800	2620	3090	1360	750
31	300	---	150	120	---	75	---	900	---	2710	1370	---
TOTAL	13740	6890	5270	4270	2600	2390	2060	15380	58220	84780	51970	46727
MEAN	443	230	170	138	92.9	77.1	68.7	496	1941	2735	1676	1558
MAX	580	300	190	150	110	80	75	1500	4400	3610	2470	3840
MIN	300	190	150	120	80	75	65	70	1100	1850	1300	750
CFSM	1.58	.82	.61	.49	.33	.28	.25	1.77	6.93	9.77	5.99	5.56
IN.	1.83	.92	.70	.57	.35	.32	.27	2.04	7.73	11.26	6.90	6.21
AC-FT	27250	13670	10450	8470	5160	4740	4090	30510	115500	168200	103100	92680

CAL YR 1981 TOTAL 426762 MEAN 1169 MAX 6470 MIN 90 CFSM 4.18 IN 56.70 AC-FT 846500
WTR YR 1982 TOTAL 294297 MEAN 806 MAX 4400 MIN 65 CFSM 2.88 IN 39.10 AC-FT 583700

15291500 SUSITNA RIVER NEAR CANTWELL

LOCATION.--Lat 62°41'55", long 147°32'42", in SE¼SE¼ sec.10, T.30 N., R.10 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank at lower end of gorge, 8 mi (13 km) east of Clarence Lake, 9.7 mi (15.6 km) downstream from Oshetna River, and 65 mi (105 km) southeast of Cantwell.

DRAINAGE AREA.--4,140 mi² (10,700 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1961 to September 1972, June 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,900 ft (580 m), from topographic map. Prior to May 29, 1980, gage on opposite bank and different datum.

REMARKS.--Water-discharge records good except those for period of no gage-height record, Oct. 1 to June 3, which are poor. Large diurnal fluctuations at times each year caused by glacier melt at the source.

AVERAGE DISCHARGE.--13 years (water years 1962-72, 1981-82), 6,396 ft³/s (181.1 m³/s), 20.98 in/yr (533 mm/yr), 4,634,000 acre-ft/yr (5.71 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 55,000 ft³/s (1,560 m³/s) Aug. 10, 1971 on basis of discharge recorded at stations 15291000 and 15292000; minimum daily discharge, about 400 ft³/s (11 m³/s) Mar. 16-31, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,100 ft³/s (683 m³/s) June 21, gage height 7.43 ft (2.265 m); maximum gage height, 9.8 ft (2.99 m) May 14 or 15, from floodmarks, backwater from ice; minimum daily discharge, about 500 ft³/s (14 m³/s) Apr. 5-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4500	2400	1400	1200	800	600	550	1400	15500	14800	17100	12000
2	4500	2200	1400	1200	800	600	550	1800	17000	13900	14700	9500
3	4500	2200	1400	1200	800	600	550	2000	19000	12200	13400	8240
4	4200	2000	1400	1200	800	600	550	2400	15700	11400	12800	8280
5	4200	2000	1400	1200	800	600	500	2800	13600	11700	12400	7570
6	4200	1800	1400	1200	800	600	500	3200	14600	11600	12400	6570
7	4000	1800	1400	1200	800	600	500	3600	18300	11400	12200	6490
8	4000	1600	1400	1200	750	600	500	4000	21300	13100	12200	7390
9	4000	1600	1400	1200	750	600	500	4600	18600	16100	12300	9320
10	3800	1600	1400	1200	750	600	500	5000	15800	17100	11600	9220
11	3800	1600	1400	1200	700	600	500	6000	15600	18300	10500	8280
12	3800	1600	1400	1200	700	600	500	7000	15200	21100	9990	7830
13	4000	1600	1400	1200	650	600	500	8000	13600	21300	10200	8280
14	4200	1600	1400	1000	650	600	500	9000	11600	20600	10700	11400
15	4600	1600	1400	1000	650	550	500	12000	11300	19100	11800	14900
16	4400	1600	1200	1000	650	550	500	10000	12800	19600	12200	18800
17	4000	1600	1200	1000	650	550	500	9000	13400	18500	10900	18700
18	3600	1600	1200	1000	650	550	500	9000	14400	18300	10500	14600
19	3400	1400	1200	1000	650	550	500	9000	15600	18000	9580	12400
20	3200	1400	1200	1000	650	550	500	9000	19300	16900	9180	13100
21	3200	1400	1200	1000	650	550	550	9500	23200	16400	9220	14200
22	3400	1400	1200	1000	650	550	550	10000	18700	16400	9360	12000
23	3800	1400	1200	1000	650	550	550	11000	16200	15800	9040	10500
24	4400	1400	1200	1000	650	550	550	11000	15600	15400	10200	9040
25	4000	1400	1200	950	650	550	600	12000	16800	17100	10400	7750
26	3800	1400	1200	950	630	550	650	12000	18100	18800	10200	7090
27	3600	1400	1200	900	600	550	700	13000	18300	18500	9500	7040
28	3200	1400	1200	900	600	550	750	16000	19800	16900	9270	6240
29	3000	1400	1200	900	---	550	900	15000	19600	16200	8600	5820
30	2800	1400	1200	850	---	550	1200	13000	16400	16900	8640	5700
31	2600	---	1200	850	---	550	---	13500	---	19200	10100	---
TOTAL	118700	48800	40200	32900	19530	17750	17200	254800	494900	512600	341180	298250
MEAN	3829	1627	1297	1061	698	573	573	8219	16500	16540	11010	9942
MAX	4600	2400	1400	1200	800	600	1200	16000	23200	21300	17100	18800
MIN	2600	1400	1200	850	600	550	500	1400	11300	11400	8600	5700
CFSM	.93	.39	.31	.26	.17	.14	.14	1.99	3.99	4.00	2.66	2.40
IN.	1.07	.44	.36	.30	.18	.16	.15	2.29	4.45	4.61	3.07	2.68
AC-FT	235400	96790	79740	65260	38740	35210	34120	505400	981600	1017000	676700	591600

CAL YR 1981 TOTAL 2790840 MEAN 7646 MAX 30500 MIN 900 CFSM 1.85 IN 25.08 AC-FT 5536000
WTR YR 1982 TOTAL 2196810 MEAN 6019 MAX 23200 MIN 500 CFSM 1.45 IN 19.74 AC-FT 4357000

15291500 SUSITNA RIVER NEAR CANTWELL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-72 and 1980 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May to October 1980, June to September 1982 (seasonal).

INSTRUMENTATION.--Temperature recorder since May 29, 1980.

REMARKS.-- Records good. Temperature recorder re-installed June 4. Temperature measurements obtained on June 30 and July 27 indicated a maximum variation of 0.5°C within the cross-section. No Record Sept. 23-30 due to equipment malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 13.5°C, June 25, 25, 1982.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--Minimum temperature of .0°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum 13.5°C, June 25, 26.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	TEMPERATURE (DEG C)
JUN			
30...	1300	15.0	9.6
30...	1301	65.0	9.6
30...	1302	115	9.6
30...	1303	165	9.5
30...	1304	215	9.6
30...	1305	265	9.6
30...	1306	315	9.1
30...	1307	365	9.1
JUL			
27...	1345	18.0	9.6
27...	1346	68.0	9.4
27...	1347	118	9.4
27...	1348	168	9.4
27...	1349	218	9.4
27...	1350	268	9.5
27...	1351	318	9.5
27...	1352	368	9.5
27...	1353	403	9.6

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE, AIR (DEG C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
JUN								
04...	1400	400	15700	12.0	303	12800	--	--
30...	1300	410	15400	13.0	563	23400	32	38
JUL								
27...	1345	413	18100	--	1020	49800	19	23
AUG								
26...	1415	387	9850	16.5	480	12800	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. FALL DIAM. % FINER THAN 2.00 MM
JUN									
04...	--	--	--	46	60	79	94	100	--
30...	--	50	--	66	71	83	96	100	--
JUL									
27...	28	36	48	58	65	77	91	*95	*99
AUG									
26...	--	--	--	*61	--	--	--	--	--

* SIEVE ANALYSIS

15291500 SUSITNA RIVER NEAR CANTWELL--Continued

TEMPERATURE, WATER (DEG. C), JUNE 1982 TO SEPTEMBER 1982

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1					---	---	9.5	8.5	9.5	8.0	7.5	7.0
2					---	---	10.0	8.0	9.0	8.0	8.0	7.0
3					---	---	11.5	9.0	10.5	8.5	8.0	7.0
4					7.5	---	12.0	10.5	10.5	9.0	7.5	6.5
5					8.0	7.0	11.5	10.0	10.5	9.5	7.5	6.5
6					8.5	6.5	12.0	10.5	10.5	8.5	8.0	7.0
7					8.0	6.0	13.0	11.0	10.0	9.0	8.0	7.5
8					7.0	5.5	13.0	12.0	9.0	8.0	7.5	7.0
9					7.0	6.0	12.5	10.0	8.5	7.0	7.0	6.5
10					7.0	6.0	10.0	8.5	8.5	7.5	6.5	6.0
11					7.5	6.5	9.5	8.0	9.0	8.0	6.5	5.5
12					7.0	6.0	9.5	8.0	10.0	8.0	5.5	4.5
13					8.0	6.5	8.5	8.0	11.0	9.0	6.0	5.0
14					8.0	7.5	9.0	8.0	11.0	10.0	6.5	5.5
15					8.0	6.5	8.5	8.0	10.5	8.0	8.5	6.0
16					7.0	6.0	8.0	7.0	8.5	7.5	8.5	7.0
17					8.5	6.5	9.0	7.5	8.5	8.0	7.0	5.5
18					8.5	7.5	9.5	8.0	8.5	7.5	5.5	5.0
19					8.0	6.0	11.5	8.5	10.0	8.0	6.0	5.5
20					8.0	7.0	12.5	10.5	10.5	9.0	6.0	5.5
21					8.0	6.5	11.5	10.5	10.5	9.5	5.5	5.0
22					9.5	8.0	10.5	8.5	10.5	8.5	5.5	5.0
23					11.5	8.5	8.5	7.5	11.0	10.0	---	---
24					13.0	10.5	8.5	7.5	11.0	9.5	---	---
25					13.5	11.5	8.5	7.5	9.5	9.0	---	---
26					13.5	11.0	9.0	7.0	9.0	8.0	---	---
27					12.5	11.0	11.0	8.5	10.0	8.5	---	---
28					12.5	11.0	11.0	9.5	9.0	7.5	---	---
29					11.0	9.0	10.5	9.0	8.5	7.5	---	---
30					10.0	9.0	9.0	7.5	7.5	7.0	---	---
31					---	---	8.0	7.0	7.5	6.5	---	---
MONTH					13.5	5.5	13.0	7.0	11.0	6.5	8.5	4.5

15292000 SUSITNA RIVER AT GOLD CREEK

LOCATION.--Lat 62°46'04", long 149°41'28", in NW¼ sec.20, T.31 N., R.2 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, near left bank under Alaska Railroad bridge, 0.1 mi (0.2 km) downstream from Gold Creek, 0.9 mi (1.4 km) north of Gold Creek railroad station, and 2.0 mi (3.2 km) downstream from Indian River.

DRAINAGE AREA.--6,160 mi² (15,950 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 676.50 ft (206.197 m) National Geodetic Vertical Datum of 1929. Prior to June 6, 1957, nonrecording gage at same site and datum. June 7, 1957 to June 2, 1964, water-stage recorder at site 0.3 mi (0.5 km) upstream at same datum.

REMARKS.--Water-discharge records good except those for Nov. 2 to June 30, which are poor.

AVERAGE DISCHARGE.--33 years, 9,718 ft³/s (275.2 m³/s), 21.42 in/yr (544 mm/yr), 7,041,000 acre-ft/yr (8.68 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90,700 ft³/s (2,570 m³/s) June 7, 1964, gage height, 16.58 ft (5.054 m); maximum gage height observed, 24.48 ft (7.462 m) May 10, 1954, ice jam; minimum daily discharge, about 600 ft³/s (17 m³/s) Feb. 16-20, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37,900 ft³/s (1,070 m³/s) June 21, gage height, 12.07 ft (3.679 m), from floodmarks; minimum daily, about 1,300 ft³/s (37 m³/s) Feb. 21 to Mar. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8250	4400	2200	1700	1600	1300	1500	3000	23000	25000	26400	17900
2	7890	4200	2100	1700	1600	1300	1500	3200	26000	22800	22500	16000
3	7530	4100	2100	1700	1700	1300	1500	3400	29000	19600	19800	14600
4	7440	4000	2100	1700	1700	1300	1500	4100	25000	18000	18500	14400
5	7590	4000	2000	1700	1700	1300	1500	4500	22000	17400	17400	13600
6	7500	3900	2000	1700	1700	1300	1500	5000	23000	17100	16800	12200
7	7290	3900	2000	1700	1700	1300	1500	5600	26000	16600	16500	11700
8	7170	3900	2000	1700	1700	1300	1500	6800	30000	18100	16600	11900
9	7080	4000	2000	1700	1700	1300	1500	8000	28000	21500	17000	13400
10	7050	4000	2000	1700	1600	1300	1500	9300	26000	23000	16700	14400
11	6900	4000	1900	1700	1600	1300	1500	10500	24000	24000	15400	13600
12	6900	3800	1900	1700	1500	1300	1500	11500	23000	26500	14400	13200
13	7410	3600	1900	1700	1500	1300	1500	12500	21000	28400	13600	15200
14	7890	3400	1900	1700	1500	1300	1500	13500	20000	27300	13600	20200
15	8440	3300	1900	1700	1400	1300	1550	15000	19000	25600	14800	28200
16	8310	3100	1800	1700	1400	1300	1550	16000	20000	25600	15600	32500
17	7860	3000	1800	1700	1400	1300	1600	16000	22000	25300	15100	32000
18	7560	3000	1800	1700	1400	1300	1650	16000	24000	25400	14200	26800
19	6810	2900	1800	1700	1400	1300	1700	16000	28000	24900	13300	24100
20	6120	2800	1800	1700	1400	1300	1750	16000	33000	22900	12500	24000
21	6690	2700	1800	1700	1300	1300	1800	16000	37000	21900	12200	24200
22	7620	2700	1800	1700	1300	1300	1900	16000	31000	22400	12200	22300
23	8680	2600	1800	1700	1300	1300	2000	17000	27000	24900	12300	19400
24	10200	2600	1800	1700	1300	1350	2100	18000	26000	26800	12500	17100
25	9840	2500	1800	1700	1300	1400	2200	20000	27000	31900	13400	17000
26	8760	2400	1700	1600	1300	1400	2300	22000	28000	31800	13600	14000
27	7920	2300	1700	1600	1300	1500	2400	23000	29000	29100	12900	13800
28	7050	2300	1700	1600	1300	1550	2500	24000	30000	25600	12400	12900
29	5950	2200	1700	1600	---	1550	2700	22000	29000	23600	12200	12400
30	5120	2200	1700	1600	---	1550	2800	20000	27000	26400	13100	12500
31	4520	---	1700	1600	---	1550	---	21000	---	28400	16000	---
TOTAL	231340	97800	58200	52100	41600	41750	53500	414900	783000	747800	473500	533500
MEAN	7463	3260	1877	1681	1486	1347	1783	13380	26100	24120	15270	17780
MAX	10200	4400	2200	1700	1700	1550	2800	24000	37000	31900	26400	32500
MIN	4520	2200	1700	1600	1300	1300	1500	3000	19000	16600	12200	11700
CFSM	1.21	.53	.31	.27	.24	.22	.29	2.17	4.24	3.92	2.48	2.89
IN.	1.40	.59	.35	.31	.25	.25	.32	2.51	4.73	4.52	2.86	3.22
AC-FT	458900	194000	115400	103300	82510	82810	106100	823000	1553000	1483000	939200	1058000

CAL YR 1981	TOTAL	4347040	MEAN	11910	MAX	60800	MIN	1500	CFSM 1.93	IN 26.25	AC-FT	8622000
WTR YR 1982	TOTAL	3528990	MEAN	9668	MAX	37000	MIN	1300	CFSM 1.57	IN 21.31	AC-FT	7000000

NOTE.--No gage-height record Feb. 1 to June 30.

15292000 SUSITNA RIVER AT GOLD CREEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-58, 1962, 1967-68, 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Aug. 20 to Sept. 30, 1982.

INSTRUMENTATION.--Water temperature recorder since Aug. 20, 1982.

REMARKS.--Temperature measurements made on Mar. 30, May 27, July 1, Aug. 19 and Sept. 16 indicated a maximum variation of 0.5°C within the cross section.

EXTREMES FOR CURRENT YEAR.--Maximum recorded 12.5°C on Aug. 20

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JAN							
20...	1545	--	260	7.5	.0	15.8	110
MAR							
03...	1230	--	--	6.7	.0	14.2	99
30...	1431	182	268	7.8	.0	--	--
30...	1432	212	265	7.9	.0	14.0	98
30...	1433	242	266	8.0	.0	--	--
MAY							
27...	1746	95.0	70	8.0	5.0	13.6	107
27...	1747	165	70	8.0	5.1	13.8	109
27...	1748	210	70	8.0	5.0	14.1	111
27...	1749	255	70	8.0	5.0	14.4	113
27...	1750	330	70	8.0	5.0	14.7	116
JUL							
01...	1731	120	112	7.7	10.2	11.8	107
01...	1732	180	111	7.7	10.1	11.8	107
01...	1733	230	108	7.7	9.9	11.9	108
01...	1734	280	107	7.7	9.9	12.0	108
01...	1735	350	98	7.5	9.7	11.9	108
AUG							
19...	1616	85.0	133	6.7	10.7	--	--
19...	1617	140	130	7.3	10.5	--	--
19...	1618	185	129	7.4	10.4	--	--
19...	1619	225	129	7.5	10.4	--	--
19...	1620	285	129	7.6	10.4	--	--
SEP							
16...	1630	--	101	--	7.5	--	--
16...	1631	55.0	105	7.8	7.7	12.2	104
16...	1632	115	104	7.9	7.6	12.4	106
16...	1633	165	102	8.0	7.5	12.7	108
16...	1634	220	101	8.0	7.5	12.1	103
16...	1635	285	92	8.0	7.4	12.6	107

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE IT-FLD (MG/L AS CO3)
JAN												
20...	1545	--	2310	.70	751	120	39	4.6	15	2.1	--	--
MAR												
03...	1230	--	1070	.10	746	110	35	4.8	17	2.2	--	--
30...	1430	277	1520	.10	743	100	33	4.5	17	2.2	--	--
MAY												
27...	1745	430	23600	29	760	30	9.9	1.4	2.9	1.2	31	.00
JUL												
01...	1730	--	24500	180	743	47	16	1.7	4.2	1.5	46	.00
AUG												
19...	1615	390	13200	140	756	56	19	2.1	4.5	1.9	56	.00
SEP												
16...	1630	392	34600	23	745	45	15	1.9	3.4	1.3	--	--

15292000 SUSITNA RIVER AT GOLD CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
JAN												
20...	17	24	.1	12	152	165	.18	.18	.080	.090	.18	.15
MAR												
03...	15	31	.1	12	163	169	.19	.20	<.060	<.060	--	--
30...	13	27	.1	13	160	160	.17	.18	.060	.070	.21	.19
MAY												
27...	<5.0	4.3	.1	4.6	64	--	<.10	<.10	.130	.120	--	.48
JUL												
01...	9.0	4.7	<.1	5.4	67	67	<.10	<.10	.230	.100	--	.60
AUG												
19...	13	6.3	<.1	5.4	99	75	<.10	<.10	.090	.090	.31	.41
SEP												
16...	11	3.7	<.1	7.3	67	68	<.10	<.10	.100	.110	1.1	.29

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
JAN											
20...	.26	.02	.24	.44	.42	.010	.010	.030	1.2	--	--
MAR											
03...	.28	.03	.25	.47	.45	.040	.040	.020	1.1	--	--
30...	.27	.01	.26	.44	.44	.010	<.010	--	--	1.6	.1
MAY											
27...	--	--	.60	--	--	.090	.040	--	10	--	--
JUL											
01...	--	--	.70	--	--	.120	.040	.020	--	2.0	.4
AUG											
19...	.40	.00	.50	--	--	.230	.040	.020	1.4	--	--
SEP											
16...	1.20	.80	.40	--	--	.390	.010	<.010	--	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
MAR											
30...	1430	2	0	2	100	40	60	<1	--	<3	10
JUL											
01...	1730	4	3	1	200	200	31	1	0	1	20
SEP											
16...	1630	5	4	1	100	70	28	1	--	<1	30

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
MAR										
30...	--	<10	1	0	1	2	1	1	40	30
JUL										
01...	--	<10	5	--	<1	23	20	3	12000	12000
SEP										
16...	20	10	5	--	<1	56	49	7	14000	14000

15292000 SUSITNA RIVER AT GOLD CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
MAR 30...	15	3	0	3	10	7	3	<.1	<.1	2
JUL 01...	140	<1	--	1	210	200	7	.2	<.1	22
SEP 16...	120	15	14	1	280	270	8	.2	<.1	36

DATE	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR 30...	1	1	<1	--	<1	<1	1	10	--	<12
JUL 01...	--	<1	<1	--	1	1	<1	50	40	14
SEP 16...	29	7	1	0	1	<1	<1	90	90	5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. FALL DIAM. % FINER THAN 2.00 MM
JAN 20...	1545	2310	2	12	--	--	--	--	--	--	--	--	--
MAR 03...	1230	1070	1	2.9	--	--	--	--	--	--	--	--	--
30...	1430	1520	8	33	--	--	--	--	--	--	--	--	--
MAY 27...	1745	23600	524	33400	--	--	--	*26	*43	*76	*96	*99	*100
JUL 01...	1730	24500	303	20000	29	40	55	69	76	88	99	100	--
AUG 19...	1615	13200	238	8480	36	51	71	84	87	95	100	--	--
SEP 16...	1630	34600	812	75900	--	--	--	*45	--	--	--	--	--

* SIEVE ANALYSIS

15292000 SUSITNA RIVER AT GOLD CREEK--Continued

TEMPERATURE, WATER (DEG. C), AUGUST 1982 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1									---	---	9.0	8.0
2									---	---	9.0	7.5
3									---	---	8.5	8.0
4									---	---	8.5	7.5
5									---	---	8.0	7.5
6									---	---	8.5	7.5
7									---	---	9.5	8.0
8									---	---	8.5	8.0
9									---	---	8.0	7.5
10									---	---	8.0	7.0
11									---	---	7.0	6.0
12									---	---	7.0	5.5
13									---	---	6.5	6.0
14									---	---	7.0	6.5
15									---	---	8.0	6.5
16									---	---	8.0	7.0
17									---	---	7.0	6.5
18									---	---	6.5	6.0
19									---	---	6.5	6.0
20									12.0	9.5	6.5	6.0
21									12.5	10.0	6.5	6.0
22									12.0	10.0	6.0	5.5
23									12.0	11.0	5.5	4.5
24									12.0	10.5	4.5	3.5
25									11.5	11.0	4.5	4.0
26									11.5	10.0	5.0	4.5
27									11.0	9.0	5.5	4.5
28									10.5	9.5	4.5	4.0
29									10.0	9.0	4.5	4.0
30									9.0	8.5	5.0	4.0
31									8.5	8.0	---	---
MONTH											9.5	3.5

15292400 CHULITNA RIVER NEAR TALKEETNA

LOCATION.--Lat 62°33'31", long 150°14'02", in SE¼ sec.32, T.29 N., R.5 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank, 0.5 mi (0.8 km) downstream from Parks Highway bridge, 4.5 mi (7.2 km) downstream from Troublesome Creek, 18 mi (29 km) upstream from mouth, and 16 mi (26 km) northwest of Talkeetna.

DRAINAGE AREA.--2,570 mi² (6,660 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1958 to September 1972 and annual maximum, water years 1973-77, 1979. May 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 500 ft (152 m), from topographic map. Prior to July 30, 1964, at site 3 mi (5 km) downstream at different datum. Oct. 1, 1972 to Apr. 30, 1980, crest-stage gage at site 150 ft (46 m) upstream at same datum. Streamflow augmented by glaciers, which cover 17 percent of the basin.

REMARKS.--Records good except those for period of no gage-height record, Oct. 7 to May 24 and July 19-26, which are poor.

AVERAGE DISCHARGE.--16 years (water years 1959-72, 1981-82), 8,834 ft³/s (250.2 m³/s), 46.68 in/yr (1,186 mm/yr), 6,400,000 acre-ft/yr (7.89 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,900 ft³/s (2,150 m³/s) July 20, 1967, gage height, 22.48 ft (6.852 m); minimum daily, about 650 ft³/s (18 m³/s) Apr. 1-15, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46,600 ft³/s (1,320 m³/s) July 25, gage height, 15.14 ft (4.615 m), from floodmarks; minimum daily, about 750 ft³/s (21 m³/s) Mar. 5-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5720	3200	1400	1100	950	800	950	1500	11700	25300	26800	17000
2	5570	3200	1400	1100	950	800	950	1600	15000	23700	24100	13900
3	5280	3000	1300	1100	950	800	950	1800	16100	20800	23000	14700
4	5240	3000	1300	1100	1000	800	1000	2000	12500	19900	22500	13500
5	5000	3000	1300	1100	1000	750	1000	2400	13100	19900	22500	12300
6	4860	2800	1300	1100	1000	750	1000	3000	16700	19800	22100	11600
7	4800	2800	1300	1100	950	750	1000	3600	20700	20200	21900	11800
8	4600	2800	1300	1100	900	750	1000	4400	20100	22400	23000	11700
9	4600	2800	1300	1100	900	750	1000	5000	17800	23700	24800	11600
10	4600	3000	1300	1100	900	750	1000	4600	17100	23200	23500	11600
11	4400	2800	1200	1100	850	750	1000	4800	17700	23600	21400	11600
12	4800	2600	1200	1100	850	750	1000	5000	16700	23000	19600	12900
13	5400	2400	1200	1000	850	750	1000	5000	16300	22500	19400	14500
14	6000	2400	1200	1000	850	750	1000	5500	14400	22600	21400	18800
15	5600	2200	1200	1000	850	750	1000	5500	14600	22600	24200	24900
16	5200	2200	1200	1000	850	750	1000	6000	14400	21800	22500	37000
17	4800	2000	1200	1000	850	750	1000	6500	14700	21300	21700	33000
18	4400	2000	1200	1000	850	750	1100	7000	15200	22700	20100	28000
19	4200	1900	1200	1000	850	750	1100	7500	16600	23400	18000	25100
20	4000	1800	1200	1000	850	750	1100	8000	20600	23000	17600	30800
21	4200	1800	1200	1000	850	800	1100	7500	22700	22000	18000	29600
22	4400	1700	1200	1000	800	800	1100	7500	19200	22000	18100	27200
23	4800	1700	1200	1000	800	800	1100	8500	18700	30000	18600	22000
24	5400	1600	1200	1000	800	800	1100	9500	19900	38000	18400	17500
25	6000	1600	1200	1000	800	800	1200	10800	22000	42000	17000	15000
26	5400	1500	1100	1000	800	850	1200	10600	23900	41600	16000	14400
27	5000	1500	1100	950	800	850	1200	9030	25200	31900	15500	14500
28	4400	1500	1100	950	800	850	1300	10600	26000	27700	15300	13000
29	4000	1400	1100	950	---	900	1300	11100	26800	28200	15100	12500
30	3600	1400	1100	950	---	900	1400	9120	24300	32200	18400	11900
31	3400	---	1100	950	---	900	---	10000	---	32900	20800	---
TOTAL	149670	67600	37800	31950	24450	24450	32150	194950	550700	793900	631300	547100
MEAN	4828	2253	1219	1031	873	789	1072	6289	18360	25610	20360	18240
MAX	6000	3200	1400	1100	1000	900	1400	11100	26800	42000	26800	37000
MIN	3400	1400	1100	950	800	750	950	1500	11700	19800	15100	11600
CFSM	1.88	.88	.47	.40	.34	.31	.42	2.45	7.14	9.97	7.92	7.10
IN.	2.17	.98	.55	.46	.35	.35	.47	2.82	7.97	11.49	9.14	7.92
AC-FT	296900	134100	74980	63370	48500	48500	63770	386700	1092000	1575000	1252000	1085000

CAL YR 1981	TOTAL	3718830	MEAN	10190	MAX	58200	MIN	1000	CFSM	3.97	IN	53.83	AC-FT	7376000
WTR YR 1982	TOTAL	3086020	MEAN	8455	MAX	42000	MIN	750	CFSM	3.29	IN	44.67	AC-FT	6121000

15292400 CHULITNA RIVER NEAR TALKEETNA--Continued

WATER-QUALITY RECORDS

LOCATION.--Sediment samples from June to September 1982 were collected 3.9 mi (6.3 km) downstream of the gage.

PERIOD OF RECORD.--Water years 1958-59, 1967-72, and 1980 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May to September 1982

INSTRUMENTATION.--Temperature recorder since May 24, 1982.

REMARKS.--Record good. Temperature measurements on June 3, 29 and July 26 indicated a maximum variation of 1.1°C within the cross section. No record Aug. 4 to Sept. 10 due to equipment malfunction.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Minimum temperature 0.0°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded 10.0°C on June 14, 19, 24; minimum recorded, 2.0°C on Sept. 23.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	TEMPERATURE (DEG C)
APR			
08...	1645	--	.0
JUN			
03...	1931	40.0	7.9
03...	1932	90.0	7.8
03...	1933	140	7.8
03...	1934	190	7.8
03...	1935	240	7.7
04...	1710	--	6.0
09...	1715	--	6.5
16...	1320	--	4.5
22...	1220	--	7.5
29...	1240	--	7.0
29...	1600	20.0	7.5
29...	1601	70.0	7.5
29...	1602	120	7.2
29...	1603	170	6.9
29...	1604	220	6.6
29...	1605	270	6.4
JUL			
07...	1150	--	9.0
13...	1220	--	6.5
20...	1340	--	9.0
26...	1715	30.0	7.6
26...	1716	80.0	7.5
26...	1717	130	7.4
26...	1718	180	7.3
26...	1719	230	7.0
26...	1720	280	6.8
27...	1435	--	6.0
AUG			
03...	1355	--	8.0
11...	1100	--	6.0
17...	1100	--	5.0
24...	1055	--	5.5
SEP			
01...	1120	--	6.0
18...	1510	--	5.0

15292400 CHULITNA RIVER NEAR TALKEETNA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAR								
02...	1245	--	789	4	8.5	--	--	--
APR								
08...	1645	195	1100	383	1140	--	--	--
JUN								
04...	1710	--	11500	424	13200	22	32	37
09...	1715	--	16900	760	34700	19	27	--
16...	1320	--	14500	428	16800	24	36	--
22...	1220	--	19500	880	46300	19	25	32
29...	1240	--	29000	1600	125000	34	45	56
JUL								
07...	1150	--	20700	1000	55900	26	36	51
13...	1220	--	22700	1270	77800	--	--	--
20...	1340	--	23100	1140	71100	30	44	54
27...	1435	--	31900	1110	95600	16	25	30
AUG								
03...	1355	--	23300	803	50500	24	33	42
11...	1100	--	21300	766	44100	23	34	40
17...	1100	--	21900	1180	69800	25	37	48
24...	1055	--	18200	830	40800	24	34	42
SEP								
01...	1120	--	17300	506	23600	17	26	--
18...	1510	--	29200	1680	132000	33	43	52

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. FALL DIAM. % FINER THAN 2.00 MM
MAR								
02...	--	--	--	--	--	--	--	--
APR								
08...	--	--	--	--	--	--	--	--
JUN								
04...	46	54	59	68	88	99	100	--
09...	41	--	77	83	96	99	100	--
16...	48	--	62	68	84	100	--	--
22...	39	47	58	64	75	98	100	--
29...	62	70	77	83	94	100	--	--
JUL								
07...	60	69	78	84	93	100	--	--
13...	--	--	71	76	83	99	100	--
20...	65	77	78	84	92	100	--	--
27...	42	51	60	70	85	98	99	100
AUG								
03...	55	67	73	77	87	99	100	--
11...	51	60	68	75	85	99	100	--
17...	59	68	75	80	87	97	100	--
24...	54	65	75	81	93	100	--	--
SEP								
01...	42	--	64	68	84	100	--	--
18...	58	62	68	74	86	96	99	100

DATE	TIME	NUMBER OF SAM-PLING POINTS	STREAM-FLOW, INSTAN-TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 128 MM
JUL												
27...	1520	1	30600	--	--	1	3	15	46	71	89	100
27...	1525	1	30600	--	--	1	5	18	44	72	93	100
27...	1530	1	30600	5	29	34	36	42	52	67	100	--
27...	1535	1	30600	--	--	--	--	--	--	5	24	100
27...	1540	1	30600	2	5	6	6	8	13	36	87	100

15292400 CHULITNA RIVER NEAR TALKEETNA--Continued

TEMPERATURE, WATER (DEG. C), MAY 1982 TO SEPTEMBER 1982

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1			---	---	---	---	6.0	5.0	9.5	5.5	---	---
2			---	---	---	---	6.0	5.0	9.5	5.5	---	---
3			---	---	---	---	7.0	5.0	9.0	[illegible]	---	---
4			---	---	8.5	6.5	7.5	5.5	---	5.5	---	---
5			---	---	7.0	5.5	7.0	5.5	---	---	---	---
6			---	---	6.5	5.5	7.0	5.5	---	---	---	---
7			---	---	7.0	6.0	7.5	5.5	---	---	---	---
8			---	---	9.0	6.0	7.5	6.0	---	---	---	---
9			---	---	8.5	7.0	6.5	5.5	---	---	---	---
10			---	---	8.0	7.0	6.0	5.5	---	---	---	---
11			---	---	7.5	6.5	5.5	5.0	---	---	5.0	4.5
12			---	---	8.0	6.5	5.5	5.0	---	---	5.5	4.0
13			---	---	8.5	6.0	5.0	4.5	---	---	4.5	4.0
14			---	---	10.0	6.5	5.0	5.0	---	---	5.0	4.5
15			---	---	8.5	6.0	5.0	5.0	---	---	6.5	5.5
16			---	---	5.5	5.0	5.0	5.0	---	---	6.0	4.0
17			---	---	8.0	5.0	5.0	5.0	---	---	4.0	3.5
18			---	---	8.5	6.5	5.0	5.0	---	---	4.5	3.5
19			---	---	10.0	6.[illegible]	5.0	5.0	---	---	4.0	4.0
20			---	---	9.0	6.0	5.5	5.0	---	---	4.5	4.0
21			---	---	8.0	5.5	5.5	5.0	---	---	4.0	3.5
22			---	---	9.0	6.5	5.0	5.0	---	---	4.5	2.5
23			---	---	9.5	6.5	5.0	4.5	---	---	4.5	2.0
24			---	---	10.0	7.0	4.5	4.5	---	---	3.5	2.5
25			5.5	5.0	9.5	7.0	6.5	4.5	---	---	4.0	3.5
26			6.5	5.0	8.5	7.0	7.0	6.0	---	---	4.0	---
27			6.0	5.5	7.5	6.5	7.5	5.5	---	---	5.0	---
28			6.0	5.5	7.0	6.5	7.5	6.0	---	---	4.0	2.5
29			6.0	5.5	7.0	5.5	7.0	6.0	---	---	4.5	3.0
30			6.0	6.0	6.5	5.5	6.5	5.5	---	---	4.5	4.0
31			---	---	---	---	8.5	5.5	---	---	---	---
MONTH			10.0	5.0	8.5	4.5					6.5	2.0

15292700 TALKEETNA RIVER NEAR TALKEETNA
(Hydrologic bench-mark station)

LOCATION.--Lat 62°20'49", long 150°01'01", in NE¼ sec.16, T.26 N., R.4 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 1.7 mi (2.7 km) downstream from Chunilna Creek, 3.5 mi (5.6 km) northeast of Talkeetna, and about 5 mi (8 km) above mouth.

DRAINAGE AREA.--2,006 mi² (5,196 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 400 ft (120 m), from topographic map.

REMARKS.--Water-discharge records good except those for period of no gage-height record, Oct. 20 to May 23, which are poor.

AVERAGE DISCHARGE.--18 years, 4,078 ft³/s (115.5 m³/s), 27.61 in/yr (701 mm/yr), 2,954,000 acre-ft/yr (3.64 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 67,400 ft³/s (1,910 m³/s) Aug. 10, 1971, gage height, 16.35 ft (4.983 m); minimum daily, about 260 ft³/s (7.36 m³/s) Feb. 27 to Mar. 20, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 38,200 ft³/s (1,080 m³/s) July 25, gage height, 12.25 ft (3.734 m); minimum daily, about 260 ft³/s (7.36 m³/s) Feb. 27 to Mar. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2740	1500	840	650	650	260	440	740	9560	9320	13800	8150
2	2540	1500	840	650	650	260	450	800	16000	7940	11500	7250
3	2450	1450	820	650	660	260	450	860	17000	6920	9730	8180
4	2560	1450	820	650	680	260	440	920	10800	7220	8810	8440
5	2440	1400	800	650	690	260	440	1000	10200	7460	8150	7220
6	2380	1400	780	650	680	260	430	1150	11500	6890	7790	6540
7	2260	1400	780	650	650	260	430	1300	18100	6830	7370	6360
8	2200	1400	740	650	620	260	430	1500	15800	8400	7580	6050
9	2140	1450	740	650	600	260	430	1700	13400	8240	8150	5660
10	2100	1500	740	650	570	260	430	2000	13400	7580	7400	5380
11	2080	1500	720	650	540	260	430	2300	14300	8810	6830	5320
12	2150	1450	720	650	510	260	430	2600	13000	9050	6280	5480
13	2700	1400	700	650	480	260	430	2900	10900	9390	6150	7480
14	2840	1350	700	650	460	260	430	3200	8120	8180	6670	12700
15	2570	1300	700	650	440	260	430	3500	9730	8000	7310	19400
16	2480	1250	680	650	420	260	430	3600	11100	7790	6860	23700
17	2340	1200	680	650	400	260	430	3700	10300	9560	6490	17100
18	2270	1200	680	650	380	260	430	3700	12500	9930	6200	13700
19	2180	1150	680	650	360	260	430	3700	12700	9420	5920	13200
20	2100	1100	650	650	340	260	440	3700	16300	8880	5760	14300
21	2200	1100	650	650	320	270	460	3800	14200	8640	5840	12200
22	2300	1050	650	650	310	270	480	3900	12300	8610	5790	11100
23	2500	1050	650	650	300	280	500	4200	11700	11600	5940	9830
24	2700	1000	650	650	290	290	520	4580	13600	16800	6250	8710
25	2800	960	650	650	280	300	550	5290	15600	27600	6380	7940
26	2600	960	650	650	270	320	580	5680	16400	24000	6510	7430
27	2400	920	650	650	260	340	600	5200	14900	20000	6180	7550
28	2200	920	650	650	260	360	640	6250	13900	13300	5630	6860
29	2000	880	650	650	---	380	670	5860	11800	13300	5710	6670
30	1800	880	650	650	---	400	720	5660	9180	15900	7340	6750
31	1700	---	650	650	---	420	---	7400	---	17700	9080	---
TOTAL	72720	37070	21960	20150	13070	8830	14400	102690	388320	343260	225400	286650
MEAN	2346	1236	708	650	467	285	480	3313	12940	11070	7271	9555
MAX	2840	1500	840	650	690	420	720	7400	18100	27600	13800	23700
MIN	1700	880	650	650	260	260	430	740	8120	6830	5630	5320
CFSM	1.17	.62	.35	.32	.23	.14	.24	1.65	6.45	5.52	3.63	4.76
IN.	1.35	.69	.41	.37	.24	.16	.27	1.90	7.20	6.37	4.18	5.32
AC-FT	144200	73530	43560	39970	25920	17510	28560	203700	770200	680900	447100	568600

CAL YR 1981 TOTAL 1603330 MEAN 4393 MAX 40500 MIN 530 CFSM 2.19 IN 29.73 AC-FT 3180000
WTR YR 1982 TOTAL 1534520 MEAN 4204 MAX 27600 MIN 260 CFSM 2.10 IN 28.46 AC-FT 3044000

15292700 TALKEETNA RIVER NEAR TALKEETNA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAR							
03...	1750	--	197	6.4	.0	13.3	92
APR							
09...	1000	--	203	6.4	.0	13.8	95
JUN							
01...	1331	40.0	65	7.3	6.9	--	--
01...	1332	80.0	64	6.8	6.3	--	--
01...	1333	130	62	6.7	6.2	--	--
01...	1334	190	60	6.6	6.1	--	--
01...	1335	260	55	6.6	5.9	--	--
02...	1530	--	--	--	4.0	--	--
09...	1035	--	--	--	6.0	--	--
23...	1020	--	--	--	7.0	--	--
29...	1730	--	--	--	9.5	--	--
JUL							
02...	1101	40.0	88	7.5	8.3	11.8	101
02...	1102	80.0	88	7.5	8.2	11.9	102
02...	1103	140	90	7.4	8.2	11.9	102
02...	1104	195	89	7.3	8.2	11.9	102
02...	1105	270	80	7.5	8.3	11.8	101
07...	1910	--	--	--	13.0	--	--
13...	1830	--	--	--	10.0	--	--
20...	1900	--	--	--	13.0	--	--
28...	1200	--	--	--	9.0	--	--
AUG							
03...	1930	--	--	--	11.0	--	--
10...	1820	--	--	--	9.0	--	--
17...	1715	--	--	--	9.0	--	--
20...	1416	28.0	92	7.3	10.5	--	--
20...	1417	78.0	93	7.3	10.5	--	--
20...	1418	128	93	7.3	10.6	--	--
20...	1419	178	93	7.3	10.7	--	--
20...	1420	263	92	7.2	10.7	--	--
31...	1750	--	--	--	8.5	--	--
SEP							
17...	1301	37.0	83	7.8	5.7	12.2	99
17...	1302	87.0	82	7.8	5.7	12.3	99
17...	1303	142	80	7.8	5.7	12.5	101
17...	1304	206	79	7.7	5.8	11.5	93
17...	1305	282	73	7.7	5.9	11.5	93
20...	0945	--	--	--	6.0	--	--

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)
MAR												
03...	1750	150	260	756	--	--	74	25	2.8	14	1.5	53
APR												
09...	1000	142	432	754	--	--	68	23	2.6	14	1.5	51
JUN												
01...	1330	343	9440	--	30	K18	26	8.5	1.1	3.6	.9	23
JUL												
02...	1100	340	8240	751	K4	K14	41	14	1.4	4.3	.9	33
AUG												
20...	1415	335	5860	--	--	K11	38	13	1.4	4.5	.9	30
SEP												
17...	1300	352	17000	756	--	--	35	12	1.3	3.4	.7	33

K NON-IDEAL COLONY COUNT

15292700 - TALKEETNA RIVER NEAR TALKEETNA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
MAR 03...	14	24	.1	9.7	125	125	.49	.50	<.060	<.060	--	--
APR 09...	14	24	.1	9.4	126	119	.48	.49	.060	<.060	.58	--
JUN 01...	5.0	4.6	<.1	5.4	48	43	.30	.29	.080	.110	.62	.49
JUL 02...	9.0	4.5	<.1	5.9	61	66	.21	.21	.120	.100	.48	--
AUG 20...	9.0	5.3	<.1	5.9	67	58	.22	.22	.120	.100	.48	.40
SEP 17...	--	--	<.1	7.3	--	--	.30	.29	.070	.060	.83	.84

DATE	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
MAR 03...	.23	.03	.20	.72	.70	<.010	<.010	.7	--	-	--
APR 09...	.64	.37	.27	1.1	.76	<.010	<.010	--	1.2	.1	<.01
JUN 01...	.70	.10	.60	1.0	.89	.080	<.010	--	--	--	--
JUL 02...	.60	--	<.10	.81	--	.080	.020	--	2.8	.2	--
AUG 20...	.60	.10	.50	.82	.72	.090	.050	1.3	--	--	--
SEP 17...	.90	.00	.90	1.2	1.2	.170	<.010	2.6	--	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)
APR 09...	1000	<1	<1	<100	19	<3	<1	<3	<10	2	<9

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR 09...	2	<30	60	40	17	1	<30	30	10	6	4

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 09...	.1	<.1	<30	1	<1	<1	<1	150	<10	10	<12

15292700 - TALKEETNA RIVER NEAR TALKEETNA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	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)
JUL									
02...	1100	<1.1	<2.0	.7	<1.5	.6	<1.4	.10	.06

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
MAR								
03...	1750	260	1	.70	--	--	--	--
APR								
09...	1000	432	2	2.3	--	--	--	--
JUN								
01...	1330	9440	333	8490	--	--	--	--
02...	1530	17900	1340	64300	--	--	--	--
09...	1035	14200	302	11600	--	--	--	--
16...	1630	11400	171	5260	--	--	--	--
23...	1020	12400	171	5730	--	--	--	--
29...	1730	10700	309	8930	--	--	--	--
JUL								
02...	1100	8240	204	4540	--	--	--	--
07...	1910	6750	90	1640	--	--	--	--
13...	1830	8880	226	5420	--	--	--	--
20...	1900	8400	226	5130	--	--	--	--
28...	1200	14200	696	26700	17	22	27	35
AUG								
03...	1930	8980	206	5000	--	--	--	--
10...	1820	6980	203	3830	--	--	--	--
17...	1715	6230	212	3570	--	--	--	--
24...	1735	5920	179	2860	--	--	--	--
31...	1750	9120	276	6800	--	--	--	--
SEP								
17...	1300	17000	612	28100	7	9	--	16
20...	0945	14800	301	12000	--	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. FALL DIAM. % FINER THAN 2.00 MM
MAR							
03...	--	--	--	--	--	--	--
APR							
09...	--	--	--	--	--	--	--
JUN							
01...	--	*32	*48	*76	*92	*99	*100
02...	--	*45	--	--	--	--	--
09...	--	28	40	66	100	--	--
16...	--	29	44	68	92	100	--
23...	--	29	42	63	100	--	--
29...	--	42	59	82	100	--	--
JUL							
02...	--	29	37	65	100	--	--
07...	--	36	46	67	99	100	--
13...	--	64	72	92	100	--	--
20...	--	*69	--	--	--	--	--
28...	47	56	66	79	94	100	--
AUG							
03...	--	40	56	74	100	--	--
10...	--	32	43	62	100	--	--
17...	--	41	54	74	100	--	--
24...	--	51	62	79	100	--	--
31...	--	32	46	82	100	--	--
SEP							
17...	--	34	48	73	92	100	--
20...	--	32	41	66	91	96	100

* SIEVE ANALYSIS

15292700 - TALKEETNA RIVER NEAR TALKEETNA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 128 MM
JUL											
28...	1230	1	7	50	74	84	91	95	100	--	--
28...	1235	--	--	--	--	--	--	4	25	85	100
28...	1240	--	--	--	--	--	--	--	7	100	--
28...	1245	--	--	--	--	--	--	--	--	100	--
SEP											
20...	1120	--	--	--	--	--	--	--	--	6	100
20...	1125	--	--	--	--	--	5	22	65	100	--
20...	1130	--	--	--	--	--	--	4	38	80	100
20...	1135	--	--	--	--	--	--	1	3	30	100

15292780 SUSITNA RIVER AT SUNSHINE

LOCATION.--Lat 62°10'42", long 150°10'30", in SE¼SW¼ sec.10, T.24 N., R.5 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 100 ft (30 m) upstream from Parks Highway bridge, 1.6 mi (2.6 km) downstream from Sunshine Creek, and 3.2 mi (5.2 km) northwest of Sunshine. Prior to May 28, 1982 at site 100 ft (30 m) upstream on right bank.

DRAINAGE AREA.--11,100 mi² (28,800 km²), approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 270 ft (82 m), from topographic map. Prior to May 28, 1982 at site 100 ft (30 m) upstream on right bank at same datum.

REMARKS.-- Water-discharge records poor for period of no gage-height record prior to May 27, good thereafter. Satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 150,000 ft³/s (4,250 m³/s) July 11, 1981; minimum daily, 2,700 ft³/s (76.5 m³/s) Feb. 23 to Mar. 20, 1982

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 10, 1971 had a peak discharge of 200,000 ft³/s (5,700 m³/s), gage height, about 62.0 ft (18.9 m), datum then in use for National Weather Service gage on downstream side of bridge near left bank.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 105,000 ft³/s (2,970 m³/s) July 25, gage height, 13.44 ft (4.096 m); minimum daily, 2,700 ft³/s (76.5 m³/s) Feb. 23 to Mar. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19000	9400	4600	3500	3500	2700	3500	6100	49000	62100	73500	47200
2	18500	9000	4600	3500	3500	2700	3500	6400	60500	59300	63300	43700
3	17500	8600	4600	3500	3600	2700	3300	6800	73800	51300	56400	41500
4	16500	8500	4600	3500	3800	2700	3300	7400	59700	48000	52600	41600
5	16500	8400	4600	3500	4000	2700	3300	8000	52000	47100	50400	37600
6	16500	8400	4300	3500	4000	2700	3300	9400	54000	46600	49100	34700
7	16000	8300	4300	3500	3900	2700	3300	11000	70900	46100	47700	33000
8	16000	8300	4300	3500	3800	2700	3300	13000	76500	49700	49400	32700
9	15500	8400	4300	3500	3700	2700	3300	16000	70800	55400	52500	32500
10	15500	8600	4300	3500	3600	2700	3300	18000	64200	56100	51600	34100
11	15000	8500	4000	3500	3500	2700	3300	21000	65000	58400	47900	33800
12	15000	8200	4000	3500	3400	2700	3300	23000	60800	60100	44000	35000
13	17000	7800	4000	3500	3300	2700	3300	25000	56900	63000	42000	36400
14	18000	7500	4000	3500	3200	2700	3300	27000	47600	62500	42800	53300
15	19000	7200	4000	3500	3100	2700	3300	30000	46400	60800	47900	68700
16	18000	7000	4000	3500	3000	2700	3300	32000	50100	58200	47700	91300
17	17000	6700	4000	3500	3000	2700	3400	34000	50900	58600	46500	88400
18	16000	6500	4000	3500	2900	2700	3500	35000	54600	59800	44400	76500
19	15000	6300	4000	3500	2900	2700	3600	34000	59000	61500	40700	69500
20	13500	6100	4000	3500	2900	2700	3700	33000	67000	59000	38200	72700
21	15000	6000	3800	3500	2800	2800	3800	33000	78600	57800	37600	69400
22	17000	5800	3800	3500	2800	2800	3900	33000	70000	59000	37600	65300
23	19000	5600	3800	3500	2700	2900	4100	34000	61600	66200	38000	56600
24	22000	5400	3800	3500	2700	3000	4300	35000	62700	79000	38700	47500
25	21000	5200	3800	3500	2700	3100	4500	37000	66700	89900	38700	42200
26	19000	5200	3600	3500	2700	3200	4700	40000	71700	99300	38400	38000
27	17000	5000	3600	3500	2700	3400	5000	43000	72500	82400	37400	38500
28	15000	5000	3600	3500	2700	3500	5200	45500	73600	72000	35600	35900
29	13000	5000	3600	3500	---	3500	5400	44800	73100	67900	34900	33900
30	11000	5000	3600	3500	---	3500	5800	40300	64500	73700	39000	33400
31	10000	---	3600	3500	---	3500	---	41700	---	83100	48700	---
TOTAL	510000	210900	125100	108500	90400	89200	114100	823400	1884700	1953900	1413200	1464900
MEAN	16450	7030	4035	3500	3229	2877	3803	26560	62820	63030	45590	48830
MAX	22000	9400	4600	3500	4000	3500	5800	45500	78600	99300	73500	91300
MIN	10000	5000	3600	3500	2700	2700	3300	6100	46400	46100	34900	32500
CFSM	1.48	.63	.36	.32	.29	.26	.34	2.39	5.66	5.68	4.11	4.40
IN.	1.71	.71	.42	.36	.30	.30	.38	2.76	6.32	6.55	4.74	4.91
AC-FT	1012000	418300	248100	215200	179300	176900	226300	1633000	3738000	3876000	2803000	2906000

WTR YR 1982 TOTAL 8788300 MEAN 24080 MAX 99300 MIN 2700 CFSM 2.17 IN 29.45 AC-FT 17430000

15292780 SUSITNA RIVER AT SUNSHINE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971, 1975, 1977, and 1981 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May to September 1981, July to September 1982 (seasonal).

INSTRUMENTATION.--Temperature recorder since May 15, 1981.

REMARKS.--Records good. Temperature measurements obtained June 3, July 2, Aug. 17 and Sept. 15 indicated a maximum variation of 1.7°C within the cross sections.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum recorded 12.0°C June 13-14, 1981 and July 20, 1982; minimum recorded 3.5°C on Sept. 24-25, 1982.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: July to September, maximum, 12.0°C July 20; minimum, 3.5°C on Sept. 24-25.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--Minimum temperature observed 0°C Mar. 2 and, Apr. 9, 1982.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAR							
02...	1650	--	--	6.2	.0	13.8	95
APR							
09...	1400	--	225	7.3	.0	13.4	92
JUN							
03...	1331	65.0	50	6.9	5.7	13.5	107
03...	1332	190	59	6.9	6.4	13.2	107
03...	1333	290	62	7.0	6.4	13.4	109
03...	1334	415	64	7.3	6.5	13.1	107
03...	1335	690	69	7.4	6.6	13.1	107
10...	1010	--	--	--	7.5	--	--
17...	1010	--	--	--	7.0	--	--
21...	1510	--	--	--	7.0	--	--
28...	1655	--	--	--	11.0	--	--
JUL							
02...	1630	--	99	--	--	--	--
02...	1631	100	93	7.2	10.6	--	--
02...	1632	200	99	7.6	9.9	--	--
02...	1633	275	100	7.8	9.4	--	--
02...	1634	375	100	8.0	9.2	--	--
02...	1635	550	102	8.0	8.9	--	--
06...	1700	--	--	--	10.0	--	--
19...	1640	--	--	--	9.5	--	--
26...	1515	--	--	--	9.5	--	--
AUG							
02...	1635	--	--	--	11.0	--	--
09...	1810	--	--	--	10.5	--	--
16...	1530	--	--	--	10.5	--	--
17...	1301	150	98	7.4	9.7	--	--
17...	1302	350	95	7.6	8.7	--	--
17...	1303	550	93	7.9	8.0	--	--
23...	1630	--	--	--	10.0	--	--
30...	1600	--	--	--	9.0	--	--
SEP							
15...	1330	--	--	--	7.0	--	--
15...	1331	90.0	80	7.8	7.4	11.9	100
15...	1332	190	84	7.8	7.4	12.4	105
15...	1333	290	88	8.0	7.2	12.2	102
15...	1334	415	88	8.0	7.1	12.4	102
15...	1335	590	88	7.8	7.0	13.4	112
17...	1630	--	--	--	6.5	--	--

15292780 SUSITNA RIVER AT SUNSHINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM WIDTH (FT)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	HARD-NESS (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 IT-FLD (MG/L AS HCO3)
MAR 02...	1650	260	2660	.20	759	96	31	4.4	11	1.9	--
APR 09...	1400	220	3350	.50	757	87	28	4.2	10	1.8	--
JUN 03...	1330	1015	73800	160	759	33	11	1.4	2.1	1.2	32
JUL 02...	1630	1010	58700	300	754	52	17	2.2	2.7	1.4	48
AUG 17...	1300	1010	47500	270	--	54	18	2.2	3.0	1.7	53
SEP 15...	1330	985	70100	320	751	46	15	2.0	3.3	1.1	---

DATE	CAR-BONATE IT-FLD (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
MAR 02...	--	16	16	.1	9.7	130	136	.27	.29	<.060	<.060
APR 09...	--	17	16	.2	9.8	135	130	.27	.27	.060	.060
JUN 03...	.00	6.0	2.5	.1	4.2	54	--	.21	.20	.100	.080
JUL 02...	.00	13	3.2	<.1	4.9	71	72	.11	.10	.080	.080
AUG 17...	.00	13	3.0	.1	4.0	62	72	<.10	.11	.230	.160
SEP 15...	--	10	3.5	.1	6.9	59	69	.20	.16	.160	.130

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
MAR 02...	--	--	.45	.02	.43	.72	.72	<.010	<.010	.8	--
APR 09...	.26	.37	.32	.00	.43	.59	.70	<.010	<.010	.4	--
JUN 03...	.40	.42	.50	.00	.50	.71	.70	.100	.020	--	6.4
JUL 02...	1.1	1.0	1.20	.10	1.1	1.3	1.2	.050	.100	--	4.7
AUG 17...	1.1	.64	1.30	.50	.80	--	.91	.330	.050	3.2	--
SEP 15...	.74	.47	.90	.30	.60	1.1	.76	1.10	.010	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
JUL 02...	1630	9	7	2	300	300	25	<1	<1	30
SEP 15...	1330	12	11	1	200	200	24	<1	<1	40

15292780 SUSITNA RIVER AT SUNSHINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
JUL 02...	10	20	10	<1	30	25	5	20000	20000	220
SEP 15...	--	<10	11	<1	75	63	12	29000	29000	200

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
JUL 02...	<1	--	1	400	390	10	.2	<.1	33
SEP 15...	41	38	3	620	610	14	.2	.1	40

DATE	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
JUL 02...	31	2	<1	<1	<1	<1	80	70	9
SEP 15...	37	3	1	<1	2	<1	130	110	17

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAR 02...	1650	2660	1	7.2	--	--	--
JUN 03...	1330	73800	847	169000	--	--	--
10...	1010	64500	414	72100	16	20	--
17...	1010	50800	360	49400	--	--	--
21...	1510	78300	683	144000	17	20	27
28...	1655	75700	702	143000	25	33	43
JUL 02...	1630	58700	659	104000	32	41	49
06...	1700	46600	503	63300	25	40	45
12...	1550	59800	800	129000	--	--	--
19...	1640	60800	548	90000	27	39	47
26...	1515	96800	1430	374000	13	18	27
AUG 02...	1635	62400	704	119000	--	--	--
09...	1810	54000	813	119000	28	33	43
16...	1530	47800	726	93700	37	42	55
23...	1630	38600	527	54900	27	41	50
30...	1600	39800	424	45600	19	25	34
SEP 15...	1330	70100	1620	307000	6	9	11
17...	1630	86500	1300	304000	28	38	46

15292780 SUSITNA RIVER AT SUNSHINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN 250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. FALL DIAM. % FINER THAN 2.00 MM
MAR								
02...	--	--	--	--	--	--	--	--
JUN								
03...	--	--	*42	*62	*85	*97	*99	*100
10...	32	--	52	62	95	100	--	--
17...	--	--	35	42	62	100	--	--
21...	37	48	60	76	93	100	--	--
28...	53	62	73	82	92	100	--	--
JUL								
02...	57	66	72	78	90	100	--	--
06...	54	62	67	72	84	100	--	--
12...	--	--	75	82	90	100	--	--
19...	60	69	78	85	93	99	100	--
26...	36	47	59	74	90	99	100	--
AUG								
02...	--	--	--	--	--	--	--	--
09...	55	66	75	81	89	100	--	--
16...	67	77	83	88	93	100	--	--
23...	62	73	81	86	94	100	--	--
30...	49	62	72	80	90	99	100	--
SEP								
15...	22	39	60	79	91	99	100	--
17...	54	65	72	82	94	99	100	--

DATE	TIME	NUMBER OF SAMPLING POINTS	STREAMFLOW, INSTANTANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 128 MM
JUL												
26...	1650	1	95200	--	--	--	--	--	2	18	100	--
26...	1655	1	95200	--	--	--	--	--	--	8	54	100
26...	1700	1	95200	--	--	--	--	--	--	4	31	100
26...	1705	1	95200	1	3	5	1	23	38	53	62	100
26...	1710	1	95200	--	--	--	--	--	1	15	100	--
26...	1715	1	95200	--	2	4	6	12	23	64	100	--

* SIEVE ANALYSIS

SOUTH-CENTRAL ALASKA

15292780 SUSITNA RIVER AT SUNSHINE--Continued

TEMPERATURE, WATER (DEG. C), JULY 1982 TO SEPTEMBER 1982

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1												
2							---	---	10.0	8.0	8.5	7.0
3							---	---	10.0	8.5	8.0	7.5
4							---	---	10.0	8.5	7.5	7.0
5							---	---	10.5	9.0	8.0	7.0
6							---	---	10.5	9.0	7.5	7.0
7							---	---	10.5	9.0	7.5	7.0
8							---	---	10.0	8.0	9.5	7.0
9							---	---	9.0	7.5	8.5	7.5
10							---	---	9.0	7.5	7.5	7.0
11							10.5	8.5	7.5	6.5	7.5	6.5
12							9.0	8.5	9.0	6.5	7.0	5.5
13							9.0	8.0	---	---	5.5	5.0
14							10.0	7.5	---	---	6.0	5.5
15							9.5	8.5	---	---	6.0	5.5
16							9.5	8.5	---	---	7.0	6.0
17							9.0	8.0	---	---	8.0	7.0
18							10.0	8.0	8.0	---	7.0	5.0
19							10.0	8.5	8.0	6.5	5.5	5.0
20							11.0	8.0	9.0	7.0	5.5	5.0
21							12.0	9.5	9.0	7.5	5.5	5.5
22							11.5	8.5	9.5	8.0	5.5	5.0
23							8.5	7.5	9.0	8.5	5.5	4.5
24							8.0	7.0	9.5	8.5	5.0	4.0
25							8.0	7.5	8.5	8.0	4.5	3.5
26							8.0	7.0	8.5	8.0	4.5	3.5
27							8.5	7.0	9.0	8.0	5.0	4.5
28							8.5	7.5	9.0	8.0	5.5	4.5
29							9.5	8.0	8.5	7.5	4.5	4.0
30							9.5	8.0	8.0	7.0	4.5	4.0
31							9.0	8.0	7.0	6.5	5.0	4.5
MONTH							9.5	7.5	7.5	6.5	---	---
							12.0	7.0	10.5	6.5	9.5	3.5

15294005 WILLOW CREEK NEAR WILLOW

LOCATION.--Lat 61°46'51", long 149°53'04", in NW¼SE¼ sec.31, T.20 N., R.3 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 0.9 mi (1.4 km) downstream from unnamed tributary, 5.5 mi (8.8 km) northeast of Willow, and 6.7 mi (10.8 km) upstream from Deception Creek.

DRAINAGE AREA.--166 mi² (430 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR AK-80-1: 1979 (M).

GAGE.--Water-stage recorder. Altitude of gage is 350 ft (107 m), from topographic map. Prior to Apr. 2, 1981 at site 0.2 mi (0.3 km) upstream at different datum.

REMARKS.--Water-discharge records good except those for Oct. 30 to May 10, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,450 ft³/s (126 m³/s) July 28, 1980, gage height, 8.80 ft (2.682 m), site and datum then in use; minimum daily, about 33 ft³/s (0.93 m³/s) Mar. 9-30, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,140 ft³/s (117 m³/s) Sept. 16, gage height, 6.34 ft (1.932 m); maximum gage height, 6.69 ft (2.039 m) Dec. 11, backwater from ice; minimum daily discharge, about 33 ft³/s (0.93 m³/s) Mar. 9-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	310	100	96	96	38	35	240	1110	757	996	687
2	238	290	100	96	98	37	36	280	1390	673	892	568
3	242	270	100	96	104	36	38	290	1030	666	771	808
4	250	270	100	96	107	36	40	250	908	645	687	729
5	242	280	100	96	110	35	42	225	1070	624	638	610
6	238	290	100	96	110	35	46	320	2080	589	638	556
7	219	280	100	96	106	34	50	630	2320	617	617	562
8	215	270	100	96	102	34	53	1050	1430	673	568	504
9	219	240	100	96	98	33	56	1070	1370	610	536	486
10	212	220	100	96	95	33	58	1000	1420	603	523	450
11	223	200	100	96	89	33	59	916	1070	764	610	542
12	267	185	100	96	83	33	59	589	1060	680	510	549
13	652	175	100	96	79	33	59	480	962	510	456	1650
14	492	160	100	96	75	33	59	428	884	480	423	1370
15	400	150	100	96	70	33	59	462	954	434	439	2220
16	359	140	100	96	67	33	59	582	838	486	468	3110
17	339	130	100	96	63	33	59	617	815	562	417	1810
18	330	130	100	96	59	33	63	530	971	468	417	1390
19	280	120	100	96	56	33	74	504	1000	406	375	1890
20	311	120	100	96	54	33	74	486	1380	380	354	1650
21	486	120	100	96	51	33	76	462	1220	364	330	1410
22	729	110	100	96	49	33	72	549	979	423	316	1350
23	785	110	100	96	47	33	74	556	996	891	316	1210
24	916	110	100	96	45	33	78	652	1210	1850	316	996
25	694	110	100	96	43	33	100	729	1530	2590	325	884
26	589	110	100	96	42	33	107	652	1370	1750	339	876
27	498	100	100	96	40	33	115	666	1220	1180	320	924
28	486	100	96	96	39	33	150	645	1190	924	302	808
29	434	100	96	96	---	33	195	468	962	892	359	815
30	400	100	96	96	---	33	200	624	838	1570	492	892
31	350	---	96	96	---	34	---	996	---	1230	757	---
TOTAL	12353	5300	3084	2976	2077	1045	2245	17948	35577	25291	15507	32306
MEAN	398	177	99.5	96.0	74.2	33.7	74.8	579	1186	816	500	1077
MAX	916	310	100	96	110	38	200	1070	2320	2590	996	3110
MIN	212	100	96	96	39	33	35	225	815	364	302	450
CFSM	2.40	1.07	.60	.58	.45	.20	.45	3.49	7.15	4.92	3.01	6.49
IN.	2.77	1.19	.69	.67	.47	.23	.50	4.02	7.97	5.67	3.48	7.24
AC-FT	24500	10510	6120	5900	4120	2070	4450	35600	70570	50160	30760	64080

CAL YR 1981 TOTAL 140269 MEAN 384 MAX 2760 MIN 45 CFSM 2.31 IN 31.43 AC-FT 278200
WTR YR 1982 TOTAL 155709 MEAN 427 MAX 3110 MIN 33 CFSM 2.57 IN 34.89 AC-FT 308800

15294005 WILLOW CREEK NEAR WILLOW--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1978, April to December 1979, April to November 1980 (fragmentary), March to September 1981, April to September 1982 (fragmentary).

INSTRUMENTATION.--Temperature recorder since Oct. 5, 1978

REMARKS.--No record Oct. 1 to Apr. 17, July 1 to Aug. 26 and Sept. 23, 24, 27 due to equipment malfunction. Record Apr. 18 to June 30 is considered good within 0.5°C. Record Aug. 27-Sept. 30 is considered good within 2.0°C. No cross sections were run this water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 15.5°C July 3, 1979 and July 23, 1980, but may have been greater during period of missing record, July 26 to Sept. 8, 1980; minimum, 0.0°C during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 12.5°C May 24, but may have been greater during period of missing record; minimum, 0.0°C most days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAY							
18...	1131	20.0	35	7.0	1.8	13.2	97
18...	1132	40.0	35	7.0	1.8	13.3	98
18...	1133	52.0	35	7.0	1.8	13.4	98
18...	1134	67.0	35	6.9	1.8	13.5	99
18...	1135	88.0	35	6.9	1.9	13.4	98
AUG							
26...	1100	--	55	7.7	9.5	12.3	109

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L) AS HCO3)
MAY												
18...	1130	99.0	439	748	18	K15	14	4.1	.8	2.7	1.5	15
AUG												
26...	1100	--	350	754	--	23	21	6.2	1.2	3.4	.7	28

DATE	CARBONATE IT-FLD (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
MAY												
18...	.00	6.0	4.1	<.1	4.5	38	34	.06	.10	.114	.130	.86
AUG												
26...	.00	<5.0	4.4	<.1	7.0	41	--	.03	<.10	.090	--	.31

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	COBALT, DISSOLVED (UG/L AS CO)
MAY												
18...	.97	1.0	.052	--	.010	5.3	--	--	--	20	--	--
AUG												
26...	.40	.43	<.005	<.010	--	1.8	30	14	<1	30	<1	<3

K NON-IDEAL COLONY COUNT

15294005 WILLOW CREEK NEAR WILLOW--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	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)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	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)
MAY												
18...	--	170	--	--	--	.1	--	--	--	--	23	27
AUG												
26...	<10	37	<10	11	3	<.1	< 10	62	<6.0	4	--	--

TEMPERATURE, WATER (DEG. C), APRIL 1982 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	.5	.0	8.0	4.0			---	---	9.5	8.0
2	---	---	.0	.0	7.0	5.0			---	---	9.5	7.5
3	---	---	.5	.0	8.5	3.5			---	---	9.0	7.5
4	---	---	.5	.5	9.0	5.0			---	---	8.5	6.5
5	---	---	.5	.0	7.5	5.5			---	---	8.0	7.0
6	---	---	.5	.5	6.5	5.0			---	---	7.5	6.5
7	---	---	.5	.0	7.5	4.5			---	---	8.5	7.0
8	---	---	.5	.5	11.0	5.0			---	---	8.0	7.0
9	---	---	.5	.5	9.5	6.0			---	---	8.0	7.0
10	---	---	.5	.5	7.0	5.5			---	---	8.0	7.0
11	---	---	1.0	.5	7.0	4.5			---	---	7.0	6.0
12	---	---	1.5	.5	7.5	5.0			---	---	6.0	4.0
13	---	---	2.0	.5	7.0	4.0			---	---	7.0	5.0
14	---	---	2.0	1.0	6.5	5.0			---	---	7.0	6.0
15	---	---	3.0	1.0	6.0	4.5			---	---	7.5	5.0
16	---	---	3.0	1.0	6.5	5.0			---	---	5.0	4.0
17	---	---	2.0	1.0	10.0	5.5			---	---	4.5	3.5
18	.5	.0	2.5	1.0	10.0	6.5			---	---	4.5	3.0
19	.0	.0	3.0	1.0	8.0	5.5			---	---	4.5	4.0
20	.5	.0	3.5	1.0	7.5	5.5			---	---	4.5	3.5
21	.5	.0	4.5	1.5	7.0	4.5			---	---	4.0	3.0
22	.5	.0	4.0	1.5	8.5	6.0			---	---	4.0	2.0
23	.0	.0	5.0	2.0	11.5	6.5			---	---	---	---
24	.0	.0	4.5	2.5	12.5	7.5			---	---	---	---
25	.0	.0	5.0	2.5	12.0	8.0			---	---	3.5	1.5
26	.0	.0	4.5	3.0	11.0	8.0			---	---	3.5	2.5
27	.0	.0	5.5	3.5	10.5	8.0			12.0	9.5	---	---
28	.0	.0	4.5	3.0	11.5	8.0			11.5	10.0	2.5	1.0
29	.0	.0	5.0	3.5	10.0	7.5			10.5	9.5	2.5	2.0
30	.0	.0	7.0	4.0	10.0	8.0			9.5	8.5	3.0	1.5
31	---	---	7.0	3.5	---	---			9.5	8.0	---	---
MONTH	.5	.0	7.0	.0	12.5	3.5					9.5	1.0

15294010 DECEPTION CREEK NEAR WILLOW

LOCATION.--Lat 61°44'52", long 149°56'14", in NE¼SE¼ sec.11, T.19 N., R.4 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 0.6 mi (1.0 km) downstream from unnamed tributary, 3.3 mi (5.3 km) east of Willow, and 4.9 mi (7.9 km) upstream from mouth.

DRAINAGE AREA.--48.0 mi² (124.3 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map. Prior to May 1, 1980 at site 500 ft (150 m) upstream at different datum.

REMARKS.--Water-discharge records good except those for Oct. 27 to May 24, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 751 ft³/s (21.3 m³/s) June 21, 1980, gage height, 8.44 ft (2.572 m); minimum daily, about 2.0 ft³/s (0.06 m³/s) Dec. 24, 1980 to Jan. 14, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 678 ft³/s (19.2 m³/s) July 30, gage height, 8.30 ft (2.530 m), but may have been higher Sept. 16 during period of no gage-height record; minimum daily, about 2.8 ft³/s (0.08 m³/s) Mar. 9-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	74	31	19	6.6	3.4	3.1	25	74	56	158	174
2	63	68	31	19	6.6	3.4	3.3	28	80	51	105	103
3	60	64	31	18	6.6	3.3	3.5	29	63	45	84	158
4	65	60	31	17	6.8	3.2	3.7	28	61	45	67	156
5	64	56	31	17	7.0	3.1	3.9	27	89	41	58	99
6	64	54	29	16	7.0	3.0	4.3	30	443	40	54	74
7	60	52	29	15	6.6	2.9	4.7	60	321	40	54	67
8	55	48	29	15	6.2	2.9	5.2	100	153	42	55	58
9	51	46	29	14	6.0	2.8	6.0	108	126	45	49	52
10	52	45	29	14	5.8	2.8	7.4	105	98	49	48	48
11	63	43	27	13	5.6	2.8	8.6	96	78	73	77	61
12	118	42	27	12	5.4	2.8	8.6	90	75	61	67	93
13	374	40	27	12	5.2	2.8	8.6	80	63	58	51	385
14	265	39	27	12	5.0	2.8	8.6	64	71	52	45	360
15	161	38	27	11	4.8	2.8	8.6	64	70	48	48	500
16	119	37	25	11	4.7	2.8	8.8	72	65	55	72	610
17	121	37	25	10	4.6	2.8	9.2	90	60	173	58	450
18	106	37	25	10	4.5	2.8	9.6	110	61	99	51	270
19	80	37	25	9.5	4.4	2.8	10	105	69	71	45	310
20	72	37	25	9.0	4.3	2.8	11	100	124	57	41	290
21	182	35	25	8.7	4.2	2.8	11	90	89	53	38	260
22	384	35	25	8.5	4.1	2.8	11	85	73	56	36	230
23	336	35	25	8.2	4.0	2.8	11	80	63	83	35	200
24	273	35	25	8.2	3.9	2.8	12	95	55	504	36	180
25	162	35	25	8.0	3.8	2.8	13	110	46	512	43	160
26	112	33	24	7.8	3.7	2.8	14	92	45	404	45	150
27	90	33	24	7.6	3.6	2.8	16	80	45	161	38	150
28	80	33	23	7.4	3.5	2.8	17	74	43	102	35	150
29	74	33	22	7.2	---	2.8	19	63	42	100	45	140
30	70	33	21	7.0	---	2.9	22	72	49	431	85	160
31	74	---	20	6.8	---	3.0	---	74	---	392	219	---
TOTAL	3920	1294	819	358.9	144.5	89.9	282.7	2326	2794	3999	1942	6098
MEAN	126	43.1	26.4	11.6	5.16	2.90	9.42	75.0	93.1	129	62.6	203
MAX	384	74	31	19	7.0	3.4	22	110	443	512	219	610
MIN	51	33	20	6.8	3.5	2.8	3.1	25	42	40	35	48
CFSM	2.63	.90	.55	.24	.11	.06	.20	1.56	1.94	2.69	1.30	4.23
IN.	3.04	1.00	.63	.28	.11	.07	.22	1.80	2.17	3.10	1.51	4.73
AC-FT	7780	2570	1620	712	287	178	561	4610	5540	7930	3850	12100

CAL YR 1981 TOTAL 24995.0 MEAN 68.5 MAX 446 MIN 2.0 CFSM 1.43 IN 19.37 AC-FT 49580
WTR YR 1982 TOTAL 24068.0 MEAN 65.9 MAX 610 MIN 2.8 CFSM 1.37 IN 18.65 AC-FT 47740

NOTE.--No gage-height record Nov. 16 to May 24 and Sept. 13-30.

15294010 DECEPTION CREEK NEAR WILLOW--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1978, May to October 1979, May to September 1980, June to July 1981, and May to September 1982 (seasonal).

INSTRUMENTATION.--Temperature recorder since Oct. 1, 1978.

REMARKS.--Missing record due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 17.0°C, July 3, 1979; minimum, 0.0°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 11.5°C Aug. 7; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAY							
18...	1431	6.00	56	6.8	3.8	13.6	105
18...	1432	16.0	56	6.9	3.7	13.1	100
18...	1433	23.0	55	6.9	3.7	13.0	99
AUG							
26...	0915	--	103	7.4	10.0	10.4	93

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L) AS HCO3)
MAY												
18...	1430	30.0	109	751	25	K11	21	6.5	1.2	4.5	1.7	28
AUG												
26...	0915	--	46	757	--	34	33	10	1.8	8.5	.9	38

DATE	CARBONATE IT-FLD (MG/L AS CO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
MAY												
18...	.00	6.0	7.0	.1	6.7	51	48	.10	<.10	.111	.160	1.4
AUG												
26...	.00	<5.0	13	<.1	11	76	--	.02	<.10	.140	--	.26

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)
MAY											
18...	1.50	1.6	.107	--	.020	7.1	--	--	--	40	--
AUG											
26...	.40	.42	.010	<.010	--	5.1	30	17	<1	90	<1

K NON-IDEAL COLONY COUNT

15294010 DECEPTION CREEK NEAR WILLOW--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	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)	MERCURY DIS-SOLVED (UG/L) AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L) AS MO)	STRON-TIUM, DIS-SOLVED (UG/L) AS SR)	VANA-DIUM, DIS-SOLVED (UG/L) AS V)	ZINC, DIS-SOLVED (UG/L) AS ZN)
MAY 18...	--	--	570	--	--	--	<.1	--	--	--	--
AUG 26...	<3	<10	240	10	18	32	<.1	<10	84	<6.0	16

TEMPERATURE, WATER (DEG. C), MAY 1982 TO SEPTEMBER 1982

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1			---	---	5.5	2.5	8.0	7.0	8.0	7.5	7.5	7.0
2			---	---	7.0	2.5	7.5	7.0	8.5	7.5	7.5	7.5
3			---	---	3.0	2.0	9.0	7.0	9.0	7.5	8.0	7.0
4			---	---	4.5	.5	8.0	7.5	10.0	9.0	7.0	6.5
5			---	---	7.5	.5	8.0	7.0	10.5	10.0	7.0	6.5
6			---	---	6.5	2.5	8.0	7.5	11.0	10.5	7.5	7.0
7			---	---	5.0	4.0	8.5	7.0	11.5	10.5	8.0	7.5
8			---	---	4.0	4.0	8.0	7.0	11.0	10.5	8.0	8.0
9			---	---	7.0	2.5	9.0	7.0	10.5	10.0	8.0	8.0
10			---	---	6.5	3.5	9.0	7.5	10.5	10.0	8.5	8.0
11			---	---	5.0	1.0	8.5	7.0	10.5	9.5	8.0	8.0
12			---	---	1.5	1.0	7.5	7.5	10.0	9.5	8.0	7.0
13			---	---	1.5	1.5	7.5	7.5	10.5	9.5	7.0	5.5
14			---	---	2.0	1.5	8.0	7.0	10.5	10.5	6.5	6.0
15			---	---	2.5	2.0	8.5	7.0	11.0	10.5	6.5	5.5
16			---	---	3.0	2.5	8.5	7.0	10.5	9.5	7.5	6.5
17			---	---	3.0	3.0	9.5	7.5	10.0	9.5	7.5	7.0
18			---	---	3.5	3.0	9.0	7.5	10.0	9.5	7.0	6.5
19			---	---	3.5	2.5	8.0	7.5	10.0	9.5	6.5	5.5
20			---	---	5.0	3.5	8.5	7.0	10.5	9.5	6.5	5.5
21			---	---	6.5	4.5	9.5	7.5	10.5	10.0	6.5	5.5
22			---	---	4.5	4.0	9.5	9.5	10.5	9.5	6.5	5.5
23			---	---	4.0	4.0	9.5	8.5	10.5	10.0	6.0	5.5
24			---	---	4.5	4.0	9.5	8.5	10.5	10.5	5.5	5.0
25	6.5	2.5	6.0	4.5	9.0	7.5	11.0	10.5	5.0	5.0		
26	5.0	3.0	8.0	5.0	8.0	7.5	10.5	10.5	5.0	5.0		
27	6.0	2.5	9.0	7.5	8.0	7.5	10.5	10.0	5.0	4.5		
28	6.5	3.0	9.0	7.0	8.5	7.5	10.5	10.0	5.0	4.5		
29	4.0	1.5	8.5	7.5	9.0	8.5	10.5	10.0	4.5	4.5		
30	5.5	1.5	8.0	7.0	8.5	7.5	10.0	9.0	4.5	4.5		
31	5.0	2.0	---	---	8.0	7.5	9.0	7.5	---	---		
MONTH			9.0	.5	9.5	7.0	11.5	7.5	8.5	4.5		

15294100 DESHKA RIVER NEAR WILLOW

LOCATION.--Lat 61°46'05", long 150°20'13, in SW¼NE¼ sec.3, T.19 N., R.6 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 0.2 mi (0.3 km) upstream from unnamed tributary, 1.1 mi (1.8 km) downstream from unnamed tributary, 7.9 mi (12.7 km) upstream from mouth, and 10 mi (16 km) west of Willow.

DRAINAGE AREA.--592 mi² (1,530 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 80 ft (24 m), from topographic map.

REMARKS.--Records good except those for Nov. 6 to May 6, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,920 ft³/s (281 m³/s) Nov. 13, 1979, gage height, 8.16 ft (2.487 m); minimum daily, about 170 ft³/s (4.8 m³/s), Mar. 1-12, 1982.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 143 ft³/s (4.05 m³/s) was measured, Mar. 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,050 ft³/s (171 m³/s) Sept. 18, gage height, 6.03 ft (1.838 m); minimum daily, about 170 ft³/s (4.8 m³/s) Mar. 1-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	673	1140	460	320	200	170	200	1500	717	648	2370	2630
2	656	1110	460	320	200	170	200	1700	673	630	1550	2550
3	630	1000	460	320	200	170	200	1800	790	639	1110	1780
4	614	950	460	320	200	170	200	1600	940	614	890	1690
5	622	900	460	300	2[illegible]	170	200	1500	790	557	762	1540
6	630	1000	460	300	180	170	210	1700	1060	533	673	1310
7	630	1100	440	300	180	170	210	1900	1930	510	605	1170
8	614	1200	440	280	180	170	210	2070	2770	480	573	1070
9	589	1300	440	280	180	170	210	2560	2760	458	648	980
10	573	1400	420	280	180	170	210	2730	2080	436	1120	890
11	581	1200	420	260	180	170	210	2830	1680	443	1240	870
12	726	900	420	260	180	170	210	3140	1390	436	1410	950
13	1060	700	420	260	180	180	210	3040	1200	429	1150	1440
14	1660	650	420	260	180	180	220	2620	1110	422	880	2580
15	1640	600	400	240	180	180	220	2360	990	394	744	3920
16	1390	600	400	240	180	180	220	2200	1020	394	735	4650
17	1370	550	400	240	180	180	220	2070	1160	429	682	5340
18	1460	550	400	240	180	180	220	1880	1080	502	639	5930
19	1300	550	380	220	180	180	230	1610	960	518	614	4610
20	1110	550	380	220	180	180	240	1470	970	510	565	4050
21	1260	500	380	220	180	180	260	1330	1460	436	518	4320
22	2740	500	380	220	180	180	300	1220	2400	401	488	4240
23	4170	500	380	220	180	180	340	1080	1780	401	458	3640
24	4700	500	360	220	180	180	400	980	1330	876	443	2890
25	4830	500	360	220	180	180	500	920	1090	1260	458	2290
26	3720	500	360	200	180	180	600	880	930	2120	480	1940
27	2380	480	360	200	180	180	750	860	810	2980	458	1900
28	1820	480	360	200	180	180	1000	840	762	2540	436	1940
29	1490	480	340	200	---	180	1200	880	726	1430	422	1790
30	1360	480	340	200	---	200	1400	850	682	1550	581	1940
31	1260	---	340	200	---	200	---	762	---	2420	1510	---
TOTAL	48258	22870	12500	7760	5140	5500	11000	52882	38040	26396	25212	76840
MEAN	1557	762	403	250	184	177	367	1706	1268	851	813	2561
MAX	4830	1400	460	320	200	200	1400	3140	2770	2980	2370	5930
MIN	573	480	340	200	180	170	200	762	673	394	422	870
CFSM	2.63	1.29	.68	.42	.31	.30	.62	2.88	2.14	1.44	1.37	4.33
IN.	3.03	1.44	.79	.49	.32	.35	.69	3.32	2.39	1.66	1.58	4.83
AC-FT	95720	45360	24790	15390	10200	10910	21820	104900	75450	52360	50010	152400

CAL YR 1981 TOTAL 381645 MEAN 1046 MAX 7770 MIN 210 CFSM 1.77 IN 23.98 AC-FT 757000
WTR YR 1982 TOTAL 332398 MEAN 911 MAX 5930 MIN 170 CFSM 1.54 IN 20.89 AC-FT 659300

NOTE.--No gage-height record Dec. 3 to Mar. 23.

15294100 DESHKA RIVER NEAR WILLOW--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAY							
21...	1321	23.0	31	6.9	6.3	11.1	90
21...	1322	39.0	31	6.9	6.2	11.1	90
21...	1323	55.0	31	6.9	6.2	11.1	90
21...	1324	75.0	31	7.0	6.4	11.0	89
21...	1325	104	30	7.2	6.7	11.0	90
AUG							
12...	1430	--	28	6.6	14.5	10.0	98
24...	1200	--	56	7.6	15.0	10.9	107

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE IT-FLD (MG/L AS CO3)
MAY												
21...	1320	136	1340	758	K8	15	4.2	.9	1.3	1.1	18	.00
AUG												
12...	1430	--	1490	764	--	--	--	--	--	--	--	--
24...	1200	137	454	768	K4	28	8.5	1.7	2.0	.8	35	.00

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)
MAY												
21...	6.0	.9	.1	8.5	40	34	.10	<.10	.101	1.5	1.60	1.7
AUG												
12...	--	--	--	--	--	--	--	--	--	--	--	--
24...	5.0	.7	.1	12	53	48	<.01	<.10	.140	.56	.70	--

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
MAY												
21...	.034	--	.020	6.4	--	--	--	<10	--	--	--	590
AUG												
12...	--	--	--	--	--	--	--	--	--	--	--	--
24...	.020	.020	--	5.6	60	18	1	<10	<1	<3	<10	680

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	MENT, DISCHARGE, SUSPENDED (T/DAY)	SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY											
21...	--	--	--	.2	--	--	--	--	23	83	66
AUG											
12...	--	--	--	--	--	--	--	--	--	--	--
24...	<10	4	25	.6	<10	50	<6.0	15	--	--	--

K NON-IDEAL COLONY COUNT

15294300 SKWENTNA RIVER NEAR SKWENTNA

LOCATION.--Lat 61°52'23", long 151°22'01", in NW¼ sec.31, T.21 N., R.11 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 2 mi (3 km) downstream from Shell Creek, 8 mi (13 km) southwest of Skwentna, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--2,250 mi² (5,830 km²), approximately.

PERIOD OF RECORD.--October 1959 to September 1982 (discontinued).

REVISED RECORDS.--WSP 1936: 1960.

GAGE.--Water-stage recorder. Altitude of gage is 200 ft (61 m), from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 15 to June 9, which are poor. Summer flows augmented by glaciers that cover 16 percent of the basin.

AVERAGE DISCHARGE.--23 years, 6,606 ft³/s (187.1 m³/s), 39.87 in/yr (1,013 mm/yr), 4,786,000 acre-ft/yr (5.90 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51,600 ft³/s (1,460 m³/s) June 9, 1977, gage height, 15.09 ft (4.599 m), from rating curve extended above 35,000 ft³/s (990 m³/s); minimum daily, about 600 ft³/s (17.0 m³/s) Mar. 1-31, 1964, Dec. 16, 1968 to Mar. 15, 1969, Mar. 9 to Apr. 26, 1971, and Mar. 5 to Apr. 5, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 43,000 ft³/s (1,220 m³/s) Sept. 16, gage height, 14.27 ft (4.350 m); minimum daily, about 680 ft³/s (19 m³/s) Apr. 12 and 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4350	3200	1600	1300	1000	900	700	1100	7500	18200	14400	9520
2	4080	2900	1600	1300	1000	900	700	1200	8500	15000	13100	8740
3	4060	2700	1600	1300	1000	900	700	1400	9500	12200	12100	8530
4	3970	2500	1600	1300	1000	900	700	1500	11000	11700	11000	8080
5	3790	2400	1600	1300	1000	850	700	1700	14000	10900	11000	8980
6	3650	2300	1600	1300	1000	850	700	2000	18000	10800	10500	13400
7	3370	2500	1600	1200	1000	850	700	2500	17000	11000	10500	15700
8	3190	2700	1500	1200	1000	850	700	3200	16000	13100	10500	12800
9	2990	3000	1500	1200	1000	850	700	4000	15000	14300	11000	10400
10	3010	3300	1500	1200	1000	800	700	4800	16600	14200	11000	9640
11	3310	2900	1500	1200	1000	800	700	4400	18600	14500	11500	9190
12	3560	2700	1500	1200	1000	800	680	4600	16200	14900	11000	8590
13	4820	2500	1500	1200	1000	800	680	5200	15300	14000	10600	10700
14	5250	2400	1500	1200	1000	800	700	6000	13400	14300	10900	13100
15	5200	2300	1500	1200	1000	800	700	7000	12400	14600	11800	20400
16	5400	2200	1500	1200	1000	800	700	7500	13100	14800	11100	40800
17	6000	2100	1500	1100	1000	750	700	8500	13300	14500	10800	30700
18	5000	2000	1500	1100	1000	750	750	8000	15600	13400	10100	25400
19	4600	2000	1500	1100	1000	750	750	7500	16800	12900	9610	26600
20	4200	1900	1400	1100	1000	700	750	7000	18000	14200	9580	20600
21	6000	1900	1400	1100	1000	700	750	6500	16100	15200	9490	24400
22	7500	1900	1400	1100	950	700	800	6000	14000	14500	9400	25600
23	9500	1800	1400	1100	950	700	800	5500	12800	13300	9310	17800
24	11500	1800	1400	1100	950	700	850	6500	14500	14000	9490	13800
25	11000	1700	1400	1100	950	700	850	7000	18600	13800	9310	11600
26	8000	1700	1400	1100	950	700	900	7000	21400	14700	9100	11000
27	6500	1700	1400	1100	950	700	950	6500	22900	14000	8830	10100
28	5000	1700	1400	1100	900	700	1000	6500	27500	14300	8470	9430
29	4400	1700	1400	1100	---	700	1000	6000	26200	14900	8590	9730
30	3800	1600	1400	1100	---	700	1100	6500	20700	15700	9700	9280
31	3500	---	1300	1100	---	700	---	7000	---	15400	10500	---
TOTAL	160500	68000	45900	36300	27600	24100	23110	160100	480500	433300	324280	454610
MEAN	5177	2267	1481	1171	986	777	770	5165	16020	13980	10460	15150
MAX	11500	3300	1600	1300	1000	900	1100	8500	27500	18200	14400	40800
MIN	2990	1600	1300	1100	900	700	680	1100	7500	10800	8470	8080
CFSM	2.30	1.01	.66	.52	.44	.35	.34	2.30	7.12	6.21	4.65	6.73
IN.	2.65	1.12	.76	.60	.46	.40	.38	2.65	7.94	7.16	5.36	7.52
AC-FT	318400	134900	91040	72000	54740	47800	45840	317600	953100	859500	643200	901700

CAL YR 1981 TOTAL 3278570 MEAN 8982 MAX 32500 MIN 900 CFSM 3.99 IN 54.21 AC-FT 6503000
WTR YR 1982 TOTAL 2238300 MEAN 6132 MAX 40800 MIN 680 CFSM 2.73 IN 37.01 AC-FT 4440000

15294345 YENTNA RIVER NEAR SUSITNA STATION

LOCATION.--Lat 61°41'55", long 150°39'02", in NW¼ sec.36, T.19 N., R.8 W., Matanuska-Susitna Borough, Hydrologic Unit 1905002, on right bank 12 mi (19 km) upstream from mouth and 14 mi (22 km) northwest of Susitna Station.

DRAINAGE AREA.--6,180 mi² (16,000 km²), approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 80 ft (24 m), from topographic map.

REMARKS.--Water-discharge records good except those for Nov. 1 to May 17 and for Aug. 29 to Sept. 19, which are poor. Satellite telemetry installed May 1982.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 116,000 ft³/s) (3,290 m³/s) Aug. 13, 1981, gage height, 18.61 ft (5.672 m); minimum daily, about 2,000 ft³/s (57 m³/s) Mar. 21 to Apr. 10, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 105,000 ft³/s (2,970 m³/s) Sept. 17; minimum daily, about 2,000 ft³/s (57 m³/s) Mar. 21 to Apr. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11300	8500	4800	4100	3100	2600	2000	2900	20400	53600	57600	37000
2	10800	8100	4800	4100	3100	2600	2000	3100	22400	50500	51300	34000
3	10300	7500	4800	4000	3000	2600	2000	3400	24500	43200	47100	32000
4	10200	7200	4800	4000	3000	2500	2000	3700	24500	36800	43900	32000
5	9960	6800	4800	4000	2900	2500	2000	4100	24300	37500	41500	31000
6	9600	6600	4800	4000	2900	2500	2000	4500	34000	37000	41500	33000
7	9240	6400	4800	3900	2900	2400	2000	5500	49600	36000	42300	44000
8	8940	7000	4700	3900	2900	2400	2000	8000	48400	35000	41900	49000
9	8670	7800	4700	3900	2900	2400	2000	10000	40800	36000	42100	42000
10	8340	8200	4700	3900	2900	2400	2000	11000	43300	38000	42600	37000
11	8250	7800	4700	3800	2900	2300	2100	13000	49500	38000	44400	34000
12	8520	7400	4600	3800	2900	2300	2100	14000	47500	40000	45800	33000
13	9480	6800	4600	3800	2800	2300	2100	16000	41900	42800	39200	32000
14	11800	6400	4600	3800	2800	2300	2100	18000	39400	42800	37400	37000
15	11800	6200	4600	3800	2800	2200	2100	19000	34400	44600	43800	43000
16	11000	6000	4500	3700	2800	2200	2100	20000	34100	46800	48300	60000
17	11400	5800	4500	3700	2800	2200	2100	21000	32700	47800	43200	105000
18	12600	5600	4500	3600	2800	2100	2100	21200	34100	45300	40300	90000
19	11000	5600	4500	3600	2800	2100	2100	19200	38300	44100	36800	80000
20	9320	5400	4400	3500	2800	2100	2100	17700	41700	46000	35200	76200
21	9720	5400	4400	3500	2800	2000	2200	17200	47100	50000	34800	71300
22	17200	5200	4400	3400	2800	2000	2200	16700	43700	52500	34200	82700
23	22800	5200	4400	3400	2800	2000	2300	16700	38600	53200	33100	67500
24	28700	5000	4400	3400	2800	2000	2300	17200	36500	57700	34200	49600
25	23800	5000	4300	3400	2700	2000	2300	18400	42300	54700	35500	40000
26	18000	4900	4300	3300	2700	2000	2400	18100	49600	60200	34400	34800
27	13800	4900	4300	3300	2700	2000	2500	17600	54300	54900	31500	34300
28	12600	4900	4300	3300	2700	2000	2600	18300	58100	50200	31500	30300
29	11200	4900	4300	3200	---	2000	2700	19200	68600	50200	30000	28100
30	10300	4900	4200	3200	---	2000	2800	18600	61600	58600	32000	28100
31	9480	---	4200	3200	---	2000	---	17700	---	64900	35000	---
TOTAL	380120	187400	140700	113500	79800	69000	65300	431000	1226200	1448900	1232400	1427900
MEAN	12260	6247	4539	3661	2850	2226	2177	13900	40870	46740	39750	47600
MAX	28700	8500	4800	4100	3100	2600	2800	21200	68600	64900	57600	105000
MIN	8250	4900	4200	3200	2700	2000	2000	2900	20400	35000	30000	28100
CFSM	1.98	1.01	.73	.59	.46	.36	.35	2.25	6.61	7.56	6.43	7.70
IN.	2.29	1.13	.85	.68	.48	.42	.39	2.59	7.38	8.72	7.42	8.60
AC-FT	754000	371700	279100	225100	158300	136900	129500	854900	2432000	2874000	2444000	2832000

CAL YR 1981	TOTAL	8842920	MEAN	24230	MAX	113000	MIN	2600	CFSM	3.92	IN	53.23	AC-FT	17540000
WTR YR 1982	TOTAL	6802220	MEAN	18640	MAX	105000	MIN	2000	CFSM	3.02	IN	40.95	AC-FT	13490000

NOTE.--No gage-height record Nov. 10 to May 17 and Aug. 29 to Sept. 19.

15294345 YENTNA RIVER NEAR SUSITNA STATION--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1981 to current year (seasonal).

INSTRUMENTATION.--Temperature recorder since May 20, 1981.

REMARKS.--Temperature at the sensor was compared with the mean for the river by temperature cross section on July 13, and Aug. 11. The maximum difference occurred July 13, when the temperature at the sensor was 9.3°C. A maximum variation of 0.2°C was found within the cross-sections. A two-point temperature cross section was made Jan. 12 with both points showing the same water temperature. The temperature recorder was not in operation Jan. 12 and stream was completely ice covered.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum 17.0°C July 20, 1982.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 17.0°C July 20; minimum recorded 0°C Oct. 4-8 and Nov. 4-5.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--Minimum 0°C on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JAN							
12...	1531	120	209	7.3	.0	11.1	76
12...	1532	1020	216	7.1	.0	10.9	75
MAY							
18...	1230	--	86	7.0	4.5	13.4	104
JUL							
13...	1701	140	103	8.3	9.6	11.7	102
13...	1702	340	105	8.3	9.6	11.7	102
13...	1703	590	108	8.3	9.6	11.7	102
13...	1704	940	109	8.2	9.7	11.7	102
13...	1705	1190	113	8.3	9.8	--	--
AUG							
11...	1621	140	--	--	7.4	--	--
11...	1622	390	--	--	7.4	--	--
11...	1623	640	--	--	7.4	--	--
11...	1625	1140	--	--	7.7	--	--

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	BAROMETRIC PRESSURE (MM OF HG)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN							
12...	1530	1220	3840	760	4	41	--
APR							
01...	1530	--	2060	--	7	39	--
MAY							
18...	1230	1240	21700	758	417	24400	38
JUL							
13...	1700	1250	42100	763	--	--	--
AUG							
11...	1620	1250	39800	--	596	64000	56

15294345 YENTNA RIVER NEAR SUSITNA STATION--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1.5	.5	1.5	1.5								
2	2.0	1.0	1.5	1.0								
3	3.0	2.0	1.0	1.0								
4	3.0	.0	1.0	.0								
5	1.0	.0	.0	.0								
6	1.0	.0	---	---								
7	.5	.0	---	---								
8	1.0	.0	---	---								
9	1.5	1.0	---	---								
10	2.0	1.5	---	---								
11	2.0	2.0	---	---								
12	2.0	2.0	---	---								
13	2.5	2.0	---	---								
14	2.5	2.5	---	---								
15	3.0	2.5	---	---								
16	3.0	3.0	---	---								
17	3.0	3.0	---	---								
18	3.0	2.0	---	---								
19	2.5	2.0	---	---								
20	2.5	2.5	---	---								
21	2.5	1.5	---	---								
22	1.5	1.5	---	---								
23	2.0	1.5	---	---								
24	2.0	2.0	---	---								
25	2.0	2.0	---	---								
26	2.0	1.5	---	---								
27	1.5	1.0	---	---								
28	1.0	1.0	---	---								
29	1.0	1.0	---	---								
30	1.5	1.0	---	---								
31	1.5	1.5	---	---								
MONTH	3.0	.0										

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	11.0	9.5	9.0	7.5	14.5	10.0	9.5	7.0
2			---	---	10.5	10.0	8.5	7.5	14.5	10.0	9.5	7.5
3			---	---	10.0	9.5	10.0	7.5	14.5	10.0	9.0	7.0
4			---	---	10.0	9.5	11.0	9.5	14.5	10.5	8.5	6.5
5			---	---	10.0	9.5	11.0	9.5	14.5	11.5	8.5	7.0
6			---	---	9.5	8.0	11.5	10.0	15.0	11.5	7.0	6.0
7			---	---	8.0	7.0	11.0	9.5	15.0	11.5	8.5	6.5
8			---	---	8.0	7.0	12.5	10.0	12.0	9.0	9.5	8.0
9			---	---	9.0	8.0	12.5	10.5	12.5	10.0	8.5	7.0
10			---	---	9.0	8.0	10.5	9.5	12.0	7.5	7.5	6.5
11			---	---	8.5	7.5	10.0	9.0	9.0	6.5	7.0	6.0
12			---	---	9.0	8.0	9.5	8.0	14.0	8.0	6.5	4.0
13			---	---	9.5	8.5	10.0	8.0	15.5	11.0	4.5	3.0
14			---	---	9.5	9.0	11.5	7.5	15.5	13.0	6.0	4.0
15			---	---	9.5	9.0	11.5	9.5	13.5	8.5	7.5	6.0
16			---	---	9.5	8.5	10.0	6.5	11.5	8.0	---	---
17			---	---	9.5	8.0	8.0	5.0	11.0	8.0	---	---
18			4.5	4.5	10.0	9.5	11.0	7.5	10.5	7.5	---	---
19			5.0	4.5	11.0	10.0	12.5	7.5	12.5	8.0	---	---
20			4.5	4.5	11.0	10.5	17.0	11.5	12.5	10.5	---	---
21			5.0	4.5	10.5	8.5	16.5	12.5	12.0	9.5	---	---
22			5.0	5.0	9.0	8.5	13.0	7.5	12.0	9.5	---	---
23			5.5	5.0	10.0	8.5	7.5	6.0	12.0	9.5	---	---
24			6.5	5.5	12.5	10.0	8.5	6.0	11.5	9.5	---	---
25			8.0	6.5	13.5	12.0	9.0	6.0	11.0	9.0	---	---
26			8.0	8.0	13.5	12.5	10.5	7.0	11.0	9.0	---	---
27			8.0	7.5	13.0	12.0	9.0	7.0	12.0	8.5	---	---
28			7.5	7.0	12.0	10.5	9.5	7.0	12.0	9.0	---	---
29			7.5	7.0	10.5	9.5	9.5	8.0	10.5	7.5	---	---
30			8.0	7.0	9.5	8.5	9.5	6.5	8.5	8.0	---	---
31			9.5	8.0	---	---	12.5	8.0	8.0	7.0	---	---
MONTH			9.5	4.5	13.5	7.0	17.0	5.0	15.5	6.5		
YEAR	17.0	.0										

15294350 SUSITNA RIVER AT SUSITNA STATION
(National stream-quality accounting and pesticide network station)

LOCATION.--Lat 61°32'41", long 150°30'45", in SE¼SE¼ sec.22, T.17 N., R.7 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank at Susitna Station, 1.5 mi (2.4 km) downstream from Yentna River, and 12.5 mi (20.1 km) upstream from Alexander Creek.
DRAINAGE AREA.--19,400 mi² (50,200 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.
GAGE.--Water-stage recorder. Altitude of gage is 40 ft (12 m), from topographic map.
REMARKS.--Water-discharge records good, except those for period of no gage-height record, Oct. 31 to May 17 and Aug. 22 to Sept. 30, which are poor.
AVERAGE DISCHARGE.--8 years, 50,700 ft³/s (1,436 m³/s), 35.49 in/yr (901 mm/yr), 36,730,000 acre-ft/yr (45.3 km³/yr).
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 230,000 ft³/s (6,510 m³/s) July 29, 1980 and Aug. 16, 1981; maximum gage height, 20.27 ft (6.178 m), Aug. 16, 1981; minimum daily discharge, about 5,000 ft³/s (142 m³/s) Mar. 18 to Apr. 13, 1982.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 208,000 ft³/s (5,890 m³/s) Sept. 17; minimum daily, about 5,000 ft³/s (142 m³/s) Mar. 18 to Apr. 13.
REVISIONS.--Revised daily discharges, in cubic feet per second, for September 18-30, 1980, are given below. These figures supersede those published in the report for 1980.

Sept. 18.....	110,000	Sept. 21.....	68,000	Sept. 24.....	57,000	Sept. 27.....	52,000
19.....	90,000	22.....	62,000	25.....	55,000	28.....	50,000
20.....	75,000	23.....	60,000	26.....	54,000	29.....	48,000
						30.....	46,000

Monthly	Cfs-day	Mean	Maximum	Minimum	Per square mile	Runoff in Inches	Runoff in Acre-feet
September 1980.....	2,339,000	77,970	135,000	46,000	4.02	4.48	4,639,000
WTR YR 1980.....	22,663,300	61,920	226,000	8,600	3.19	43.46	44,950,000
CAL YR 1980.....	21,673,400	59,220	226,000	6,500	2.87	39.00	40,340,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33300	25000	13000	11000	8000	6500	5000	9000	72900	120000	146000	95000
2	32000	23000	13000	10000	8000	6500	5000	9500	81500	116000	130000	87000
3	30800	22000	13000	10000	8000	6000	5000	10000	100000	106000	116000	82000
4	30300	21000	13000	10000	8000	6000	5000	11000	94900	94700	112000	82000
5	29800	20000	12000	10000	7500	6000	5000	12000	83500	92300	106000	75000
6	29300	19000	12000	10000	7500	6000	5000	13000	88800	91600	104000	74000
7	28000	20000	12000	9500	7500	6000	5000	16000	111000	89800	103000	87000
8	27000	21000	12000	9500	7500	6000	5000	21000	127000	89500	104000	93000
9	26000	23000	12000	9500	7500	5500	5000	27000	119000	98600	107000	85000
10	25000	24000	12000	9500	7500	5500	5000	32000	113000	103000	106000	80000
11	26000	22000	12000	9000	7500	5500	5000	38000	114000	104000	102000	77000
12	27000	20000	12000	9000	7000	5500	5000	42000	114000	108000	98900	77000
13	28700	19000	12000	9000	7000	5500	5000	45000	106000	109000	90800	90000
14	33400	18000	12000	9000	7000	5500	5500	50000	98600	107000	87700	110000
15	33900	17000	12000	9000	7000	5500	5500	54000	89000	107000	92600	140000
16	32400	17000	12000	9000	7000	5500	5500	56000	90800	107000	100000	170000
17	32400	16000	12000	9000	7000	5500	5500	58000	91800	107000	95400	208000
18	32800	16000	12000	9000	7000	5000	5500	62800	93000	107000	92100	180000
19	30700	15000	12000	8500	7000	5000	6000	59900	101000	107000	86600	170000
20	27600	15000	11000	8500	7000	5000	6000	59300	108000	106000	82500	168000
21	28000	14000	11000	8500	7000	5000	6000	59900	126000	108000	80900	159000
22	38500	14000	11000	8500	7000	5000	6000	60200	126000	110000	79000	167000
23	49200	14000	11000	8500	7000	5000	6500	59100	112000	115000	78000	152000
24	62000	14000	11000	8500	7000	5000	6500	60100	106000	133000	80000	110000
25	61900	13000	11000	8500	7000	5000	7000	63700	112000	142000	82000	93000
26	49800	13000	11000	8500	6500	5000	7000	67000	123000	172000	80000	82000
27	40600	13000	11000	8500	6500	5000	7000	66500	131000	158000	76000	82000
28	35800	13000	11000	8500	6500	5000	7500	65400	133000	137000	74000	75000
29	32100	13000	11000	8000	---	5000	8000	70700	142000	127000	71000	70000
30	29500	13000	11000	8000	---	5000	8500	69500	135000	133000	71000	70000
31	27000	---	11000	8000	---	5000	---	65400	---	153000	92000	---
TOTAL	1050800	527000	364000	280000	202000	168500	174500	1393000	3243800	3558500	2933500	3290000
MEAN	33900	17570	11740	9032	7214	5435	5817	44940	108100	114800	94630	109700
MAX	62000	25000	13000	11000	8000	6500	8500	70700	142000	172000	146000	208000
MIN	25000	13000	11000	8000	6500	5000	5000	9000	72900	89500	71000	70000
CFSM	1.75	.91	.61	.47	.37	.28	.30	2.32	5.57	5.92	4.88	5.66
IN.	2.01	1.01	.70	.54	.39	.32	.33	2.67	6.22	6.82	5.63	6.31
AC-FT	2084000	1045000	722000	555400	400700	334200	346100	2763000	6434000	7058000	5819000	6526000

CAL YR 1981 TOTAL 20447600 MEAN 56020 MAX 228000 MIN 6000 CFSM 2.89 IN 39.21 AC-FT 40560000
WTR YR 1982 TOTAL 17185600 MEAN 47080 MAX 208000 MIN 5000 CFSM 2.43 IN 32.95 AC-FT 34090000

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1970, 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JAN							
12...	1130	--	210	--	--	--	--
12...	1131	180	186	7.3	.0	12.7	87
12...	1132	300	203	7.0	.0	12.7	87
12...	1133	540	209	7.0	.0	12.6	86
12...	1134	620	217	6.9	.0	11.2	77
APR							
09...	1501	50.0	189	7.2	.0	11.8	71
09...	1502	500	195	7.2	.0	--	--
09...	1503	700	203	7.2	.0	10.5	80
MAY							
19...	0846	90.0	94	6.5	3.0	--	--
19...	0847	190	91	6.5	2.9	--	--
19...	0848	290	89	6.5	3.1	--	--
19...	0849	440	84	6.5	3.7	--	--
19...	0850	690	84	6.5	4.2	--	--
JUL							
14...	1146	110	109	8.1	11.3	10.9	97
14...	1147	210	110	8.2	11.1	11.0	99
14...	1148	335	110	8.2	10.6	11.2	100
14...	1149	535	111	8.3	9.8	11.7	103
14...	1150	1485	114	8.3	9.1	12.0	103
AUG							
12...	1101	75.0	99	7.8	9.9	11.2	99
12...	1102	200	98	7.8	9.7	11.2	98
12...	1103	325	97	8.0	9.1	11.5	99
12...	1104	575	98	8.3	8.2	12.0	101
12...	1105	1675	106	8.2	8.1	12.3	103

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE LAB (UMHOS)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JAN										
12...	1130	860	9050	208	1.0	761	K1	K8	95	31
APR										
09...	1500	850	4000	222	1.1	763	K3	<1	91	29
MAY										
19...	0845	1470	54800	94	50	760	K14	K30	37	12
JUL										
14...	1145	1865	103000	133	270	764	K20	K26	57	19
AUG										
12...	1100	1875	100000	119	120	766	--	K44	50	16

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
JAN										
12...	4.3	9.0	1.6	73	17	11	.2	10	125	128
APR										
09...	4.5	7.8	1.7	76	17	11	.2	11	133	128
MAY										
19...	1.8	2.9	1.4	34	6.0	4.1	.2	5.7	51	55
JUL										
14...	2.4	2.3	1.7	49	17	2.1	.1	4.7	83	79
AUG										
12...	2.4	2.6	1.1	--	13	--	.1	6.0	74	--

K NON-IDEAL COLONY COUNT

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN 12...	.27	.070	.23	.010	.010	<.010	7	171	--
APR 09...	.26	.060	.33	<.010	<.010	<.010	9	97	--
MAY 19...	.23	.100	1.30	.190	.040	.020	526	77800	36
JUL 14...	.10	.070	1.00	.050	.020	.050	797	222000	67
AUG 12...	.11	.110	1.00	.040	.030	.020	598	161000	65

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
APR 09...	1500	1	0	1	100	60	40	<1	<3	<10
MAY 19...	0845	5	4	1	100	80	20	<1	<3	20
JUL 14...	1145	10	8	2	200	200	27	1	<1	50

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)
APR 09...	<10	1	--	<1	2	1	1	320	260	65
MAY 19...	<10	4	3	1	28	23	5	9900	9700	190
JUL 14...	<10	10	9	1	32	29	3	7900	7800	69

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
APR 09...	<1	--	<1	30	10	17	<.1	--	<.1	1
MAY 19...	14	11	3	240	230	11	.1	--	<.1	17
JUL 14...	5	--	<1	570	560	6	.2	.0	.2	53

DATE	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 09...	--	<1	1	<1	<1	<1	10	--	<12
MAY 19...	15	2	<1	<1	6	<1	60	--	<12
JUL 14...	52	1	<1	<1	<1	<1	110	110	5

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)
APR 09...	1500	<.10	--	<.01	--	<.10	--	<.01	--	<.01	--	<.01
MAY 19...	0845	--	<1	--	<.1	--	<1.0	--	<.1	--	<.1	--
JUL 14...	1145	<.10	--	<.01	--	<.10	--	<.01	--	<.01	--	<.01

DATE	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL (UG/L)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOTAL (UG/L)
APR 09...	--	<.01	<.01	--	<.01	--	<.01	--	<.01	<.01	--	<.01
MAY 19...	<.1	<.01	--	<.1	--	<.1	--	<.1	<.01	--	<.1	--
JUL 14...	--	<.01	<.01	--	<.01	--	<.01	--	<.01	<.01	--	<.01

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)
APR 09...	--	<.01	--	<.01	<.01	--	<.01	<.01	<.01	--	<.10
MAY 19...	<.1	--	<.1	<.01	--	<.1	<.01	<.01	--	<.1	--
JUL 14...	--	<.01	--	<.01	<.01	--	<.01	<.01	<.01	--	<.10

DATE	PARATHION, TOTAL (UG/L)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE TOTAL (UG/L)	PERTHANE IN BOTTOM MATERIL (UG/KG)	SILVEX, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
APR 09...	<.01	--	<.10	--	<.01	<1	--	<.01	<.01	<.01	<.01
MAY 19...	<.01	<1.0	--	<1.00	<.01	--	<10	<.01	<.01	<.01	<.01
JUL 14...	<.01	--	<.10	--	<.01	<1	--	<.01	<.01	<.01	<.01

15294410 CAPPS CREEK BELOW NORTH CAPPS CREEK NEAR TYONEK

LOCATION.--Lat 61°19'45", long 151°39'56", in SE¼SE¼ sec.6, T.14 N., R.13 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 1.2 mi (1.9 km) downstream from North Capps Creek, about 2 mi (3 km) upstream from mouth, and 25 mi (40 km) northwest of Tyonek.

DRAINAGE AREA.--10.5 mi² (27.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 520 ft (160 m), from topographic map.

REMARKS.--Records fair except those for Oct. 29 to Mar. 22, June 10 to July 19, and Sept. 9-23, which are poor. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 710 ft³/s (20.1 m³/s) June 25, 1980, gage height, 6.95 ft (2.118 m), from rating curve extended above 300 ft³/s (8.50 m³/s); maximum gage height, 7.71 ft (2.350 m) Apr. 23, 1981, backwater from ice; minimum daily discharge, about 5.0 ft³/s (0.14 m³/s) Dec. 18-29, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 550 ft³/s (15.6 m³/s) Sept. 15, gage height, 7.60 ft (2.316 m), from rating curve extended above 150 ft³/s (4.25 m³/s) on basis of slope-area measurement of peak flow; minimum discharge observed, 6.9 ft³/s (0.20 m³/s) Jan. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	25	12	9.0	7.0	7.0	8.3	16	189	100	19	21
2	38	25	12	9.0	7.0	7.0	8.3	17	241	90	23	15
3	38	25	12	9.0	7.0	7.0	8.8	17	206	60	20	18
4	37	25	12	8.0	7.0	7.0	8.3	17	178	50	18	16
5	36	25	12	8.0	7.0	7.0	7.5	18	273	40	17	61
6	36	20	12	8.0	7.0	7.0	7.1	19	411	30	17	35
7	31	20	12	8.0	7.0	7.0	7.9	30	350	25	18	28
8	30	25	12	8.0	7.0	7.0	8.8	40	331	30	15	21
9	30	30	12	8.0	7.0	7.0	7.5	48	425	40	13	30
10	31	50	10	8.0	7.0	7.0	7.5	53	450	35	22	70
11	31	40	10	8.0	7.0	7.0	7.1	52	350	40	21	50
12	44	30	10	8.0	7.0	7.0	7.1	43	300	35	15	40
13	61	25	10	8.0	7.0	7.0	7.1	44	250	30	13	300
14	55	20	10	8.0	7.0	7.0	7.1	45	230	25	14	200
15	68	20	10	8.0	7.0	7.0	7.1	48	250	20	13	450
16	80	20	10	8.0	7.0	7.0	7.1	53	200	150	13	300
17	74	20	10	8.0	7.0	7.0	7.1	65	180	80	13	150
18	61	15	10	8.0	7.0	7.0	7.1	64	170	40	16	100
19	55	15	10	8.0	7.0	7.0	7.1	63	180	26	17	150
20	57	15	10	7.0	7.0	7.0	7.9	64	160	32	18	250
21	71	15	9.0	7.0	7.0	7.0	9.2	71	150	36	11	200
22	99	15	9.0	7.0	7.0	7.0	10	77	140	42	10	150
23	183	15	9.0	7.0	7.0	7.0	9.2	81	120	48	12	100
24	97	15	9.0	7.0	7.0	8.0	8.8	108	100	49	13	63
25	55	15	9.0	7.0	7.0	9.0	9.6	123	90	37	11	53
26	42	5	9.0	7.0	7.0	9.2	11	127	80	29	10	129
27	42	[illegible]	9.0	7.0	7.0	9.2	11	137	80	26	10	70
28	34	15	9.0	7.0	7.0	8.8	13	176	250	24	7.9	71
29	30	12	9.0	7.0	---	8.3	15	150	150	29	42	100
30	30	12	9.0	7.0	---	8.3	15	137	90	28	34	93
31	30	---	9.0	7.0	---	7.9	---	168	---	19	23	---
TOTAL	1644	634	317.0	239.0	196.0	229.7	263.6	2171	6574	1345	518.9	3334
MEAN	53.0	21.1	10.2	7.71	7.00	7.41	8.79	70.0	219	43.4	16.7	111
MAX	183	50	12	9.0	7.0	9.2	15	176	450	150	42	450
MIN	30	12	9.0	7.0	7.0	7.0	7.1	16	80	19	7.9	15
CFSM	5.05	2.01	.97	.73	.67	.71	.84	6.67	20.9	4.13	1.59	10.6
IN.	5.82	2.25	1.12	.85	.69	.81	.93	7.69	23.29	4.76	1.84	11.81
AC-FT	3260	1260	629	474	389	456	523	4310	13040	2670	1030	6610

CAL YR 1981 TOTAL 17397.1 MEAN 47.7 MAX 284 MIN 7.0 CFSM 4.54 IN 61.63 AC-FT 34510
WTR YR 1982 TOTAL 17466.2 MEAN 47.9 MAX 450 MIN 7.0 CFSM 4.56 IN 61.87 AC-FT 34640

NOTE.--No gage-height record Jan. 6 to Mar. 22, June 10 to July 19, and Sept. 9-23.

15294450 CHUITNA RIVER NEAR TYONEK

LOCATION.--Lat 61°06'31", long 151°15'07", in NE¼NE¼ sec.29, T.12 N., R.11 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 2.1 mi (3.4 km) downstream from Lone Creek, 4.8 mi (7.7 km) northwest of Tyonek, and 6.1 mi (9.8 km) upstream from mouth.

DRAINAGE AREA.--131 mi² (339 km²).

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 160 ft (49 m), from topographic map.

REMARKS.--Records good except those for Oct. 28 to May 10, which are poor.

AVERAGE DISCHARGE.--7 years, 380 ft³/s (10.76 m³/s), 39.39 in/yr (1,001 mm/yr), 275,300 acre-ft/yr (339 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s (136 m³/s) Sept. 15, 1982, gage height, 10.07 ft (3.069 m), from rating curve extended above 2,700 ft³/s (76 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 10.97 ft (3.344 m) May 14, 1976, backwater from ice; minimum daily discharge, about 30 ft³/s (0.8 m³/s) Dec. 9, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft³/s (62 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 23	0800	2,530	71.6	7.44	2.268	Sept. 15	2200	*4,800	136	*10.07	3.069
June 6	2230	2,340	94.6	8.24	2.512	Sept. 21a	Unknown	4,000	114	b9.0	2.746
Sept. 13	1230	3,880	110	8.85	2.697						

a Probable date.
b From floodmark.

Minimum daily discharge, about 50 ft³/s (1.4 m³/s) Jan. 20 to Feb. 3.

REVISIONS.--All peak discharges and annual maximum (*), greater than 3,000 ft³/s (85 m³/s), for water years 1976-77 and 1979-81, have been revised as shown in the following table. They supersede figures published in the reports for 1976-77 and 1979-81.

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
June 6, 1976	0300	3,060	86.7	7.96	2.426	Oct. 5, 1979	2100	4,100	116	9.13	2.783
Sept. 20, 1976	1900	*3,570	101	8.49	2.588	Oct. 9, 1979	0800	4,180	118	9.22	2.810
						Oct. 11, 1979	1400	3,430	97.1	8.33	2.539
June 5, 1977	1400	3,270	92.6	8.17	2.490	Nov. 11, 1979	0430	*4,700	113	*9.87	3.008
Sept. 10, 1977	2300	3,820	108	8.77	2.673	May 30, 1980	1400	3,000	85.0	7.90	2.408
Sept. 21, 1977	1200	*4,400	125	*9.50	2.896	June 6, 1980	2230	3,100	87.8	8.00	2.438
Sept. 28, 1977	0900	3,470	98.3	8.38	2.554	June 20, 1980	1300	3,610	102	8.53	2.600
						June 25, 1980	1000	3,400	96.3	8.30	2.530
Sept. 24, 1979	0500	*3,310	93.7	*8.21	2.502						
						Aug. 12, 1981	1500	*3,700	105	*8.63	2.630

Revised daily discharge, in cubic feet per second, for high water periods in water years 1977 and 1980 are given below. They supersede figures published in the reports for 1977 and 1980.

June 5, 1977....	3,180	Sept. 21, 1977....	3,700	Oct. 5, 1979....	2,080	Nov. 8, 1979....	3,120
		22.....	1,670	6.....	2,960	9.....	2,960
Sept. 10, 1977....	1,950	28.....	2,630	9.....	3,560	10.....	2,520
11.....	1,620			11.....	2,360	11.....	3,990
						12.....	2,380

Monthly	Cfs-day	Mean	Maximum	Minimum	Per square mile	Runoff in Inches	Runoff in Acre-feet
June 1977	65,670	2,189	3,180	1,390	16.7	18.65	130,300
September 1977	25,872	862	3,700	97	6.58	7.35	51,320
WTR YR 1977	201,292	553	3,700	80	4.22	57.34	400,500
CAL YR 1977	183,341	502	3,700	70	3.83	52.06	363,700
October 1979	31,106	1,003	3,560	333	7.66	8.83	61,700
November 1979	27,227	908	3,990	107	6.93	7.73	54,000
CAL YR 1979	185,511	508	3,990	30	3.88	52.68	368,000
WTR YR 1980	200,512	548	3,990	30	4.18	56.94	397,700

15294450 CHUITNA RIVER NEAR TYONEK--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	250	150	75	50	70	80	300	1370	392	145	321
2	174	250	150	75	50	70	80	400	1560	370	127	317
3	183	250	150	75	50	70	80	400	1340	281	123	257
4	186	200	150	75	70	70	80	500	1020	245	112	305
5	174	200	150	75	70	70	100	500	1550	224	105	487
6	183	200	150	75	70	70	100	600	2130	204	103	392
7	177	200	150	75	70	70	100	700	2050	195	103	289
8	165	200	150	75	70	70	100	800	1270	214	114	224
9	165	300	150	75	70	70	100	1000	1490	253	114	277
10	153	500	150	75	70	70	100	1200	1580	204	114	546
11	189	400	100	75	70	70	100	1110	1250	238	261	425
12	301	300	100	75	70	70	100	896	1170	201	159	341
13	721	300	100	75	70	70	100	872	960	177	125	2700
14	522	250	100	75	70	70	100	840	714	168	118	1430
15	480	250	100	75	70	70	100	840	819	159	128	3870
16	516	200	100	75	70	70	100	936	693	392	125	2640
17	361	200	100	75	70	70	100	1050	606	365	110	1110
18	281	200	100	75	70	70	100	992	588	293	112	1600
19	224	200	100	75	70	70	100	872	630	214	103	1800
20	235	200	100	50	70	70	100	888	552	177	97	1700
21	1070	150	100	50	70	70	100	904	485	165	93	2400
22	1430	150	100	50	70	78	150	912	465	168	89	1800
23	2190	150	100	50	70	80	150	872	445	269	95	950
24	1400	150	100	50	70	80	150	984	425	238	105	650
25	714	150	100	50	70	80	150	1180	406	281	118	550
26	490	150	100	50	70	80	150	1190	365	242	101	850
27	350	150	100	50	70	80	200	1070	329	186	93	600
28	300	150	75	50	70	80	200	1230	540	168	89	550
29	300	150	75	50	---	80	200	1240	383	183	206	1200
30	300	150	75	50	---	80	300	1090	329	221	509	1300
31	250	---	75	50	---	80	---	1260	---	177	495	---
TOTAL	14367	6550	3500	2025	1900	2268	3670	27628	27514	7264	4491	31881
MEAN	463	218	113	65.3	67.9	73.2	122	891	917	234	145	1063
MAX	2190	500	150	75	70	80	300	1260	2130	392	509	3870
MIN	153	150	75	50	50	70	80	300	329	159	89	224
CFSM	3.53	1.66	.86	.50	.52	.56	.93	6.80	7.00	1.79	1.11	8.12
IN.	4.08	1.86	.99	.58	.54	.64	1.04	7.85	7.81	2.06	1.28	9.05
AC-FT	28500	12990	6940	4020	3770	4500	7280	54800	54570	14410	8910	63240

CAL YR 1981	TOTAL	95494	MEAN 262	MAX 3580	MIN 54	CFSM 2.00	IN 27.12	AC-FT 189400		
WTR YR 1982	TOTAL	133058	MEAN 365	MAX 3370	MIN 50	CFSM 2.79	IN 37.78	AC-FT 263900		

15294450 CHUITNA RIVER NEAR TYONEK--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	250	150	75	50	70	80	300	1370	392	145	321
2	174	250	150	75	50	70	80	400	1560	370	127	317
3	183	250	150	75	50	70	80	400	1340	281	123	257
4	186	200	150	75	70	70	80	500	1020	245	112	305
5	174	200	150	75	70	70	100	500	1550	224	105	487
6	183	200	150	75	70	70	100	600	2130	204	103	392
7	177	200	150	75	70	70	100	700	2050	195	103	289
8	165	200	150	75	70	70	100	800	1270	214	114	224
9	165	300	150	75	70	70	100	1000	1490	253	114	277
10	153	500	150	75	70	70	100	1200	1580	204	114	546
11	189	400	100	75	70	70	100	1110	1250	238	261	425
12	301	300	100	75	70	70	100	896	1170	201	159	341
13	721	300	100	75	70	70	100	872	960	177	125	2700
14	522	250	100	75	70	70	100	840	714	168	118	1430
15	480	250	100	75	70	70	100	840	819	159	128	3870
16	516	200	100	75	70	70	100	936	693	392	125	2640
17	361	200	100	75	70	70	100	1050	606	365	110	1110
18	281	200	100	75	70	70	100	992	588	293	112	1600
19	224	200	100	75	70	70	100	872	630	214	103	1800
20	235	200	100	50	70	70	100	888	552	177	97	1700
21	1070	150	100	50	70	70	100	904	485	165	93	2400
22	1430	150	100	50	70	78	150	912	465	168	89	1800
23	2190	150	100	50	70	80	150	872	445	269	95	950
24	1400	150	100	50	70	80	150	984	425	238	105	650
25	714	150	100	50	70	80	150	1180	406	281	118	550
26	490	150	100	50	70	80	150	1190	365	242	101	850
27	350	150	100	50	70	80	200	1070	329	186	93	600
28	300	150	75	50	70	80	200	1230	540	168	89	550
29	300	150	75	50	---	80	200	1240	383	183	20	1200
30	300	150	75	50	---	80	300	1090	329	221	509	1300
31	250	---	75	50	---	80	---	1260	---	177	495	---
TOTAL	14367	6550	3500	2025	1900	2268	3670	27628	27514	7264	4491	31881
MEAN	463	218	113	65.3	67.9	73.2	122	891	917	234	145	1063
MAX	2190	500	150	75	70	80	300	1260	2130	392	509	3870
MIN	153	150	75	50	50	70	80	300	329	159	89	224
CFSM	3.53	1.66	.86	.50	.52	.56	.93	6.80	7.00	1.79	1.11	8.12
IN.	4.08	1.86	.99	.58	.54	.64	1.04	7.85	7.81	2.06	1.28	9.05
AC-FT	28500	12990	6940	4020	3770	4500	7280	54800	54570	14410	8910	63240

CAL YR 1981	TOTAL	95494	MEAN 262	MAX 3580	MIN 54	CFSM 2.00	IN 27.12	AC-FT 189400		
WTR YR 1982	TOTAL	133058	MEAN 365	MAX 3870	MIN 50	CFSM 2.79	IN 37.78	AC-FT 263900		

15294450 CHUITNA RIVER NEAR TYONEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975-78, 1982.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH LAB (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (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)
SEP 08...	1735	223	55	8.0	10.5	20	17	4.8	1.2	2.5	2.5

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)
SEP 08...	18	<5.0	1.0	<.1	13	<.10	.030	3.5	1	0	120

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)
SEP 08...	<1	<10	<10	[illegible]0	<100	23	.1	<100	<1	<3

15295600 TERROR RIVER NEAR KODIAK

LOCATION.--Lat 57°39'05", long 153°01'46", in SW¼ NE¼ sec.19, T.29 S., R.23 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, in Kodiak National Wildlife Refuge, on right bank 1,200 ft (366 m) downstream of Terror Lake outlet, 8 mi (13 km) upstream from Terror Bay and 25 mi (40 km) southwest of Kodiak. Prior to July 26, 1982, at site 1,200 ft (366 m) upstream.

DRAINAGE AREA.--15.0 mi² (38.8 km²).

PERIOD OF RECORD.--June 1962 to September 1968, July 1978 to current year.

REVISED RECORD.--WDR AK-81-1: 1962 (M), 1963, 1964 (M), 1965 (M), 1966 (P), 1967 (M), 1968 (M), 1978 (M), 1979 (M), 1980 (P).

GAGE.--Water-stage recorder. Altitude of gage is 1,180 ft (360 m), from topographic map. Prior to July 26, 1982, at site 1,200 ft (366 m) upstream at different datum.

REMARKS.--Records good except those for Dec. 19 to May 16, and Sept. 17-30, which are poor. Minor effects on discharge during August and September from construction upstream at outlet. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--10 years (water years 1963-68, 1979-82), 138 ft³/s (3.908 m³/s), 124.93 in/yr (3,173 mm/yr), 99,980 acre-ft/yr (123 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,400 ft³/s (96.3 m³/s) Oct. 21, 1980, gage height, 7.87 ft (2.399 m), site and datum then in use, from rating curve extended above 770 ft³/s (21.8 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 8.0 ft³/s (0.23 m³/s) Mar. 13-24, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 937 ft³/s (26.5 m³/s) Sept. 15, gage height, 3.68 ft (1.122 m) but may have been higher during period of no gage-height record Sept. 17-18, no peak above base of 1,000 ft³/s (28.3 m³/s); minimum daily, about 11 ft³/s (0.31 m³/s) Mar. 21 to Apr. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	43	56	20	50	20	11	23	357	353	176	89
2	49	41	53	19	64	19	11	24	402	402	149	80
3	46	39	50	19	94	19	11	25	407	615	130	70
4	44	39	46	18	145	18	11	26	362	667	113	66
5	42	37	42	17	134	17	11	27	532	487	106	144
6	39	36	39	16	116	17	11	28	667	353	97	185
7	37	57	37	16	111	16	11	30	477	388	144	160
8	36	70	35	16	96	15	12	32	388	357	192	142
9	33	73	33	16	83	15	12	34	345	345	164	101
10	32	226	31	16	77	14	12	36	431	341	136	106
11	36	375	29	16	75	14	12	38	477	316	126	123
12	40	312	37	16	66	13	12	40	393	275	119	115
13	45	226	57	15	60	13	12	42	308	258	106	164
14	49	163	63	15	55	13	13	44	261	241	126	213
15	93	116	57	15	53	12	13	46	244	232	134	639
16	93	89	70	15	51	12	13	46	232	294	115	581
17	79	77	116	15	47	12	13	51	232	275	101	360
18	67	58	113	15	43	12	13	52	268	226	92	450
19	61	48	78	15	41	12	14	55	332	279	81	320
20	145	46	60	15	38	12	14	55	324	345	74	230
21	268	43	47	15	36	11	14	53	397	312	69	280
22	199	40	42	15	34	11	14	56	498	286	101	220
23	241	41	37	15	32	11	15	70	393	375	111	180
24	190	42	33	15	31	11	15	94	416	388	111	150
25	138	42	30	15	29	11	16	93	504	320	110	130
26	109	48	28	15	27	11	17	156	544	280	106	150
27	88	64	26	16	25	11	19	379	504	250	95	110
28	72	62	24	17	23	11	20	349	667	244	91	150
29	59	59	23	19	---	11	21	272	472	235	80	130
30	50	59	22	26	---	11	22	279	426	244	97	110
31	46	---	21	40	---	11	---	316	---	207	101	---
TOTAL	2579	2671	1435	533	1736	416	415	2871	12260	10190	3553	5948
MEAN	83.2	89.0	46.3	17.2	62.0	13.4	13.8	92.6	409	329	115	198
MAX	268	375	116	40	145	20	22	379	667	667	192	639
MIN	32	36	21	15	23	11	11	23	232	207	69	66
CFSM	5.55	5.93	3.09	1.15	4.13	.89	.92	6.17	27.3	21.9	7.67	13.2
IN.	6.40	6.62	3.56	1.32	4.30	1.03	1.03	7.12	30.40	25.27	8.81	14.75
AC-FT	5120	5300	2850	1060	3440	825	823	5690	24320	20210	7050	11800

CAL YR 1981 TOTAL 55636 MEAN 152 MAX 1060 MIN 17 CFSM 10.1 IN 137.97 AC-FT 110400
WTR YR 1982 TOTAL 44607 MEAN 122 MAX 667 MIN 11 CFSM 8.13 IN 110.62 AC-FT 88480

NOTE.--No gage-height record, Dec. 19 to Feb. 2, Feb. 10 to Apr. 8, and Sept. 17-30.

15295700 TERROR RIVER AT MOUTH NEAR KODIAK

LOCATION.--Lat. 57°41'49", long 153°09'20", in SW¼NE¼ sec.5, T.29 S., R.24 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, in Kodiak National Wildlife Refuge, on right bank, 0.9 mi (0.6 km) upstream from mouth, 7.5 mi (4.7 km) downstream from Terror Lake outlet, and 29 mi (18 km) southwest of Kodiak.

DRAINAGE AREA.--45.7 mi² (118 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1964 to October 1968, October 1981 to September 1982.

GAGE.--Water-stage recorder. Altitude of gage in 30 ft (9.1 m), from topographic map. Prior to Oct. 1, 1981 at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS.--Water-discharge records good except those for periods of no gage-height record, Dec. 18 to Feb. 10, Feb. 15 to Apr. 3 and Sept. 10-30, which are poor.

AVERAGE DISCHARGE.--5 years (water years 1965-68, 1982) 286 ft³/s (8.100 m³/s), 84.99 in/yr (2,159 mm/yr), 207,200 acre-ft/yr (255 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,820 ft³/s (108 m³/s) Sept. 26, 1966, gage height 6.48 ft (1.975 m); maximum gage height, 7.54 ft (2.298 m) Mar. 28, 1964 (tidal wave); minimum daily discharge, 19 ft³/s (0.54 m³/s) Feb. 23, Mar. 1, 1967; all extremes at site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 10	1800	1,510	42.8	3.20	0.975
June 5	1900	*1,830	51.8	*3.43	1.045
June 27	2200	1,620	45.9	3.28	1.000
July 4	0900	1,380	39.1	3.09	0.942
Sept. 18a	Unknown	Unknown		Unknown	

a Sometime during period Sept. 15-18.

NOTE.--Discharges from rating curve extended above 720 ft³/s (20.4 m³/s).

Minimum discharge, 21 ft³/s (0.59 m³/s) Apr. 18, but may have been less during period of missing gage-height record, Mar. 1 to Apr. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	125	166	62	140	58	32	70	869	742	242	103
2	120	110	146	60	200	56	33	73	963	826	201	97
3	120	103	130	58	300	54	34	72	897	1080	179	92
4	110	94	110	56	400	52	36	70	843	1270	161	117
5	110	86	97	54	350	50	41	120	1260	973	152	238
6	100	97	99	52	310	48	47	135	1500	758	135	278
7	94	300	94	50	280	46	51	120	1120	800	338	223
8	90	246	85	50	250	45	51	172	897	734	338	240
9	84	323	88	50	220	43	50	242	888	709	242	220
10	84	1150	85	56	190	42	47	220	1030	693	198	300
11	90	1250	85	66	169	41	44	195	1010	641	185	230
12	100	1150	195	80	152	40	41	179	817	563	164	350
13	120	888	220	100	130	39	40	179	663	530	146	440
14	150	605	212	150	120	38	37	179	591	491	246	390
15	280	404	164	380	110	37	37	188	570	498	238	1300
16	240	287	562	150	100	40	41	198	563	605	201	600
17	220	227	717	80	96	43	36	201	563	517	149	800
18	190	198	600	56	92	47	34	216	678	450	127	1100
19	170	161	400	47	88	52	33	223	783	556	110	600
20	400	140	250	42	84	56	41	212	758	605	94	500
21	740	135	150	40	80	50	40	205	869	570	97	580
22	600	117	120	39	76	46	41	208	973	517	130	450
23	700	110	100	38	72	42	46	415	808	693	146	350
24	410	132	90	38	68	38	90	410	906	641	143	290
25	314	110	80	37	66	35	92	343	1070	563	135	250
26	258	172	76	36	64	34	81	725	1120	498	130	290
27	227	216	72	36	62	33	85	1100	1060	473	127	230
28	188	179	70	43	60	32	72	860	1220	444	125	290
29	155	161	68	50	---	31	65	671	897	467	127	270
30	135	216	66	60	---	30	68	734	851	438	117	240
31	130	---	64	100	---	31	---	826	---	323	112	---
TOTAL	6859	9492	5461	2216	4329	1329	1486	9761	27037	19668	5235	11458
MEAN	221	316	176	71.5	155	42.9	49.5	315	901	634	169	382
MAX	740	1250	717	380	400	58	92	1100	1500	1270	338	1300
MIN	84	86	64	36	60	30	32	70	563	323	94	92
CFSM	4.84	6.92	3.85	1.57	3.39	.94	1.08	6.89	19.7	13.9	3.70	8.36
IN.	5.58	7.73	4.45	1.80	3.52	1.08	1.21	7.95	22.01	16.01	4.26	9.33
AC-FT	13600	18830	10830	4400	8590	2640	2950	19360	53630	39010	10380	22730

WTR YR 1982 TOTAL 104331 MEAN 286 MAX 1500 MIN 30 CFSM 6.26 IN 84.92 AC-FT 206900

15295700 TERROR RIVER AT MOUTH NEAR KODIAK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1981 to September 1982.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: December 1981 to September 1982.

INSTRUMENTATION.--Temperature recorder since Dec. 10, 1981.

REMARKS.--Records good. No record Apr. 5 to May 20 due to equipment malfunction. Records represent water temperature a the sensor within 0.5°C. Temperature measurements obtained on Sept. 8 indicated a maximum variation of 0.2°C in the cross section.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 13.0°C, Aug. 13, 14; minimum, 0.0°C, several days in Dec., Feb., and Mar.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE (DEG C)
SEP					
08...	1109	70.0	--	207	--
08...	1110	--	.00	--	9.2
08...	1111	--	16.0	--	9.2
08...	1112	--	25.0	--	9.0
08...	1113	--	34.0	--	9.0
08...	1114	--	43.0	--	9.0
08...	1115	--	53.0	--	9.2
08...	1116	--	70.0	--	9.2

TEMPERATURE, WATER (DEG. C), WATER YEAR DECEMBER 1981 TO SEPTEMBER 1982

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

15295700 TERROR RIVER AT MOUTH NEAR KODIAK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.5	.5	---	---	6.0	2.5	6.5	5.0	11.5	7.5	11.0	9.0
2	2.5	1.0	---	---	6.0	2.5	6.0	5.0	12.0	7.5	10.5	9.0
3	2.5	.5	---	---	6.5	2.5	6.5	5.0	13.0	8.0	10.5	9.0
4	2.5	1.0	---	---	6.0	2.5	6.0	5.0	13.0	8.5	10.0	7.5
5	---	---	---	---	5.5	3.0	7.5	4.5	11.5	9.5	9.5	8.5
6	---	---	---	---	4.0	3.0	8.0	5.0	11.0	9.0	10.0	8.0
7	---	---	---	---	5.5	3.0	8.5	5.5	10.0	9.0	10.0	8.5
8	---	---	---	---	5.5	3.0	8.5	5.5	10.5	9.0	10.5	8.5
9	---	---	---	---	6.0	3.0	7.0	5.5	11.5	8.0	9.0	8.0
10	---	---	---	---	5.0	3.0	8.5	6.0	11.5	9.5	9.5	8.0
11	---	---	---	---	5.5	3.0	9.5	6.0	12.0	8.5	9.5	7.0
12	---	---	---	---	5.0	3.0	9.0	7.0	12.0	8.0	9.5	7.0
13	---	---	---	---	5.5	3.0	9.0	7.0	13.0	8.5	10.0	8.5
14	---	---	---	---	5.5	3.5	8.5	7.0	13.0	9.0	10.0	8.0
15	---	---	---	---	6.5	3.0	8.0	6.5	12.0	8.5	10.0	8.5
16	---	---	---	---	7.5	3.0	8.5	6.5	11.5	7.5	9.0	8.0
17	---	---	---	---	5.5	3.5	8.5	6.0	11.5	9.0	9.0	8.5
18	---	---	---	---	5.5	4.0	9.5	6.0	11.0	8.5	8.5	8.0
19	---	---	---	---	6.0	4.0	10.5	6.0	12.5	8.5	9.0	8.0
20	---	---	---	---	8.0	4.0	10.0	7.0	12.0	9.5	9.0	8.0
21	---	---	6.5	---	6.0	4.0	9.5	7.5	11.0	9.5	8.5	7.5
22	---	---	7.0	1.5	7.0	4.5	10.5	7.0	12.5	10.0	8.0	6.5
23	---	---	3.5	3.0	6.0	4.5	11.0	9.0	12.5	10.5	7.5	6.0
24	---	---	4.0	2.5	7.0	4.5	11.5	8.0	12.5	10.0	7.5	5.5
25	---	---	6.5	2.0	6.5	5.0	11.0	8.5	11.0	10.0	8.0	7.5
26	---	---	5.0	2.5	5.5	4.5	11.5	8.5	12.5	10.0	8.0	7.0
27	---	---	4.0	2.5	5.5	4.5	12.0	9.0	11.0	8.5	7.0	6.0
28	---	---	5.5	2.5	6.5	4.5	11.0	9.5	11.5	10.0	8.0	6.5
29	---	---	4.5	2.5	6.0	5.0	11.5	9.5	12.5	9.5	8.0	6.5
30	---	---	7.0	2.5	6.5	5.0	11.0	8.0	11.5	9.0	7.5	6.0
31	---	---	7.0	2.5	---	---	11.5	7.5	10.5	9.5	---	---
MONTH	2.5	.5	7.0	1.5	8.0	2.5	12.0	4.5	13.0	7.5	11.0	5.5
YEAR	13.0	.0										

15296480 LARSEN BAY CREEK NEAR LARSEN BAY

LOCATION.--Lat 57°30'57", long 153°59'08", in NE¼SE¼ sec.6, T.31 S., R.29 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on left bank 1.5 mi (2.4 km) upstream from mouth and 1.6 mi (2.6 km) south of Larsen Bay.

DRAINAGE AREA.--3.92 mi² (10.15 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (240 m), from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, Dec. 4 to May 8, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60 ft³/s (1.70 m³/s). Oct. 21, 1980, gage height, 4.92 ft (1.500 m); maximum gage height, 4.94 ft (1.506 m) June 2, 1982; minimum daily discharge, 3.0 ft³/s (0.08 m³/s) Feb. 20 to Mar. 7 and Apr. 4-9, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 53 ft³/s (1.501 m³/s), June 2, gage height, 4.94 ft (1.506 m); minimum daily, 3.0 ft³/s (0.08 m³/s) Feb. 20 to Mar. 7 and Apr. 4-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	7.9	7.2	5.0	4.0	3.0	4.0	5.0	49	13	7.2	5.9
2	6.4	7.5	6.8	5.0	4.0	3.0	4.0	6.0	49	12	7.2	5.7
3	6.4	6.8	6.4	5.0	4.0	3.0	4.0	7.0	46	12	6.4	3.7
4	6.0	6.0	7.0	5.0	4.0	3.0	3.0	8.0	46	14	6.4	3.5
5	5.0	5.3	8.0	4.0	5.0	3.0	3.0	8.0	46	14	6.0	6.4
6	6.0	5.3	8.0	4.0	6.0	3.0	3.0	9.0	46	13	6.0	4.8
7	6.0	14	9.0	4.0	8.0	3.0	3.0	10	42	12	6.0	5.3
8	5.7	9.6	8.0	4.0	13	4.0	3.0	12	36	12	5.7	4.4
9	5.7	11	8.0	4.0	20	4.0	3.0	13	36	12	5.7	4.4
10	5.3	13	7.0	4.0	18	4.0	4.0	13	36	12	5.7	4.8
11	7.2	13	7.0	4.0	16	4.0	4.0	11	33	12	5.3	4.4
12	6.4	13	6.0	4.0	13	4.0	4.0	11	30	12	5.1	5.1
13	6.0	13	6.0	4.0	11	4.0	4.0	13	24	12	5.1	4.8
14	6.0	13	6.0	4.0	9.0	4.0	4.0	16	21	12	4.8	5.7
15	6.8	13	6.0	5.0	8.0	4.0	4.0	17	20	12	4.8	8.6
16	7.5	12	6.0	5.0	7.0	4.0	4.0	17	19	11	4.8	7.9
17	6.8	10	8.0	4.0	5.0	4.0	4.0	17	17	11	4.4	9.0
18	6.8	10	10	4.0	4.0	4.0	4.0	20	16	11	4.4	11
19	6.8	8.3	7.0	4.0	4.0	6.0	4.0	22	16	11	4.2	11
20	6.8	7.5	6.0	4.0	3.0	8.0	4.0	22	15	9.0	4.2	11
21	6.8	7.2	6.0	4.0	3.0	7.0	4.0	22	14	9.0	4.2	11
22	7.5	7.2	6.0	4.0	3.0	6.0	4.0	23	14	9.0	4.6	11
23	8.3	7.5	6.0	4.0	3.0	5.0	4.0	24	13	10	4.4	11
24	7.5	7.9	6.0	4.0	3.0	4.0	4.0	24	13	9.0	4.4	11
25	7.9	7.5	6.0	4.0	3.0	4.0	4.0	24	13	8.6	4.4	11
26	8.3	12	6.0	5.0	3.0	4.0	5.0	31	13	8.3	4.4	11
27	7.9	9.6	5.0	7.0	3.0	4.0	5.0	38	13	7.9	4.2	11
28	8.3	8.3	5.0	6.0	3.0	4.0	5.0	38	13	7.9	4.4	13
29	7.9	7.9	5.0	5.0	---	4.0	5.0	40	12	8.6	4.4	13
30	7.9	7.5	5.0	5.0	---	4.0	5.0	40	16	7.2	4.6	12
31	7.9	---	5.0	5.0	---	4.0	---	47	---	7.2	4.6	---
TOTAL	213.2	281.8	204.4	139.0	190.0	129.0	119.0	608.0	777	331.7	158.0	238.4
MEAN	6.88	9.39	6.59	4.48	6.79	4.16	3.97	19.6	25.9	10.7	5.10	7.95
MAX	8.3	14	10	7.0	20	8.0	5.0	47	49	14	7.2	13
MIN	5.3	5.3	5.0	4.0	3.0	3.0	3.0	5.0	12	7.2	4.2	3.5
CFSM	1.76	2.40	1.68	1.14	1.73	1.06	1.01	5.00	6.61	2.73	1.30	2.03
IN.	2.02	2.67	1.94	1.32	1.80	1.22	1.13	5.77	7.37	3.15	1.50	2.26
AC-FT	423	559	405	276	377	256	236	1210	1540	658	313	473

CAL YR 1981 TOTAL 3485.9 MEAN 9.55 MAX 44 MIN 3.7 CFSM 2.44 IN 33.07 AC-FT 6910
WTR YR 1982 TOTAL 3389.5 MEAN 9.29 MAX 49 MIN 3.0 CFSM 2.37 IN 32.16 AC-FT 6720

15296545 EAST FORK UPPER THUMB RIVER NEAR LARSEN BAY

LOCATION.--Lat 57°19'51", long 153°55'22", in NW¼SE¼ sec.8, T.33 S., R.29 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on right bank about 500 ft (150 m) upstream from fish research camp 2.5 mi (4.0 km) upstream from confluence with North Fork and 15 mi (24 km) south of Larsen Bay.

DRAINAGE AREA.--8.99 mi² (23.2 km²).

PERIOD OF RECORD.--Water years 1979-82.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May 1979 to September 1982 (discontinued).

INSTRUMENTATION.--Temperature recorder since May 17, 1979.

REMARKS.--Records good. No record Nov. 3 to Dec. 2, Mar. 24 to May 19 due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 12.5°C Aug. 3, 1979 and Aug. 20, 1982; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 12.5°C Aug. 20; minimum, 0.5°C on many days during winter period, possibly colder during missing record periods in November.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

15296545 EAST FORK UPPER THUMB RIVER NEAR LARSEN BAY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1			---	---	7.5	3.0	7.5	5.5	9.5	7.5	9.5	7.5
2			---	---	6.5	4.0	7.0	5.5	11.5	7.0	8.5	6.5
3			---	---	8.0	3.0	6.5	5.5	11.0	6.5	9.0	6.5
4			---	---	5.0	4.0	6.5	5.5	12.0	6.5	8.5	5.5
5			---	---	4.0	3.5	7.5	5.0	10.0	7.0	8.0	7.5
6			---	---	5.0	3.5	8.0	5.5	10.0	7.0	8.0	7.0
7			---	---	6.0	4.0	9.5	6.0	10.5	8.0	8.5	6.5
8			---	---	7.0	3.5	10.0	6.5	9.5	6.5	8.5	7.0
9			---	---	6.5	4.0	9.5	6.5	10.5	6.5	8.0	7.5
10			---	---	6.0	4.0	9.0	6.5	10.0	7.5	8.0	7.0
11			---	---	5.5	4.0	11.0	6.5	11.0	7.5	8.0	5.5
12			---	---	6.0	4.0	9.0	6.5	11.0	6.0	8.0	6.0
13			---	---	5.5	4.0	7.5	6.5	11.5	8.0	8.0	7.5
14			---	---	6.5	4.0	8.0	6.5	10.5	8.0	8.5	7.0
15			---	---	6.0	4.0	8.0	6.5	8.5	7.5	8.5	7.0
16			---	---	7.5	3.5	9.0	7.0	9.0	7.0	7.0	6.5
17			---	---	6.5	4.0	8.0	6.5	9.5	7.5	7.5	7.0
18			---	---	6.5	5.0	8.0	6.5	9.5	7.5	7.5	6.5
19			---	---	6.0	5.0	12.0	6.5	11.5	7.0	6.5	6.5
20			6.0	4.5	8.5	4.5	11.5	6.5	12.5	7.5	7.5	6.0
21			6.0	3.5	7.5	5.0	8.5	7.5	10.5	7.0	7.5	6.0
22			8.0	2.5	7.0	5.0	9.5	7.0	11.0	8.0	6.0	5.0
23			4.5	3.5	6.5	5.0	9.0	8.0	9.5	8.5	5.5	5.0
24			5.0	3.5	8.0	5.5	10.0	8.0	8.5	8.0	5.5	5.5
25			6.0	3.0	9.0	6.0	10.5	8.5	9.0	8.0	6.5	5.5
26			5.0	3.0	8.0	6.0	10.0	8.0	11.0	7.5	6.0	5.5
27			3.5	3.0	6.5	5.5	10.5	8.0	8.5	6.5	5.5	4.5
28			4.5	3.0	6.0	5.0	9.0	8.0	10.0	8.0	6.5	5.5
29			5.0	3.5	6.0	5.0	9.0	8.0	9.5	8.0	6.0	5.5
30			5.5	3.0	6.5	5.0	8.5	8.0	8.5	8.0	5.5	5.0
31			8.0	4.0	---	---	10.5	7.0	9.0	7.5	---	---
MONTH			8.0	2.5	9.0	3.0	12.0	5.	12.5	6.0	9.5	4.5

15296525 UPPER THUMB RIVER NEAR LARSEN BAY

LOCATION.--Lat 57°21'03", long 153°58'04", in NE¼NE¼ sec.1, T.33 S., R.30 W., Kodiak Island Borough, Hydrologic Unit 19050001, Kodiak National Wildlife Refuge, on Kodiak Island, on right bank 0.2 mi (0.3 km) downstream from confluence of East and North Forks, 0.3 mi (0.5 km) upstream from mouth at Thumb Lake, and 13 mi (21 km) south of Larsen Bay.

DRAINAGE AREA.--18.8 mi² (48.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1974 to September 1982 (discontinued).

REVISED RECORDS.--WDR AK-80-1: 1974-79 (P).

GAGE.--Water-stage recorder. Altitude of gage is 380 ft (116 m), from topographic map.

REMARKS.--Water-discharge records fair except those for Oct. 7 to Apr 23, which are poor.

AVERAGE DISCHARGE.--8 years, 92.1 ft³/s (2.608 m³/s), 66.52 in/yr (1,690 mm/yr), 66,730 acre-ft/yr (82.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 988 ft³/s (28.0 m³/s), Oct. 21, 1980, gage height, 3.64 ft (1.109 m); minimum, 8.1 ft³/s (0.23 m³/s) Mar. 19 and Apr. 3, 1975, gage height, 0.53 ft (0.162 m).

EXTREMES FOR CURRENT YEAR.--Peaks above base of 400 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
June 5	1900	555	15.7	2.85	0.869	Sept. 18	0200	*615	17.4	*3.07	0.936
Sept. 15	1600	530	15.0	2.90	0.884						

Minimum daily discharge, about 26 ft³/s (0.74 m³/s) Feb. 24-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	48	150	42	130	30	35	41	234	152	64	37
2	37	46	110	41	200	29	34	41	250	155	59	36
3	36	44	80	39	150	29	33	42	234	155	54	36
4	35	54	70	38	135	29	32	43	278	155	49	34
5	33	62	60	37	120	28	31	49	435	148	42	53
6	32	72	57	36	110	29	31	60	475	135	39	53
7	31	84	55	34	100	29	32	67	366	133	38	56
8	30	100	54	33	92	29	33	106	296	122	41	46
9	32	150	52	32	84	30	34	162	282	110	40	45
10	35	250	51	80	82	30	35	135	282	99	39	45
11	38	160	50	70	72	32	37	106	250	86	38	43
12	50	180	58	60	64	36	38	90	213	78	36	50
13	70	200	64	50	58	40	39	81	188	71	36	68
14	95	170	74	60	52	50	40	77	170	70	35	85
15	140	130	90	70	47	60	42	90	160	67	34	388
16	100	100	120	64	43	70	44	100	148	70	34	275
17	70	94	205	56	39	80	46	110	142	62	34	313
18	50	86	133	50	35	90	48	100	145	58	33	460
19	60	80	100	47	32	100	50	90	158	58	33	314
20	70	74	82	44	30	84	49	100	152	59	33	275
21	90	70	100	42	28	74	48	114	160	60	33	326
22	130	64	150	40	27	68	46	116	158	59	34	268
23	180	60	130	43	27	62	44	129	142	99	33	213
24	250	56	110	46	26	56	49	124	158	83	32	185
25	190	54	90	50	26	52	50	112	178	93	32	170
26	140	52	78	54	28	48	50	200	172	83	31	178
27	110	62	66	58	33	43	48	322	168	75	31	152
28	90	78	54	63	32	39	42	282	205	70	32	155
29	70	120	46	68	---	37	42	225	170	83	33	140
30	60	200	45	74	---	36	42	213	162	78	39	129
31	50	---	44	80	---	35	---	219	---	71	39	---
TOTAL	2443	3000	2628	1601	1902	1484	1224	3746	6531	2897	1180	4628
MEAN	78.8	100	84.8	51.6	67.9	47.9	40.8	121	218	93.5	38.1	154
MAX	250	250	205	80	200	100	50	322	475	155	64	460
MIN	30	44	44	32	26	28	31	41	142	58	31	34
CFSM	4.19	5.32	4.51	2.75	3.61	2.55	2.17	6.44	11.6	4.97	2.03	8.19
IN.	4.83	5.94	5.20	3.17	3.76	2.94	2.42	7.41	12.92	5.73	2.33	9.16
AC-FT	4850	5950	5210	3180	3770	2940	2430	7430	12950	5750	2340	9180

CAL YR 1981	TOTAL 32283	MEAN 88.4	MAX 402	MIN 30	CFSM 4.70	IN 63.88	AC-FT 64030		
WTR YR 1982	TOTAL 33264	MEAN 91.1	MAX 475	MIN 26	CFSM 4.85	IN 65.82	AC-FT 65980		

NOTE.--No gage-height record Oct. 7 to Dec. 11 and Dec. 26 to Feb. 10.

15296550 UPPER THUMB RIVER NEAR LARSEN BAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-82.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1974 to July 1978 and May 1979 to September 1982 (discontinued).

INSTRUMENTATION.--Temperature recorder since July 27, 1974.

REMARKS.--Record good. No record periods Oct. 7 to Dec. 10, Dec. 26 to Apr. 5 and May 15 to 19 due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 14.0°C Aug. 16, 1974; minimum, 0.0°C Feb. 22-25, 1978 and probably at other times during winter-time periods of missing record.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 11.0°C July 11 and 19; minimum recorded, 1.0°C several days in April, but it probably was 0.0°C at times during periods of missing record.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

15296550 UPPER THUMB RIVER NEAR LARSEN BAY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	5.0	1.5	6.5	6.5	7.0	7.0	9.5	8.0	8.5	7.5
2	---	---	6.0	2.0	7.0	5.0	7.0	6.5	10.5	7.5	8.0	6.5
3	---	---	6.5	2.0	7.0	4.0	7.0	7.0	10.0	7.0	8.0	7.0
4	---	---	4.5	2.5	6.0	5.5	7.0	7.0	10.5	7.0	7.5	6.0
5	---	---	4.5	3.0	5.5	5.5	7.5	6.5	10.5	8.0	7.5	7.5
6	4.0	2.0	6.0	3.0	5.5	5.0	8.0	7.0	9.5	8.0	7.5	7.0
7	3.5	2.0	4.5	3.0	5.0	5.0	9.0	7.5	9.5	8.5	7.5	7.5
8	3.5	2.0	4.5	3.5	5.5	5.0	10.0	7.5	9.5	7.5	8.5	7.5
9	2.0	1.5	4.5	3.0	5.5	5.5	9.5	7.5	9.5	7.5	8.0	7.5
10	2.0	1.0	4.0	2.5	5.5	5.5	9.5	7.5	9.5	8.5	8.0	7.5
11	1.5	1.0	4.0	2.5	5.5	5.5	11.0	7.5	10.0	8.0	8.0	6.0
12	2.0	1.0	5.0	2.5	5.5	5.5	9.0	7.5	10.5	7.0	7.5	6.5
13	1.5	1.0	5.5	2.5	5.5	5.5	8.0	7.5	10.5	8.5	7.5	7.5
14	1.5	1.0	5.5	2.5	6.0	5.5	8.5	7.5	10.5	8.5	8.0	7.5
15	1.5	1.0	---	---	6.0	5.0	8.0	7.5	9.0	8.0	8.0	8.0
16	2.0	1.0	---	---	6.5	5.5	9.0	8.0	8.5	7.5	8.0	7.5
17	2.0	1.0	---	---	6.5	5.5	8.5	7.5	9.5	8.0	7.5	7.5
18	1.0	1.0	---	---	6.5	6.0	7.5	7.0	9.5	8.0	7.5	7.5
19	1.0	1.0	---	---	6.5	6.5	11.0	7.0	10.0	7.5	7.5	7.0
20	1.0	1.0	6.0	4.0	7.5	6.0	10.5	7.5	10.0	8.0	7.0	7.0
21	2.5	1.0	6.5	3.5	7.5	7.0	10.0	8.0	9.5	7.5	7.0	7.0
22	4.5	1.0	6.0	6.0	7.5	7.0	9.0	7.5	10.5	8.5	7.0	6.0
23	4.0	2.0	6.0	6.0	7.0	6.5	9.0	9.0	9.5	8.5	6.0	6.0
24	3.0	2.0	6.0	6.0	7.5	6.5	9.5	8.5	8.5	8.0	6.0	6.0
25	4.5	2.0	6.0	6.0	7.5	7.5	9.5	9.0	8.0	7.5	6.0	6.0
26	4.0	2.0	6.0	6.0	7.5	7.5	9.5	8.5	9.5	7.0	6.0	6.0
27	5.0	2.0	6.5	6.5	7.5	7.0	9.5	8.5	8.0	6.5	6.0	5.5
28	3.0	1.5	6.5	6.5	7.5	7.5	9.5	8.5	8.5	7.5	6.5	5.5
29	4.5	2.5	6.5	6.5	7.5	7.5	9.0	8.5	8.5	8.0	6.5	6.0
30	4.5	2.5	6.5	6.5	7.5	7.0	9.0	8.0	8.0	8.0	6.0	5.5
31	---	---	6.5	6.5	---	---	10.0	7.5	8.0	7.5	---	---
MONTH	5.0	1.0	6.5	1.5	7.5	4.0	11.0	6.5	10.5	6.5	8.5	5.5

15296554 THUMB RIVER NEAR LARSEN BAY

LOCATION.--Lat 57°21'26", long 153°59'41", in NW¼SE¼ sec.31, T.32 S., R.29 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on right bank 600 ft (180 m) upstream from mouth, 0.2 mi (0.3 km) downstream from Salmon Creek, 10.3 mi (0.5 km) downstream from Thumb Lake, and 12.5 mi (20.1 km) south of Larsen Bay.

DRAINAGE AREA.--25.3 mi² (65.5 km²).

PERIOD OF RECORD.--Water years 1979-82.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1979 to September 1982 (discontinued).

INSTRUMENTATION.--Temperature recorder since June 29, 1979.

REMARKS.--Records good. No record Oct. 9 to Feb. 10 and May 14 to July 1 due to equipment malfunction. Temperature measurements obtained on Mar. 2, and May 20 indicated a maximum variation of 1.2°C within the cross section. Discharge measurements made during the year are listed with those made at miscellaneous sites.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 25.0°C Aug. 25, 1979; minimum, 0.0°C on several days during winter.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 17.0°C Aug. 13; minimum recorded 0.5°C on several days during winter, but may have been 0.0°C during periods of no record.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE (DEG C)
MAR					
02...	1420	48.0	10.0	34	3.2
02...	1421	--	19.0	--	3.2
02...	1422	--	26.0	--	3.0
02...	1423	--	32.0	--	3.2
02...	1424	--	37.0	--	3.2
02...	1425	--	43.0	--	3.2
MAY					
20...	1435	54.0	8.00	110	7.0
20...	1436	--	14.0	--	7.2
20...	1437	--	18.0	--	7.5
20...	1438	--	26.0	--	7.8
20...	1439	--	34.0	--	8.0
20...	1440	--	42.0	--	8.2

152996554 THUMB RIVER NEAR LARSEN BAY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.5	1.0	8.5	4.0			---	---	12.5	11.0	14.5	11.5
2	4.5	1.0	9.0	4.5			8.0	7.5	14.5	10.5	13.0	10.5
3	5.0	1.0	9.5	4.5			8.0	7.5	15.5	11.0	14.0	10.5
4	4.5	1.0	8.0	4.5			8.5	7.5	16.5	11.5	13.0	9.5
5	4.5	2.0	7.0	4.5			9.5	7.5	16.0	12.5	12.0	11.0
6	5.5	2.0	9.5	5.0			10.0	7.5	15.5	13.0	12.5	11.0
7	6.5	3.0	7.5	5.5			11.0	8.0	15.0	12.0	12.0	10.5
8	6.0	4.0	7.5	5.5			11.5	8.5	16.0	12.0	13.5	10.0
9	7.0	3.5	6.5	5.0			12.0	9.5	15.5	11.5	11.5	11.0
10	5.0	3.0	6.5	5.0			12.0	10.0	16.0	12.5	12.0	10.5
11	6.0	2.0	7.0	5.0			12.5	10.0	14.5	12.0	13.0	9.0
12	6.0	2.5	7.5	5.0			12.5	10.5	16.0	11.0	11.5	9.5
13	7.0	2.5	7.0	5.0			12.0	11.0	17.0	13.0	11.5	10.5
14	5.5	2.0	---	---			12.0	10.5	14.5	12.0	11.5	10.5
15	3.5	1.0	---	---			11.5	10.0	13.0	11.0	11.0	10.5
16	5.0	1.0	---	---			11.5	10.0	12.5	11.0	11.0	10.0
17	5.0	1.0	---	---			12.0	10.0	13.5	11.5	10.5	9.0
18	5.5	1.0	---	---			11.0	9.5	15.0	11.0	9.5	9.0
19	2.0	1.0	---	---			13.5	9.5	---	---	9.5	9.0
20	4.0	1.0	---	---			14.0	10.5	---	---	9.0	8.0
21	6.5	1.5	---	---			12.0	11.5	---	---	8.5	8.0
22	7.0	1.5	---	---			13.0	11.0	16.5	12.5	8.5	7.0
23	6.0	2.5	---	---			13.0	11.0	14.0	13.0	8.0	7.0
24	6.0	2.5	---	---			13.5	11.5	13.0	12.0	8.0	7.0
25	6.0	3.0	---	---			14.0	12.5	13.0	12.0	---	---
26	6.0	4.0	---	---			14.0	12.0	16.0	11.5	---	---
27	7.5	4.0	---	---			14.5	12.5	13.5	11.0	---	---
28	6.0	4.0	---	---			13.5	12.5	14.0	12.0	---	---
29	7.0	4.0	---	---			12.5	11.5	13.0	12.0	---	---
30	8.5	4.5	---	---			12.0	11.0	12.0	11.5	---	---
31	---	---	---	---			13.5	11.0	13.0	11.0	---	---
MONTH	8.5	1.0	9.5	4.0			14.5	7.5	17.0	10.5	14.5	7.0
YEAR	17.0	.5										

15296600 KARLUK RIVER AT OUTLET NEAR LARSEN BAY

LOCATION.--Lat 57°26'37", long 154°06'41", in NW¼SW¼ sec.33, T.31 S., R.30 W., Kodiak Island Borough, Hydrologic Unit 19050001, Kodiak National Wildlife Refuge, Kodiak Island, on right bank 0.3 mi (0.5 km) downstream from Karluk Lake and 5.0 mi (8.0 km) south of Larsen Bay.

DRAINAGE AREA.--100 mi² (259 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1975 to September 1976, October 1978 to September 1982 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 360 ft (110 m), from topographic map.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--5 years, (water years 1976, 1979-82), 418 ft³/s (11.84 m³/s), 56.82 in/yr, (1,443 mm/yr), 303,100 acre-ft/yr (374 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,760 ft³/s (49.8 m³/s) Nov. 11, 1979, gage height, 2.33 ft (0.710 m), affected by seiche; minimum, 84 ft³/s (2.38 m³/s) Sept. 16, 1979 and Dec. 29, 1980, gage height, 0.78 ft (0.238 m), affected by seiche.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,340 ft³/s (37.9 m³/s) Sept. 20, gage height, 2.11 ft (0.643 m), affected by seiche; minimum, 156 ft³/s (4.42 m³/s) Oct. 10, gage height, 0.99 ft (0.302 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	340	560	326	240	252	277	200	665	756	560	228
2	216	340	560	312	252	252	270	200	676	756	540	222
3	210	326	550	305	270	246	258	195	709	744	530	210
4	200	319	530	291	298	234	246	190	780	756	520	210
5	195	305	492	270	326	222	234	190	854	768	510	228
6	190	298	465	258	340	210	228	200	1060	744	492	246
7	180	340	447	246	356	205	210	205	1180	720	474	252
8	175	372	438	228	364	200	210	216	1230	698	465	252
9	170	396	420	222	356	210	210	240	1230	676	456	252
10	170	447	396	222	356	222	210	258	1230	665	447	246
11	185	474	380	222	348	216	205	270	1190	654	438	240
12	190	474	380	222	340	216	200	291	1160	632	412	246
13	195	483	388	216	340	216	205	291	1110	621	404	264
14	200	483	388	216	326	210	200	298	1040	610	388	270
15	205	483	380	216	310	205	200	298	996	580	372	404
16	210	474	396	222	310	216	200	305	952	570	340	510
17	216	465	447	222	310	270	200	319	882	560	333	632
18	216	447	483	216	300	291	195	319	828	540	319	840
19	222	429	483	210	300	333	185	340	816	520	312	966
20	222	412	483	205	290	348	200	333	780	510	298	1060
21	228	396	456	205	300	364	195	340	768	501	277	1270
22	240	380	474	200	310	380	195	348	768	501	277	1250
23	277	380	465	195	310	372	195	356	732	540	298	1250
24	284	388	447	195	320	356	195	380	709	540	291	1230
25	305	388	438	190	319	340	195	388	709	550	270	1160
26	340	438	412	190	298	333	195	429	709	570	252	1110
27	356	474	396	200	284	319	200	492	732	570	234	1040
28	364	492	372	210	270	319	200	550	756	570	228	1030
29	364	510	356	230	---	305	200	590	744	580	234	966
30	356	540	340	240	---	305	200	621	756	570	246	896
31	356	---	340	240	---	284	---	632	---	570	234	---
TOTAL	7465	12493	13562	7142	8743	8451	6313	10284	26751	19142	11451	18980
MEAN	241	416	437	230	312	273	210	332	892	617	369	633
MAX	364	540	560	326	364	380	277	632	1230	768	560	1270
MIN	170	298	340	190	240	200	185	190	665	501	228	210
CFSM	2.41	4.16	4.37	2.30	3.12	2.73	2.10	3.32	8.92	6.17	3.69	6.33
IN.	2.78	4.65	5.05	2.66	3.25	3.14	2.35	3.83	9.95	7.12	4.26	7.06
AC-FT	14810	24780	26900	14170	17340	16760	12520	20400	53060	37970	22710	37650

CAL YR 1981 TOTAL 138274 MEAN 379 MAX 882 MIN 140 CFSM 3.79 IN 51.44 AC-FT 274300
WTR YR 1982 TOTAL 150777 MEAN 413 MAX 1270 MIN 170 CFSM 4.13 IN 56.09 AC-FT 299100

15296600 KARLUK RIVER AT OUTLET NEAR LARSEN BAY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-76 and 1979 to current year (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: August 1975 to September 1976 and November 1978 to current year.

INSTRUMENTATION.--Temperature recorder Aug. 21, 1975 to Sept. 30, 1976, and Nov. 17, 1978 to current year.

REMARKS.--Records good. Records represent water temperature at the sensor within 0.5°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 17.5°C, Aug. 4, 1980; minimum, 1.0°C, Feb. 15-27, Dec. 24-26, 31, 1979 and Jan. 1 to Feb. 1, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 14.0°C, July 20 and Aug. 20-23, 26; minimum, 1.5°C, Jan. 27-31 and Feb. 16-25.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

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

15296600 KARLUK RIVER AT OUTLET NEAR LARSEN BAY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.0	2.5	4.0	2.5	6.0	5.0	7.5	7.5	10.0	9.0	11.5	11.0
2	3.0	2.5	4.0	2.5	6.0	5.0	8.0	7.0	11.5	9.5	11.5	11.5
3	3.0	2.5	4.0	3.0	5.0	5.0	7.5	7.5	11.5	10.5	11.5	11.5
4	2.5	2.5	4.0	2.5	5.5	5.0	7.5	7.0	12.0	10.5	11.5	11.5
5	2.5	2.5	3.5	3.0	5.5	5.0	8.0	7.5	11.0	10.0	11.5	11.5
6	3.0	2.5	3.5	3.0	5.5	5.0	9.5	7.5	11.5	10.0	11.5	11.5
7	3.0	2.0	3.5	3.0	6.0	6.0	9.5	8.0	10.0	8.5	11.5	11.5
8	3.0	2.5	3.5	3.0	5.0	5.0	8.5	7.5	9.0	8.0	11.5	11.5
9	2.5	2.0	5.0	3.0	5.0	5.0	8.5	7.0	12.5	9.0	12.0	11.5
10	2.5	2.0	4.0	3.0	6.0	5.0	7.5	6.5	12.5	12.0	11.5	11.5
11	2.5	2.0	4.0	3.0	6.0	6.0	7.5	6.5	12.0	11.5	11.5	11.5
12	3.0	2.0	4.5	3.0	6.5	6.0	9.0	7.0	13.0	11.5	11.5	11.5
13	3.0	2.0	4.5	3.0	6.5	6.0	9.5	8.5	12.5	12.0	11.5	11.5
14	2.5	2.5	4.0	3.5	6.0	6.0	10.0	9.5	12.5	12.0	11.5	11.5
15	2.5	2.0	4.5	3.5	6.0	6.0	10.0	9.5	12.0	10.0	11.5	11.5
16	3.0	2.0	4.5	3.5	6.5	6.0	10.0	9.0	10.5	9.5	11.0	11.0
17	3.0	2.0	5.0	4.0	6.5	6.5	10.0	9.0	11.0	10.0	11.0	11.0
18	3.0	2.0	5.0	4.5	6.5	6.0	9.5	8.0	11.0	10.0	11.0	11.0
19	2.0	2.0	5.0	4.0	6.0	5.5	11.0	8.0	11.5	11.0	11.0	11.0
20	2.5	2.0	5.0	4.0	7.0	5.5	14.0	10.0	14.0	11.5	11.0	10.5
21	3.0	2.0	4.5	4.0	8.0	6.5	13.0	11.0	14.0	13.0	10.5	10.5
22	3.0	2.0	5.0	4.0	7.5	6.5	11.0	11.0	14.0	12.5	10.5	10.5
23	3.0	2.0	5.0	4.0	7.5	6.5	11.0	10.5	14.0	13.5	10.5	10.0
24	3.5	2.5	4.5	4.5	7.0	6.5	12.0	10.5	13.5	13.0	10.0	10.0
25	3.0	2.5	5.0	4.5	7.0	6.5	11.5	11.0	13.0	13.0	10.0	10.0
26	3.0	2.0	5.0	5.0	8.5	7.0	12.0	11.0	14.0	12.5	10.0	10.0
27	3.5	2.5	5.5	4.5	8.5	8.0	12.5	11.5	12.5	12.5	10.0	10.0
28	3.0	2.5	4.5	4.5	8.0	7.5	12.0	11.5	12.5	11.5	10.0	9.0
29	3.0	2.5	5.0	4.5	7.5	7.0	11.5	11.0	12.5	11.5	9.5	9.5
30	4.0	2.5	5.0	4.5	7.5	7.5	11.0	10.0	11.5	11.0	9.5	9.5
31	---	---	5.0	4.5	---	---	10.0	9.0	11.0	11.0	---	---
MONTH	4.0	2.0	5.5	2.5	8.5	5.0	14.0	6.5	14.0	8.0	12.0	9.0
YEAR	14.0	1.5										

15297200 MYRTLE CREEK NEAR KODIAK

LOCATION.--Lat 57°36'12", long 152°24'12", in NE¼SW¼ sec.6, T.30 S., R.19 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on left bank 0.1 mi (0.2 km) upstream from bridge, 0.3 mi (0.5 km) upstream from mouth, and 13 mi (21 km) south of Kodiak.

DRAINAGE AREA.--4.74 mi² (12.28 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), from topographic map. Prior to Apr. 4, 1977 at site 200 ft (60 m) downstream on right bank at same datum.

REMARKS.--Records fair except those for the periods of no gage height record, Dec. 27 to Jan 31 and Feb. 11 to Apr. 20, which are poor. Periodic high tides cause backwater at the gage and are shown on the stage record. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--19 years, 46.0 ft³/s (1.303 m³/s), 131.79 in/yr (3,347 mm/yr), 33,330 acre-ft/yr (41.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft³/s (38.2 m³/s) Jan. 3, 1977, gage height, 5.61 ft (1.710 m) site then in use, 6.93 ft (2.112 m) from floodmarks at present site, from rating curve extended above 400 ft³/s (11.3 m³/s) on the basis of slope-area measurement of peak flow; maximum gage height, 8.40 ft (2.560 m) Mar. 28, 1964, at site then in use, tidal wave caused by earthquake; minimum daily discharge, about 1.0 ft³/s (0.028 m³/s) Mar. 3-18, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft³/s (16 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 20	1300	640	18.1	5.10	1.554	Sept. 15	1100	695	19.7	5.26	1.603
Feb. 2	1200	603	17.1	4.99	1.521	Sept. 18	0100	716	20.3	5.32	1.622
May 26	1530	*734	20.8	*5.37	1.637						

Minimum daily discharge, about 2.0 ft³/s (0.057 m³/s) Feb. 26 to Mar. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	13	62	7.0	36	2.0	9.9	18	48	81	5.0	6.7
2	9.7	11	37	6.0	347	2.0	10	18	49	140	4.8	6.7
3	9.4	11	30	5.0	209	2.0	14	15	41	209	4.2	6.4
4	9.0	10	25	4.0	117	3.0	14	15	39	270	4.2	7.0
5	8.7	10	20	4.0	72	3.0	14	229	146	87	4.2	81
6	8.4	14	40	4.0	70	3.0	15	95	109	53	4.5	54
7	8.0	45	20	4.0	57	4.0	20	53	61	44	8.0	30
8	7.7	48	20	10	39	4.0	15	56	45	36	7.3	24
9	7.7	75	60	60	32	8.0	10	79	61	36	6.4	33
10	8.0	246	20	40	24	10	30	49	162	31	6.4	56
11	10	166	100	30	20	20	20	39	178	26	6.2	33
12	10	236	60	40	17	15	10	39	84	22	5.9	82
13	9.7	136	60	30	15	15	10	30	57	20	5.9	150
14	48	132	130	70	13	15	15	25	47	18	5.6	86
15	68	78	79	110	11	15	30	23	38	17	5.6	352
16	37	48	226	70	9.0	15	10	22	31	16	5.3	117
17	28	33	124	40	7.0	20	9.0	23	31	14	5.0	147
18	23	27	78	30	6.0	30	8.0	35	57	12	4.8	237
19	20	23	48	25	5.0	100	7.0	34	49	11	4.5	81
20	271	20	32	20	5.0	30	7.0	33	38	10	4.5	144
21	107	18	26	30	4.0	20	7.0	32	185	9.7	6.4	218
22	70	16	75	25	3.0	15	8.7	31	56	9.0	9.0	68
23	76	15	53	20	3.0	30	16	73	87	8.7	7.0	41
24	48	19	33	15	3.0	30	107	57	144	8.0	6.7	29
25	34	15	25	20	3.0	20	35	47	78	7.7	6.4	43
26	26	17	19	30	2.0	15	29	331	54	7.0	6.4	57
27	23	21	17	15	2.0	12	30	162	76	6.7	6.4	35
28	20	19	15	10	2.0	11	20	81	122	6.4	6.7	81
29	17	24	12	10	---	10	18	59	120	6.4	6.7	56
30	15	130	10	20	---	10	17	56	170	5.6	6.2	35
31	14	---	9.0	30	---	9.0	---	50	---	5.3	6.2	---
TOTAL	1061.3	1676	1565.0	834.0	1133.0	498.0	564.7	1909	2463	1233.5	182.4	2396.8
MEAN	34.2	55.9	50.5	26.9	40.5	16.1	18.8	61.6	82.1	39.8	5.88	79.9
MAX	271	246	226	110	347	100	107	331	185	270	9.0	352
MIN	7.7	10	9.0	4.0	2.0	2.0	7.0	15	31	5.3	4.2	6.4
CFSM	7.22	11.8	10.7	5.68	8.54	3.40	3.97	13.0	17.3	8.40	1.24	16.9
IN.	8.33	13.15	12.28	6.54	8.89	3.91	4.43	14.98	19.33	9.68	1.43	18.81
AC-FT	2110	3320	3100	1650	2250	988	1120	3790	4890	2450	362	4750

CAL YR 1981 TOTAL 18673.9 MEAN 51.2 MAX 507 MIN 4.3 CFSM 10.8 IN 146.52 AC-FT 37040
WTR YR 1982 TOTAL 15516.7 MEAN 42.5 MAX 352 MIN 2.0 CFSM 8.97 IN 121.75 AC-FT 30780

15297482 FALLS CREEK NEAR PORT LIONS

LOCATION.--Lat 57°40'08", long 152°56'00", Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, in Kodiak National Wildlife Refuge, on left bank 0.5 mi (0.8 km) upstream from Shotgun Creek, 1.6 mi (2.6 km) upstream from mouth, and 14 mi (22 km) south of Port Lions.

DRAINAGE AREA.--4.3 mi² (11.2 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,500 ft (460 m), from topographic map.

REMARKS.--Records fair except those for Oct. 18 to May 19 and Sept. 9-30, which are poor. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 858 ft³/s (24.3 m³/s) Sept. 14, 1981, gage height, 6.20 ft (1.890 m), from rating curve extended above 100 ft³/s (2.8 m³/s), but may have been higher Oct. 21, 1980, during period of no gage-height record; minimum daily, about 3 ft³/s (0.08 m³/s) Apr. 1-20, 1981 and Apr. 2-9, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 640 ft³/s (18.1 m³/s) Sept. 15, based on runoff comparisons with nearby stations; minimum daily, about 3.0 ft³/s (0.08 m³/s) Apr. 2-9.

REVISIONS.--Revised daily discharge, in cubic feet per second, for October 1-22, 1980, are given below. They supersede those published in the report for 1981.

Oct. 1	55	Oct. 7	30	Oct. 13	12	Oct. 18	75
2	40	8	25	14	25	19	60
3	30	9	15	15	23	20	50
4	25	10	10	16	40	21	700
5	20	11	8	17	60	22	180
6	25	12	6				

Monthly	Cfs-day	Mean	Maximum	Minimum	Per square mile	Runoff in Inches	Runoff in Acre-feet
October 1980	1,856	59.9	700	6.0	13.9	16.05	3,680
WTR YR 1981	17,949	49.2	700	3.0	11.4	155.24	35,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	20	25	9.0	20	8.0	4.0	6.0	63	130	32	18
2	14	19	17	8.0	27	8.0	3.0	6.0	73	194	30	16
3	13	18	12	8.0	37	8.0	3.0	6.0	66	230	28	15
4	12	16	12	7.0	50	7.0	3.0	6.0	60	370	27	15
5	12	15	11	7.0	46	7.0	3.0	7.0	100	160	26	41
6	11	14	11	8.0	42	7.0	3.0	7.0	200	125	24	33
7	10	25	10	9.0	38	7.0	3.0	7.0	170	150	72	31
8	9.8	35	10	9.0	35	7.0	3.0	8.0	140	119	48	33
9	10	40	9.0	10	32	6.0	3.0	8.0	120	132	37	42
10	9.4	260	9.0	11	29	6.0	4.0	8.0	170	132	36	60
11	10	100	12	12	26	6.0	4.0	8.0	150	105	32	46
12	11	140	15	13	24	6.0	4.0	8.0	120	94	27	36
13	12	110	20	14	23	6.0	4.0	7.0	100	89	27	70
14	18	90	24	15	22	6.0	4.0	7.0	82	89	33	100
15	22	70	20	17	21	6.0	4.0	7.0	71	89	26	640
16	17	62	28	18	20	5.0	4.0	7.0	62	114	22	100
17	12	56	40	20	19	5.0	4.0	7.0	56	80	20	170
18	15	50	35	19	18	5.0	4.0	6.0	74	76	18	460
19	20	45	30	18	17	5.0	4.0	6.0	110	112	17	100
20	70	40	26	16	16	5.0	4.0	6.3	120	100	16	100
21	60	35	22	15	15	5.0	4.0	6.3	150	107	18	150
22	50	30	19	14	14	5.0	4.0	7.4	180	91	25	80
23	60	27	17	13	13	5.0	4.0	7.9	160	157	28	70
24	45	24	15	12	12	4.0	5.0	7.9	201	109	26	60
25	36	22	13	12	11	4.0	5.0	8.6	301	107	24	50
26	34	28	12	12	10	4.0	5.0	20	301	94	22	54
27	31	34	12	12	9.0	4.0	5.0	46	257	83	20	46
28	28	30	11	12	9.0	4.0	5.0	45	271	70	23	60
29	26	30	10	12	---	4.0	5.0	44	174	82	27	48
30	24	34	10	12	---	4.0	6.0	49	160	56	22	40
31	22	---	9.0	16	---	4.0	---	56	---	39	19	---
TOTAL	738.2	1519	526.0	390.0	655.0	173.0	120.0	436.4	4262	3685	852	2784
MEAN	23.8	50.6	17.0	12.6	23.4	5.58	4.00	14.1	142	119	27.5	92.8
MAX	70	260	40	20	50	8.0	6.0	56	301	370	72	640
MIN	9.4	14	9.0	7.0	9.0	4.0	3.0	6.0	56	39	16	15
CFSM	5.54	11.8	3.95	2.93	5.44	1.30	.93	3.28	33.0	27.7	6.40	21.6
IN.	6.38	13.14	4.55	3.37	5.67	1.50	1.04	3.77	36.86	31.87	7.37	24.08
AC-FT	1460	3010	1040	774	1300	343	238	866	8450	7310	1690	5520

CAL YR 1981 TOTAL 18399.2 MEAN 50.4 MAX 462 MIN 3.0 CFSM 11.7 IN 159.14 AC-FT 36490
WTR YR 1982 TOTAL 16140.6 MEAN 44.2 MAX 640 MIN 3.0 CFSM 10.3 IN 139.60 AC-FT 32010

NOTE.--No gage-height record Mar. 11 to May 19 and Sept. 9 to 30.

15297485 KIZHUYAK RIVER NEAR PORT LIONS

LOCATION.--Lat 57°42'38", long 152°52'06", in NE¼NE¼ sec.32, T.26 S., R.22 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on right bank 1.3 mi (2.1 km) upstream from mouth at Kizhuyak Bay and 10.8 mi (17.4 km) south of Port Lions.

DRAINAGE AREA.--27.5 mi² (71.2 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 15 ft (4.6 m), from topographic map.

REMARKS.--Water-discharge records fair except those for the period of no gage height record, Nov. 27 to May 27, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,430 ft³/s (154 m³/s) Sept. 26, 1980, gage height, 10.65 ft (3.246 m), from rating curve extended above 700 ft³/s (19.8 m³/s) on basis of slope-area measurement at gage height 10.60 ft (3.231 m); minimum daily, about 1.0 ft³/s (0.028 m³/s) Feb. 27 to Mar. 4 and Mar. 11-16, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 4,550 ft³/s (129 m³/s) Sept. 17, gage height, 10.22 ft (3.115 m); from rating curve extended as explained above; minimum daily, about 1.0 ft³/s (0.028 m³/s) Feb. 27 to Mar. 4 and Mar. 11-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	46	80	28	90	1.0	5.0	40	493	584	122	26
2	51	42	70	27	130	1.0	5.0	44	562	795	113	26
3	49	40	62	26	180	1.0	5.0	40	534	966	99	22
4	44	37	56	25	240	1.0	5.0	44	493	1380	88	21
5	40	31	52	24	210	1.5	5.0	50	813	683	80	210
6	39	30	49	23	190	2.0	6.0	80	939	486	78	181
7	37	84	47	22	170	2.0	8.0	70	723	569	422	130
8	33	160	46	22	150	2.0	9.0	80	577	448	273	155
9	30	168	44	23	140	2.0	8.0	100	514	534	172	113
10	28	1220	42	25	130	2.0	7.0	90	659	548	130	208
11	26	528	46	34	120	1.0	8.0	80	651	410	96	116
12	26	667	60	50	100	1.0	9.0	70	521	350	78	105
13	26	493	80	60	90	1.0	10	70	422	344	68	228
14	26	350	100	72	70	1.0	12	70	361	338	110	163
15	35	242	90	86	50	1.0	14	70	344	350	78	1220
16	66	186	130	90	30	1.0	16	70	333	486	66	577
17	68	142	170	94	20	2.0	15	74	327	327	54	1010
18	61	119	130	80	15	4.0	17	78	441	268	47	1170
19	54	102	120	70	10	8.0	19	82	548	428	42	422
20	311	88	100	60	7.0	10	21	80	493	416	34	338
21	274	78	82	56	5.0	15	23	100	659	404	32	486
22	218	68	70	54	3.0	15	25	250	715	344	66	262
23	269	62	60	52	2.0	12	27	200	598	613	90	190
24	184	56	44	50	2.0	10	40	170	731	428	88	142
25	142	52	40	49	2.0	8.0	50	350	849	404	83	119
26	117	50	38	48	2.0	7.0	44	700	912	333	73	163
27	95	110	36	48	1.0	7.0	50	600	813	356	56	108
28	82	96	34	49	1.0	6.0	44	454	957	310	47	223
29	68	90	32	50	---	6.0	37	367	707	338	56	186
30	56	110	30	54	---	6.0	37	410	804	237	50	130
31	51	---	29	64	---	6.0	---	480	---	159	30	---
TOTAL	2662	5547	2069	1515	2160.0	143.5	581.0	5463	18493	14636	2921	8450
MEAN	85.9	185	66.7	48.9	77.1	4.63	19.4	176	616	472	94.2	282
MAX	311	1220	170	94	240	15	50	700	957	1380	422	1220
MIN	26	30	29	22	1.0	1.0	5.0	40	327	159	30	21
CFSM	3.12	6.73	2.43	1.78	2.80	.17	.71	6.40	22.4	17.2	3.43	10.3
IN.	3.60	7.50	2.80	2.05	2.92	.19	.79	7.39	25.02	19.80	3.95	11.43
AC-FT	5280	11000	4100	3010	4280	285	1150	10840	36680	29030	5790	16760

CAL YR 1981 TOTAL 84375.8 MEAN 231 MAX 1930 MIN 2.0 CFSM 8.40 IN 114.13 AC-FT 167400
WTR YR 1982 TOTAL 64640.5 MEAN 177 MAX 1380 MIN 1.0 CFSM 6.44 IN 87.44 AC-FT 128200

15297485 KIZHUYAK RIVER NEAR PORT LIONS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1980 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: April 1980 to March 1981, October 1981 to September 1982 (fragmentary).

INSTRUMENTATION.--Temperature recorder since April 9, 1980.

REMARKS.--Records good. No record Oct. 16 to 20 and Oct. 29 to May 20 due to equipment malfunction. Records represent water temperature at sensor within 0.5°C. Temperature measurements obtained on Feb. 10 and Sept. 8 indicated a maximum variation of 0.2°C in the cross section.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 10.5°C Aug. 5, 1980 and July 27, 1982; minimum, 0.5°C Dec. 31, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 10. 5°C July 27; minimum recorded, 1.5°C May 25 and June 4; may have been colder during winter missing record period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM WIDTH (FT)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE (DEG C)
FEB					
10...	1000	60.0	13.0	131	1.6
10...	1001	--	21.0	--	1.4
10...	1002	--	27.0	--	1.4
10...	1003	--	35.0	--	1.4
10...	1004	--	41.0	--	1.4
10...	1005	--	49.0	--	1.6
SEP					
08...	1618	60.0	--	99	--
08...	1620	--	.00	--	8.2
08...	1621	--	15.0	--	8.2
08...	1622	--	30.0	--	8.2
08...	1623	--	45.0	--	8.2
08...	1624	--	60.0	--	8.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.0	6.0										
2	7.5	6.0										
3	6.0	6.0										
4	7.0	6.0										
5	6.5	5.5										
6	6.5	5.5										
7	6.5	6.0										
8	6.5	6.5										
9	7.5	6.5										
10	7.5	6.0										
11	7.5	6.5										
12	7.5	7.0										
13	7.5	7.0										
14	7.5	6.0										
15	7.0	6.0										
16	---	---										
17	---	---										
18	---	---										
19	---	---										
20	---	---										
21	7.0	6.0										
22	6.0	6.0										
23	7.5	6.0										
24	7.0	5.5										
25	6.5	5.5										
26	6.0	6.0										
27	6.0	6.0										
28	6.0	5.5										
29	---	---										
30	---	---										
31	---	---										
MONTH	7.5	5.5										

15297485 KIZHUYAK RIVER NEAR PORT LIONS--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1			---	---	5.5	2.5	6.0	4.0	8.5	5.5	6.5	5.5
2			---	---	5.5	2.5	5.0	4.0	8.5	5.5	6.5	5.5
3			---	---	5.5	2.0	5.5	3.5	9.0	5.5	7.0	5.5
4			---	---	5.0	1.5	5.0	3.5	8.5	6.0	6.0	5.0
5			---	---	5.0	3.0	6.0	3.5	7.5	6.0	7.0	5.5
6			---	---	4.5	3.0	6.5	4.0	6.5	5.5	7.0	5.5
7			---	---	5.0	3.0	7.0	4.5	7.5	6.5	7.5	6.0
8			---	---	4.5	3.0	7.0	4.5	7.5	6.0	8.0	6.5
9			---	---	4.5	3.0	6.0	4.5	8.0	5.5	7.0	6.0
10			---	---	4.5	3.0	6.5	4.5	8.0	6.5	8.0	6.5
11			---	---	4.5	3.0	7.5	4.0	8.0	6.0	8.0	6.0
12			---	---	4.5	2.5	7.5	4.5	8.5	5.5	8.0	6.0
13			---	---	4.5	2.5	7.0	4.5	8.5	5.5	8.5	7.0
14			---	---	4.5	3.0	7.0	5.0	9.0	6.5	8.0	6.5
15			---	---	4.5	3.0	6.0	4.5	8.5	6.0	9.5	7.5
16			---	---	5.5	2.5	7.5	4.5	8.0	5.5	7.5	6.0
17			---	---	4.0	3.0	6.5	4.5	7.5	5.5	8.0	7.0
18			---	---	4.0	3.0	7.5	5.0	7.0	5.5	8.0	7.0
19			---	---	4.5	3.0	10.0	5.0	7.0	5.0	7.5	7.0
20			3.5	2.0	6.0	3.0	8.5	5.5	7.0	5.5	8.0	7.0
21			4.5	2.0	5.0	3.0	6.5	5.5	6.5	5.5	8.0	6.5
22			5.0	2.0	5.0	3.0	9.0	5.0	7.5	5.5	7.5	6.0
23			3.0	2.5	4.0	3.0	9.0	6.5	7.5	6.5	7.5	6.0
24			3.5	2.0	5.0	3.0	10.0	6.0	8.0	6.0	7.5	6.0
25			5.0	1.5	6.0	4.0	9.0	6.5	7.0	6.0	7.0	6.5
26			4.0	2.0	5.5	3.5	10.0	6.5	8.0	5.5	7.5	6.5
27			4.0	2.0	5.0	3.5	10.5	6.5	7.0	5.5	7.0	6.0
28			5.0	2.0	4.5	3.5	8.0	6.5	7.0	5.5	7.5	6.5
29			4.0	2.5	5.0	3.5	10.0	6.5	8.0	6.0	7.5	6.5
30			6.0	2.5	5.5	3.5	9.0	6.0	7.5	6.0	7.5	6.0
31			5.5	2.5	---	---	9.0	5.5	6.5	5.5	---	---
MONTH					6.0	1.5	10.5	3.5	9.0	5.0	9.5	5.0

15297610 RUSSELL CREEK NEAR COLD BAY

LOCATION.--Lat 55°10'50", long 162°41'08", Hydrologic Unit 19040003, on left bank 0.2 mi (0.3 km) northeast of Russell Creek Fish Hatchery, 1.5 mi (2.4 km) upstream from mouth, and 2.5 mi (4.0 km) southeast of Cold Bay.

DRAINAGE AREA.--25 mi² (65 km²), approximately.

PERIOD OF RECORD.--October 1981 to September 1982.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 3.55 ft (1.082 m) National Geodetic Vertical Datum of 1929 (levels by private engineering firm).

REMARKS.--Records poor prior to Apr. 28, fair thereafter. Some water diverted through hatchery and returned to the stream upstream from gage.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 6,000 ft³/s (170 m³/s) Oct. 22 gage height, 11.19 ft (3.411 m), estimate of peak flow by slope-area methods; minimum daily about 50 ft³/s (1.42 m³/s) Feb. 19-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	180	200	146	529	80	100	107	330	280	310	238
2	160	190	200	142	703	90	110	109	350	581	310	212
3	160	200	200	134	722	90	110	105	349	439	313	200
4	180	250	190	130	456	90	140	105	492	331	295	215
5	180	350	190	110	550	100	160	105	625	304	289	414
6	200	500	190	90	720	100	200	120	345	369	283	1100
7	200	350	190	70	670	122	180	175	310	328	310	717
8	160	250	450	90	555	155	170	852	271	292	274	434
9	160	200	500	120	413	104	150	413	271	280	295	385
10	160	250	400	150	341	98	140	277	434	259	271	307
11	190	330	320	250	292	102	120	229	324	295	256	271
12	190	400	260	400	289	90	100	200	298	338	286	319
13	500	500	220	420	271	93	90	192	256	876	452	511
14	400	400	187	430	243	115	95	180	235	510	301	430
15	300	250	161	447	100	123	100	166	226	550	250	497
16	300	200	135	575	80	295	100	268	223	369	223	827
17	250	200	130	744	60	197	100	210	226	317	215	971
18	200	200	130	799	55	259	100	190	217	365	192	580
19	350	187	130	787	50	244	100	177	215	317	182	470
20	600	177	125	915	50	232	100	164	329	413	180	413
21	400	170	150	369	50	238	110	156	328	397	202	457
22	2000	170	180	283	50	260	120	152	341	1620	426	361
23	1300	235	150	250	50	200	130	146	331	657	815	334
24	850	247	140	220	55	120	130	140	271	525	447	581
25	500	250	182	202	60	100	130	1000	347	511	298	729
26	400	274	166	202	65	100	130	850	448	1540	342	417
27	400	241	156	354	70	100	160	700	369	1140	389	357
28	400	220	152	292	80	100	130	660	366	660	331	438
29	200	195	148	280	---	100	110	470	413	720	307	341
30	190	162	144	226	---	100	110	370	307	456	283	409
31	170	---	150	232	---	100	---	300	---	341	280	---
TOTAL	11810	7728	6226	9859	7629	4297	3725	9288	9847	16380	9607	13935
MEAN	381	258	201	318	272	139	124	300	328	528	310	465
MAX	2000	500	500	915	722	295	200	1000	625	1620	815	1100
MIN	160	162	125	70	50	80	90	105	215	259	180	200
CFSM	15.2	10.3	8.04	12.7	10.9	5.56	4.96	12.0	13.1	21.1	12.4	18.6
IN.	17.57	11.50	9.26	14.67	11.35	6.39	5.54	13.82	14.65	24.37	14.29	20.73
AC-FT	23430	15330	12350	19560	15130	8520	7390	18420	19530	32490	19060	27640

WTR YR 1982 TOTAL 110331 MEAN 302 MAX 2000 MIN 50 CFSM 12.1 IN 164.17 AC-FT 218800

NOTE.--No gage-height record Oct. 1 to Nov. 19 and Mar. 21 to Apr. 28.

15297610 RUSSELL CREEK NEAR COLD BAY ALASKA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1982.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	ALKALINITY FIELD (MG/L AS CACO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE IT-FLD (MG/L AS CO3)
JAN										
08...	1000	--	--	--	--	--	--	18	--	--
08...	1001	8.00	62	7.0	.0	14.8	101	--	--	--
08...	1002	12.0	57	7.0	.0	15.2	104	--	--	--
08...	1003	18.0	58	7.0	.2	15.7	107	--	--	--
MAR										
19...	1420	--	46	6.7	3.5	13.3	--	--	--	--
APR										
29...	0915	--	32	--	.5	--	--	--	--	--
JUN										
03...	1830	--	44	6.6	5.5	--	--	--	--	--
04...	0940	--	45	6.7	3.5	--	--	--	7.0	.00
AUG										
11...	1000	--	39	6.9	6.5	11.5	93	--	10	.00
SEP										
16...	0930	--	35	6.4	6.0	12.3	101	--	9.0	.00

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE, AIR (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
JAN											
08...	1000	72.0	73	--	.40	758	--	--	15	4.1	1.2
MAR											
19...	1420	73.0	252	--	--	--	<1	K3	--	--	--
APR											
29...	0915	60.0	102	--	--	--	--	--	--	--	--
JUN											
03...	1830	--	353	--	--	--	--	--	--	--	--
04...	0940	74.0	474	--	1.1	--	<1	180	8	2.3	.7
AUG											
11...	1000	--	265	10.0	--	763	--	--	--	--	--
SEP											
16...	0930	76.0	405	9.0	1.4	748	K8	110	9	2.8	.7

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)
JAN											
08...	7.2	1.0	<5.0	11	.1	20	51	<.09	<.09	.130	.160
MAR											
19...	--	--	--	--	--	--	--	--	--	--	--
APR											
29...	--	--	--	--	--	--	--	--	--	--	--
JUN											
03...	--	--	--	--	--	--	--	--	--	--	--
04...	4.0	.5	<5.0	6.0	<.1	9.7	30	<.10	<.10	.050	.130
AUG											
11...	--	--	--	--	--	--	--	--	--	--	--
SEP											
16...	4.0	.6	<5.0	5.4	<.1	12	29	<.10	--	<.060	--

K NON-IDEAL COLONY COUNT

15297610 RUSSELL CREEK NEAR COLD BAY ALASKA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
JAN 08...	.15	.11	.28	.01	.27	.020	.030	1.5	.2	2	.39
MAR 19...	--	--	--	--	--	--	--	--	--	--	--
APR 29...	--	--	--	--	--	--	--	--	--	3	.83
JUN 03...	--	--	--	--	--	--	--	--	--	8	7.6
04...	.65	.17	.70	.40	.30	<.010	<.010	--	.1	--	--
AUG 11...	--	--	--	--	--	--	--	--	--	--	--
SEP 16...	--	--	.70	.30	.40	<.010	.030	1.5	.1	27	30

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
JAN 08...	1000	2	--	<1	<100	--	<100	<1	<1	<10	<10	1
JUN 04...	0940	1	0	1	400	400	6	<1	<1	<10	<10	2
SEP 16...	0930	1	0	1	100	100	5	<1	<1	<10	<10	<1

DATE	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
JAN 08...	<1	11	9	2	870	840	30	2	<1	10	0	10
JUN 04...	<1	11	--	<1	260	250	15	3	<1	20	20	4
SEP 16...	2	3	0	5	220	110	110	<1	<1	10	2	8

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
JAN 08...	.1	--	<.1	<1	<1	<1	<1	<1	<1	60	50	10
JUN 04...	<.1	--	<.1	3	<1	<1	<1	<1	<1	30	2	28
SEP 16...	.1	.0	.5	<1	1	<1	<1	<1	<1	10	0	13

15297900 ESKIMO CREEK AT KING SALMON

LOCATION.--Lat 58°41'08", long 156°40'08", in SW¼ sec.23, T.17 S., R.44 W., Hydrologic Unit 19040002, on right bank 30 ft (9.1 m) upstream from culvert on King Salmon-Naknek road 0.3 mi (0.5 km) upstream from mouth and 0.3 mi (0.5 km) northwest of King Salmon post office.

DRAINAGE AREA.--16.1 mi² (41.7 km²).

PERIOD OF RECORD.--Annual maximums, water years 1965-67, 1969-73. October 1973 to September 1976 and October 1977 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and culvert control. Altitude of gage is 20 ft (6 m), from topographic map. Prior to Oct. 18, 1973, crest-stage gage on right bank at datum 2.69 ft (0.820 m) lower.

REMARKS.--Records good except those for period, Nov. 5 to June 12, which are poor.

AVERAGE DISCHARGE.--8 years (water years 1974-76, 1978-82), 12.9 ft³/s (0.365 m³/s), 10.87 in/yr (276 mm/yr), 9,350 acre-ft/yr (11.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 227 ft³/s (6.43 m³/s) June 1967, gage height, 8.51 ft (2.594 m), present datum, from rating curve extended above 110 ft³/s (3.1 m³/s) on basis of computation of peak flow through culvert; maximum gage height, 8.72 ft (2.658 m) Aug. 19, 1976, backwater from beaver dam; minimum daily discharge, about 1.5 ft³/s (0.04 m³/s) Jan. 13-17, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 103 ft³/s (2.92 m³/s) June 6, gage height, 8.00 ft (2.438 m); minimum daily discharge, about 3.2 ft³/s (0.09 m³/s) Feb. 18-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	4.6	4.3	5.8	3.8	7.0	6.8	14	14	15	28
2	11	11	4.4	4.4	5.9	4.0	7.2	6.8	15	15	12	28
3	10	9.8	4.2	4.5	5.9	4.2	7.4	6.8	17	15	11	25
4	11	9.4	4.2	4.7	5.9	4.5	7.6	6.8	40	12	10	21
5	11	9.2	4.0	4.7	5.8	4.8	7.8	6.8	85	11	9.0	22
6	11	9.2	3.8	4.4	5.7	5.2	7.8	6.6	95	11	9.0	27
7	11	9.0	3.8	4.4	5.6	5.6	7.8	6.6	75	10	9.6	33
8	9.6	9.0	3.8	4.4	5.4	5.8	7.6	6.6	65	9.4	10	35
9	9.8	9.2	3.8	4.4	5.2	6.0	7.4	6.6	45	9.2	9.6	33
10	9.8	9.2	3.8	4.4	5.0	6.2	7.4	6.6	35	9.2	9.0	31
11	14	8.8	4.0	4.4	4.7	6.3	7.2	6.6	25	9.0	9.4	28
12	18	8.6	4.1	4.7	4.4	6.4	7.0	6.6	19	8.5	9.8	27
13	19	8.6	4.3	4.9	4.1	6.4	6.8	6.8	14	8.1	9.6	29
14	18	8.4	4.5	5.0	3.8	6.4	6.8	6.8	12	8.1	9.2	36
15	18	8.2	4.7	5.2	3.5	6.4	6.8	6.8	13	8.3	9.2	41
16	17	8.0	4.7	5.4	3.4	6.3	6.8	7.0	11	11	9.0	47
17	17	7.8	4.7	5.4	3.3	6.2	6.8	7.0	11	11	9.0	54
18	16	7.5	4.7	5.6	3.2	6.2	6.8	7.2	11	11	8.5	59
19	15	7.2	4.6	5.6	3.2	6.4	6.8	7.2	9.8	12	8.7	58
20	15	6.8	4.5	5.6	3.2	6.6	6.8	7.4	8.7	12	8.7	54
21	17	6.6	4.5	5.6	3.2	6.8	6.8	7.6	8.3	12	8.3	50
22	16	6.4	4.5	5.6	3.2	6.8	6.8	7.8	8.3	11	8.1	47
23	17	6.2	4.5	5.6	3.2	6.8	6.8	8.0	8.3	12	8.1	43
24	18	6.0	4.5	5.6	3.3	7.0	7.0	8.3	7.9	12	8.3	40
25	18	5.8	4.5	5.6	3.4	7.0	7.0	8.6	7.5	14	8.7	39
26	21	5.6	4.5	5.6	3.5	7.0	7.0	9.0	7.7	15	9.8	38
27	22	5.4	4.4	5.6	3.6	7.0	7.0	9.5	9.0	16	10	40
28	22	5.2	4.3	5.6	3.7	7.0	6.8	10	11	16	11	45
29	18	5.0	4.3	5.6	---	7.0	6.8	11	12	14	14	54
30	15	4.8	4.3	5.7	---	7.0	6.8	12	10	17	19	58
31	14	---	4.3	5.8	---	7.0	---	13	---	17	24	---
TOTAL	470.2	233.9	133.8	158.3	120.1	190.1	212.4	241.2	710.5	370.8	324.6	1170
MEAN	15.2	7.80	4.32	5.11	4.29	6.13	7.08	7.78	23.7	12.0	10.5	39.0
MAX	22	12	4.7	5.8	5.9	7.0	7.8	13	95	17	24	59
MIN	9.6	4.8	3.8	4.3	3.2	3.8	6.8	6.6	7.5	8.1	8.1	21
CFSM	.94	.48	.27	.32	.27	.38	.44	.48	1.47	.75	.65	2.42
IN.	1.09	.54	.31	.37	.28	.44	.49	.56	1.64	.86	.75	2.70
AC-FT	933	464	265	314	238	377	421	478	1410	735	644	2320

CAL YR 1981 TOTAL 4475.6 MEAN 12.3 MAX 47 MIN 3.8 CFSM .76 IN 10.34 AC-FT 8880
WTR YR 1982 TOTAL 4335.9 MEAN 11.9 MAX 95 MIN 3.2 CFSM .74 IN 10.02 AC-FT 8600

NOTE.--No gage-height record Dec. 18 to Mar. 23 and Apr. 2 to June 12.

15299900 TAZIMINA RIVER NEAR NONDALTON

LOCATION.--Lat 59°55'05", long 154°34'34", in SE¼NE¼ sec.18, T.3 S., R.31 W., Hydrologic Unit 19040002, on left bank at small lake outlet, 2.1 mi (3.4 km) upstream of large waterfall, 7.5 mi (12.1 km) southeast of Nondalton, and 14.5 mi (23.3 km) northeast of Illiamna.

DRAINAGE AREA.--327 mi² (847 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 610 ft (186 m), from topographic map. Prior to Oct. 1, 1981 at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good except those for Oct. 30 to Mar. 26, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,950 ft³/s (140 m³/s) Sept. 17, 1982, gage-height, 7.92 ft (2.414 m); minimum, 140 ft³/s (3.96 m³/s) Apr. 20-22, 1982, but may have been less during period of ice effect.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,950 ft³/s (140 m³/s) Sept. 17, gage height, 7.92 ft (2.414 m); minimum, 140 ft³/s (3.96 m³/s) Apr. 20-22, but may have been less during period of ice effect.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	624	880	470	260	330	200	175	180	1090	2540	2380	1240
2	594	840	450	260	350	200	175	179	1240	2300	2200	1280
3	588	810	440	260	360	200	175	180	1390	2100	2030	1270
4	582	800	420	260	370	200	175	182	1500	1910	1860	1230
5	570	800	410	260	370	200	165	189	1710	1740	1720	1300
6	546	790	400	250	370	190	165	211	2620	1630	1600	1730
7	522	780	390	250	360	190	165	242	3160	1550	1510	2160
8	500	760	380	250	350	190	165	275	2880	1630	1440	2350
9	485	740	380	250	350	190	165	358	2720	1730	1370	2410
10	465	720	350	250	330	190	155	415	2720	1780	1320	2380
11	500	700	350	250	320	190	155	420	2790	1820	1460	2280
12	546	680	350	250	300	190	154	425	2730	1870	1540	2160
13	564	660	350	250	290	190	152	410	2580	1840	1530	2210
14	564	630	350	250	280	190	150	410	2350	1780	1490	2180
15	570	610	350	250	260	190	148	420	2150	1710	1480	2370
16	606	590	320	250	250	185	146	435	1980	1700	1460	3760
17	636	570	320	250	240	185	146	445	1860	1780	1420	4760
18	636	560	320	250	235	185	144	460	1820	1840	1390	4800
19	618	550	320	250	235	185	141	460	1850	1800	1340	4490
20	612	540	320	250	250	185	141	460	1900	1740	1280	4080
21	690	530	300	250	245	185	140	470	1970	1720	1230	3790
22	760	520	300	250	217	185	140	495	1980	1760	1170	3860
23	830	520	300	250	203	185	143	516	1930	1850	1120	3640
24	893	520	300	250	200	185	151	528	1920	2080	1100	3250
25	972	520	300	250	200	185	158	546	1980	2350	1070	2880
26	1020	520	280	260	200	185	162	582	2100	2760	1070	2620
27	1030	520	280	260	200	185	166	648	2230	2840	1030	2450
28	1020	520	280	260	200	177	171	739	2490	2760	988	2270
29	988	510	280	260	---	175	175	788	2840	2620	996	2210
30	950	490	280	280	---	175	179	837	2760	2600	1040	2190
31	900	---	280	310	---	175	---	948	---	2540	1170	---
TOTAL	21381	19180	10620	7930	7865	5822	4742	13853	65240	62670	43804	79600
MEAN	690	639	343	256	281	188	158	447	2175	2022	1413	2653
MAX	1030	880	470	310	370	200	179	948	3160	2840	2380	4800
MIN	465	490	280	250	200	175	140	179	1090	1550	988	1230
CFSM	2.11	1.95	1.05	.78	.86	.58	.48	1.37	6.65	6.18	4.32	8.11
IN.	2.43	2.18	1.21	.90	.89	.66	.54	1.58	7.42	7.13	4.98	9.06
AC-FT	42410	38040	21060	15730	15600	11550	9410	27480	129400	124300	86890	157900

WTR YR 1982 TOTAL 342707 MEAN 939 MAX 4800 MIN 140 CFSM 2.87 IN 38.99 AC-FT 679800

NOTE.--No gage-height record Oct. 30 to Feb. 17 and Feb. 24 to Mar. 26.

15299900 TAZIMINA RIVER NEAR NONDALTON--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: May to September 1982

INSTRUMENTATION.--Temperature recorder since May 20, 1982.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded 14°C on August 21 and 27.

TEMPERATURE, WATER (DEG. C), WATER YEAR MAY 1982 TO SEPTEMBER 1982

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1			---	---	7.5	5.5	10.0	8.5	10.0	9.5	12.5	11.0
2			---	---	6.5	5.5	9.0	7.0	11.5	9.5	12.5	11.5
3			---	---	8.5	5.0	9.0	8.0	12.5	10.0	12.5	11.0
4			---	---	7.5	6.0	9.0	8.0	13.0	10.5	11.5	10.5
5			---	---	6.0	5.5	10.5	8.0	13.0	10.5	11.0	10.5
6			---	---	5.5	5.0	11.0	8.5	13.0	11.0	11.0	10.0
7			---	---	6.0	5.0	11.5	9.0	12.5	11.0	11.5	10.5
8			---	---	7.0	5.5	10.5	10.0	12.5	11.0	11.5	10.5
9			---	---	6.5	6.0	11.0	9.5	13.5	11.0	11.0	10.5
10			---	---	7.5	6.0	12.0	10.0	12.0	11.0	10.5	10.0
11			---	---	7.0	6.0	11.0	10.0	12.5	10.5	11.0	10.0
12			---	---	7.0	6.0	10.5	9.5	13.0	10.5	10.0	9.5
13			---	---	7.5	6.5	10.5	9.5	13.0	11.5	10.0	9.5
14			---	---	8.0	6.0	10.5	9.5	12.5	11.5	10.0	9.5
15			---	---	7.5	6.5	10.0	9.0	12.0	11.0	10.5	9.5
16			---	---	9.0	7.0	9.5	9.0	11.5	10.5	10.0	9.5
17			---	---	9.5	7.0	9.5	8.5	11.0	10.5	9.5	9.0
18			---	---	9.5	7.5	9.5	8.5	12.5	10.5	9.5	9.0
19			---	---	9.5	8.0	11.5	9.0	13.0	10.5	9.5	9.0
20			7.0	5.0	10.0	7.5	12.0	10.0	13.5	11.0	9.5	9.0
21			7.5	4.0	8.5	7.0	11.0	10.0	14.0	11.0	9.0	9.0
22			8.5	4.5	9.0	7.0	10.5	9.5	13.0	11.5	9.0	8.5
23			8.0	4.5	9.0	8.0	10.0	9.5	13.5	11.5	9.0	8.0
24			6.0	4.5	10.5	8.0	10.0	9.5	13.0	11.5	8.5	8.0
25			8.5	4.0	9.5	8.5	10.5	9.5	12.5	11.5	8.5	8.0
26			6.5	5.0	9.5	8.5	11.5	9.5	13.0	11.5	8.0	8.0
27			8.0	4.5	9.0	8.0	10.5	10.0	14.0	11.5	8.5	7.5
28			8.0	5.5	9.0	8.0	10.5	10.0	12.5	12.0	8.0	7.5
29			6.5	5.5	9.0	8.5	10.0	9.5	13.0	11.5	8.0	7.5
30			7.0	5.5	9.5	8.5	10.5	9.5	12.5	11.5	8.0	7.5
31			8.0	5.5	---	---	10.0	9.5	13.0	11.5	---	---
MONTH			8.5	4.0	10.5	5.0	12.0	7.0	14.0	9.5	12.5	7.5

15300000 NEWHALEN RIVER NEAR ILIAMNA

LOCATION.--Lat 59°51'34", long 154°52'24", in NW¼ sec.1, T.4 S., R.33 W., Hydrologic Unit 19040002, on left bank 8 mi (13 km) downstream from Fish Village and outlet of Sixmile Lake, 8 mi (13 km) north of Iliamna, and 16 mi (26 km) upstream from mouth.

DRAINAGE AREA.--3,478 mi² (9,008 km²).

PERIOD OF RECORD.--July 1951 to September 1967 and annual maximum, waters years 1968 to 1977. May to September 1982.

REVISED RECORDS.--WSP 2136: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 210 ft (64 m), from topographic map. October 1967 to September 1977, crest-stage gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--16 years (water years 1952-67), 9,303 ft³/s (263.5 m³/s), 36.33 in/yr (923 mm/yr), 6,740,000 acre-ft/yr (8.31 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft³/s (1,020 m³/s) Aug. 30, 1959, gage-height, 9.19 ft (2.801 m); minimum daily about 1,000 ft³/s (28 m³/s) Feb. 1 to Mar. 31, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,600 ft³/s (725 m³/s) Sept. 23, gage height, 7.16 ft (2.182 m); minimum daily during period May to September, about 2,650 ft³/s (75 m³/s) May 1; a discharge of 2,320 ft³/s (65.7 m³/s) was measured on Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---			---		---		2650	5340	16500	21200	16500
2	---			---		---		2750	5560	16600	21300	16300
3	---			---		---		2800	5860	16700	21400	16200
4	---			---		---		2900	6120	16400	21600	15900
5	---			---		---		2950	6550	16000	21700	16200
6	ƒ8260			---		---		3000	7600	15800	21800	16600
7	---			---		---		3050	8560	15500	22000	17200
8	---			---		---		3100	9020	15500	22100	17700
9	---			---		---		3150	9530	15800	21900	17900
10	---			---		---		3250	10100	16000	21600	18100
11	---			---		---		3380	10700	16300	21400	18100
12	---			---		---		3420	11100	16700	21200	18100
13	---			---		---		3460	11500	16900	21000	18500
14	---			---		---		3520	11800	17100	20800	18100
15	---			---		---		3600	11900	17300	20600	18600
16	---			---		---		3660	12000	17300	20300	19800
17	---			---		---		3750	11900	17600	20100	22200
18	---		ƒ2320	---		---		3810	12000	17500	19900	23500
19	---			---		---		3900	12100	17600	19600	24300
20	---			---		---		3960	12200	17600	19400	24600
21	---			---		---		4030	12300	17700	19100	25000
22	---			---		---		4100	12600	17900	18800	25400
23	---			---		---		4190	12700	18200	18500	25600
24	---			---		---		4190	12800	18700	18200	25400
25	---			---		---		4260	13000	19500	18000	25100
26	---			---		ƒ2370		4430	13200	20600	17700	24600
27	---			---		---		4530	13500	20500	17500	24300
28	---			---		---		4620	14500	20700	17300	24100
29	---			---		---		4820	15500	20800	17100	23700
30	---			---		---		5000	16200	20900	16900	23300
31	---			---		---		5150	---	21000	16700	---
TOTAL	---			---		---		115380	327740	549200	616700	620900
MEAN	---			---		---		3722	10920	17720	19890	20700
MAX	---			---		---		5150	16200	21000	22100	25600
MIN	---			---		---		2650	5340	15500	16700	15900
CFSM	---			---		---		1.07	3.14	5.10	5.72	5.95
IN.	---			---		---		1.23	3.51	5.87	6.60	6.64
AC-FT	---			---		---		228900	650100	1089000	1223000	1232000

ƒ Result of discharge measurement.

15300500 KVICHAK RIVER AT IGIUGIG

LOCATION.--Lat 59°19'44", long 155°53'57", in NE¼ sec.7, T.10 S., R.39 W., Hydrologic Unit 19040002, on left bank 0.7 mi (1.1 km) downstream from outlet of Iliamna Lake at Igiugig.

DRAINAGE AREA.--6,500 mi² (16,800 km²), approximately.

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 45 ft (14 m), from topographic map. Prior to Oct. 1, 1969, nonrecording gage at site 1,500 ft (460 m) upstream at different datum.

REMARKS.--Records good except those after Mar. 10, which are fair. Discharge affected by storage in Lake Iliamna, Lake Clark, and other smaller lakes covering over 1,100 mi² (2,800 km²).

AVERAGE DISCHARGE.--15 years, 18,110 ft³/s (512.9 m³/s), 37.83 in/yr (961 mm/yr), 13,120,000 acre-ft/yr (16.2 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,700 ft³/s (1,380 m³/s) Sept. 12, 1980, gage height, 23.64 ft (7.205 m); minimum daily, 6,400 ft³/s (181 m³/s) Apr. 21, 22, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 34,000 ft³/s (963 m³/s) Sept. 23, 24; minimum daily, about 8,600 ft³/s (244 m³/s) Apr. 18 to May 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27200	24400	21100	18000	15500	11800	9400	8600	10500	16000	22000	19500
2	27100	24400	21700	18100	15500	11800	9400	8600	10500	17000	22000	19000
3	27000	24400	21500	18100	15200	11800	9400	8600	11000	17000	22000	19000
4	26700	24100	21800	17600	15000	11800	9400	8600	11000	17000	23000	19000
5	26400	23800	21100	17800	15000	11800	9400	8600	11500	17000	23000	20000
6	25900	25000	21000	17500	15000	11500	9000	8600	12000	17000	23000	20000
7	25800	26800	20500	17500	14900	11300	9000	8600	12000	16000	24000	20000
8	25500	24200	20000	17500	14800	11100	9000	8600	12500	16000	24000	21000
9	25500	23800	20000	17500	14700	10800	9000	8600	12500	16000	24000	21000
10	26000	24700	19800	17500	14500	10500	9000	8600	12800	16000	24000	22000
11	26200	23500	19800	17400	14500	10500	9000	8600	12800	17000	24000	22000
12	25300	23700	19700	17300	14300	10500	9000	8600	12800	17000	24000	23000
13	25000	23500	19500	17200	14100	10500	9000	8600	12800	17000	24000	23000
14	25300	23200	19100	17200	13700	10500	9000	8600	12800	18000	24000	24000
15	24900	23300	19000	17200	13600	10500	9000	8600	13500	18000	24000	25000
16	24600	23400	19400	17200	13600	9600	9000	9000	13500	18000	24000	26000
17	24400	23500	19900	17400	13400	9600	9000	9000	13500	18000	23000	27000
18	24300	23600	19300	17100	13100	9600	8500	9000	13000	18000	23000	28000
19	25000	23200	19000	17200	13000	9600	8600	9000	13000	18000	23000	29000
20	26200	23400	19000	17200	12800	9600	8600	9000	13000	18000	22000	30000
21	26200	22700	19000	17000	12700	9600	8600	9000	13000	18000	22000	31000
22	26900	22200	18800	16900	12800	9600	8600	9000	13000	18000	22000	32500
23	26600	22500	18800	16600	12600	9600	8600	9500	13000	19000	22000	34000
24	25100	21400	18800	16400	12400	9600	8600	9500	13000	19000	21000	34000
25	25400	22100	18600	16200	12300	9600	8600	9500	13000	19000	21000	33500
26	25400	22600	18600	16000	12200	9400	8600	9500	13500	20000	20000	33000
27	25200	22300	18600	16200	12000	9400	8600	9500	14000	21000	20000	32500
28	24800	22200	18500	16000	11800	9400	8600	10000	14500	21000	20000	32000
29	24600	23100	18500	15700	---	9400	8600	10000	15000	21000	19500	31500
30	24700	22900	18500	15600	---	9400	8600	10000	15500	22000	19500	31000
31	24400	---	18000	15500	---	9400	---	10000	---	22000	19500	---
TOTAL	793600	703900	606900	527600	385000	319100	266800	279500	384500	562000	692500	782500
MEAN	25600	23460	19580	17020	13750	10290	8893	9016	12820	18130	22340	26080
MAX	27200	26800	21800	18100	15500	11800	9400	10000	15500	22000	24000	34000
MIN	24300	21400	18000	15500	11800	9400	8600	8600	10500	16000	19500	19000
CFSM	3.94	3.61	3.01	2.62	2.12	1.58	1.37	1.39	1.97	2.79	3.44	4.01
IN.	4.54	4.03	3.47	3.02	2.20	1.83	1.53	1.60	2.20	3.22	3.96	4.48
AC-FT	1574000	1396000	1204000	1046000	763600	632900	529200	554400	762700	1115000	1374000	1552000

CAL YR 1981 TOTAL 8455100 MEAN 23160 MAX 34000 MIN 16600 CFSM 3.56 IN 48.39 AC-FT 16770000
WTR YR 1982 TOTAL 6303900 MEAN 17270 MAX 34000 MIN 8600 CFSM 2.66 IN 36.08 AC-FT 12500000

NOTE.--No gage-height record for the period Mar. 10 to June 12 and June 15 to Sept. 30.

15302000 NUYAKUK RIVER NEAR DILLINGHAM

LOCATION.--Lat 59°56'04", long 158°11'05", in NE¼ sec.10, T.3 S., R.52 W., Hydrologic Unit 19040002, on left bank 1,000 ft (300 m) downstream from Tikchik Lake, 0.5 mi (0.8 km) upstream from unnamed tributary, and 62 mi (100 km) north of Dillingham.

DRAINAGE AREA.--1,490 mi² (3,860 km²), approximately.

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WRD Alaska 1972: 1971.

GAGE.--Water-stage recorder. Altitude of gage is 325 ft (99 m), from topographic map. Prior to Oct. 1, 1957, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Discharge affected by storage in Tikchik Lake, Nuyakuk Lake, Lake Chauekuktuli, and other smaller lakes in the basin covering over 170 mi² (440 km²).

AVERAGE DISCHARGE.--29 years, 6,138 ft³/s (174.0 m³/s), 55.94 in/yr (1,421 mm/yr), 4,447,000 acre-ft/year (5.48 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,200 ft³/s (912 m³/s) July 2, 1977, gage height, 10.49 ft (3.197 m); minimum daily, about 770 ft³/s (21.8 m³/s) Apr. 16-30, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,500 ft³/s (694 m³/s) July 4, gage height, 8.78 ft (2.676 m); minimum daily, about 1,900 ft³/s (53.8 m³/s) Apr. 13 to May 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4840	5040	3880	2400	2800	2100	2200	1900	10200	23800	12200	6000
2	4650	4970	3780	2400	3000	2100	2200	1900	10900	23300	11700	5900
3	4580	4890	3700	2400	3200	2100	2200	2000	11500	24000	11400	5800
4	4770	4790	3600	2400	3200	2100	2200	2000	11900	24300	11000	5700
5	4440	4700	3500	2400	3100	2100	2100	2100	12800	24000	10700	5600
6	4260	4650	3400	2300	3100	2100	2100	2200	14900	23700	10400	5500
7	4200	4480	3300	2300	3000	2100	2100	2300	16000	23400	10000	5500
8	4010	4640	3300	2300	3000	2100	2000	2400	16500	23200	9790	5500
9	3930	4800	3300	2300	3000	2100	2000	2450	16900	22900	9590	5300
10	3840	4870	3280	2300	2900	2100	2000	2550	16900	22600	9170	5100
11	3860	4950	3230	2300	2800	2100	2000	2650	17700	22000	9080	5000
12	3800	4990	3200	2300	2700	2100	2000	2720	18600	21500	8810	5000
13	3770	4990	3180	2300	2600	2100	1900	2760	19000	20900	8510	5000
14	3710	4890	3130	2200	2500	2100	1900	2760	19200	20400	8390	5300
15	3720	4800	3090	2200	2500	2200	1900	2800	19200	19800	8270	6000
16	3630	4680	3060	2200	2400	2200	1900	2880	19300	19500	8050	7500
17	3620	4580	3030	2200	2400	2300	1900	3010	19400	18900	7880	9500
18	3510	4520	3050	2200	2400	2400	1900	3150	19500	18400	7600	12000
19	3360	4390	3020	2200	2300	2500	1900	3260	19500	17800	7500	15000
20	3240	4290	2960	2200	2300	2500	1900	3390	19500	17000	7400	19000
21	3650	4200	2900	2200	2300	2500	1900	3570	19600	16400	7200	21000
22	3840	4110	2770	2200	2200	2500	1900	3760	19900	15800	7100	21500
23	4320	4020	2850	2200	2200	2500	1900	3970	20200	15500	7000	21500
24	4800	3980	2850	2200	2200	2500	1900	4170	20400	15000	6800	21000
25	4940	3910	2830	2300	2200	2400	1900	4410	20400	14500	6700	20500
26	5070	3940	2830	2300	2200	2400	1900	4650	20500	14000	6600	20500
27	5120	3920	2770	2300	2200	2300	1900	5680	20900	13500	6500	20000
28	5250	3890	2690	2400	2200	2300	1900	7050	21600	13200	6400	19700
29	5190	3860	2550	2400	---	2300	1900	8050	22800	12900	6300	19500
30	5170	3930	2500	2500	---	2300	1900	8840	23700	12800	6200	19300
31	5210	---	2400	2600	---	2200	---	9560	---	12500	6100	---
TOTAL	132300	134670	95930	71400	72900	69700	59300	114890	539400	587500	260340	349700
MEAN	4268	4489	3095	2303	2604	2248	1977	3706	17980	18950	8398	11660
MAX	5250	5040	3880	2600	3200	2500	2200	9560	23700	24300	12200	21500
MIN	3240	3860	2400	2200	2200	2100	1900	1900	10200	12500	6100	5000
CFSM	2.86	3.01	2.08	1.55	1.75	1.51	1.33	2.49	12.1	12.7	5.64	7.83
IN.	3.30	3.36	2.40	1.78	1.82	1.74	1.48	2.87	13.47	14.67	6.50	8.73
AC-FT	262400	267100	190300	141600	144600	138200	117600	227900	1070000	1165000	516400	693600

CAL YR 1981 TOTAL 2296460 MEAN 6292 MAX 20300 MIN 2400 CFSM 4.22 IN 57.33 AC-FT 4555000
WTR YR 1982 TOTAL 2488030 MEAN 6817 MAX 24300 MIN 1900 CFSM 4.58 IN 62.12 AC-FT 4935000

NOTE.--No gage-height record Dec. 30 to May 10 and Aug. 18 to Sept. 30.

15302500 NUSHAGAK RIVER AT EKWOK
(National stream-quality accounting network station)

LOCATION.--Lat 59°20'57", long 157°28'23", in SE¼SE¼ sec.35, T.9 S., R.48 W., Hydrologic Unit 19040002, on right bank at Ekwok, 0.6 mi (1.0 km) upstream from Klutuk Creek, and 40 mi (64 km) northeast of Dillingham.

DRAINAGE AREA.--9,850 mi² (25,500 km²), approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Nonrecording gage. Altitude of gage is 90 ft (27 m), from topographic map. Prior to Apr. 17, 1979, at site 0.4 mi (0.6 km) downstream at different datum.

REMARKS.--Water-discharge records good except those for period of no gage-height record, Oct. 30 to May 13, which are poor.

AVERAGE DISCHARGE.--5 years, 25,046 ft³/s (709.3 m³/s), 34.53 in/yr (877 mm/yr), 18,146,000 acre-ft/yr (22.4 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 89,200 ft³/s (2,530 m³/s) June 8, 1982, gage height, 13.22 ft (4.029 m); maximum gage height, 14.46 ft (4.407 m), site and datum then in use, in April 1979, from floodmarks, backwater from ice; minimum daily discharge, about 6,000 ft³/s (170 m³/s) Mar. 1 to 12, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 89,200 ft³/s (2,530 m³/s) June 8, gage height, 13.22 ft (4.029 m); minimum daily, about 8,300 ft³/s (235 m³/s) Dec. 26 to Jan. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19700	22000	13000	8300	9700	10000	11500	14500	57100	43800	40200	24500
2	19200	21000	13000	8300	11000	10000	11500	16000	53100	42800	37400	24300
3	18900	21000	13000	8300	12000	10000	11000	18000	53300	41800	35100	23600
4	18700	21000	12000	8300	13500	10000	11000	21000	52800	41400	33100	23200
5	18400	21000	12000	8300	14500	10000	11000	25000	52800	41500	31100	23100
6	18200	20000	12000	8300	14500	10000	11000	30000	68100	40800	29700	25700
7	17800	20000	12000	8300	14000	10000	11000	35000	83800	40200	28400	33600
8	17300	19500	11000	8300	13500	10000	11000	41000	88000	39800	27700	34600
9	17200	19500	11000	8300	13000	10000	11000	50000	86400	39000	27300	34500
10	17200	18500	11000	8300	13000	10000	11000	53000	67700	37800	27200	33500
11	17400	18500	11000	8300	12500	10000	10800	54000	58500	37100	26600	32200
12	18600	17500	10000	8300	12000	10000	10600	53000	55600	36300	27000	32300
13	20000	17500	10000	8300	11500	10000	10500	52000	53100	36100	27500	31400
14	20700	16500	10000	8300	11500	10000	10400	51000	50400	36500	26200	32400
15	20800	16500	10000	8300	11000	10000	10300	49000	47700	36300	25200	34700
16	20800	15500	9500	8300	11000	10000	10200	46000	45800	36300	24800	42200
17	21200	15500	9500	8300	11000	10000	10100	44200	43800	37400	24100	52300
18	20800	15000	9500	8300	10500	10500	10000	42900	42700	39700	23600	62900
19	20000	15000	9500	8300	10500	11500	10000	41900	41800	39200	23200	67200
20	19200	14500	9000	8300	10000	12000	10000	40900	40900	38400	22800	72600
21	19100	14500	8900	8300	10000	13000	10000	41300	40200	36700	22300	78300
22	20000	13500	8700	8300	10000	14000	10000	42600	40400	34600	21600	80500
23	22200	13500	8600	8300	10000	14000	10000	43000	40300	34400	21200	80500
24	24500	13500	8500	8300	10000	13500	10200	42500	39800	37400	20800	81100
25	27500	14000	8400	8300	10000	13000	10500	42800	39100	40100	20800	80000
26	26800	15000	8300	8300	10000	12500	10800	42600	38400	41800	21300	80800
27	26200	15000	8300	8300	10000	12500	11200	43400	37900	41400	21300	81100
28	25300	15000	8300	8300	10000	12000	11500	52800	38600	39800	21000	82000
29	23600	14000	8300	8300	---	12000	12000	62400	40300	38700	21000	80900
30	23000	14000	8300	8400	---	12000	13500	66200	43000	39400	21800	78600
31	22500	---	8300	9000	---	12000	---	61800	---	41400	23000	---
TOTAL	642800	507500	310900	258100	320200	344500	323600	1319800	1541400	1207900	804300	1544600
MEAN	20740	16920	10030	8326	11440	11110	10790	42570	51380	38960	25950	51490
MAX	27500	22000	13000	9000	14500	14000	13500	66200	88000	43800	40200	82000
MIN	17200	13500	8300	8300	9700	10000	10000	14500	37900	34400	20800	23100
CFSM	2.11	1.72	1.02	.85	1.16	1.13	1.10	4.32	5.22	3.96	2.64	5.23
IN.	2.43	1.92	1.17	.97	1.21	1.30	1.22	4.98	5.82	4.56	3.04	5.83
AC-FT	1275000	1007000	616700	511900	635100	683300	641900	2618000	3057000	2396000	1595000	3064000

CAL YR 1981 TOTAL 8059700 MEAN 22080 MAX 52500 MIN 7400 CFSM 2.24 IN 30.44 AC-FT 15990000
WTR YR 1982 TOTAL 9125600 MEAN 25000 MAX 88000 MIN 8300 CFSM 2.54 IN 34.46 AC-FT 18100000

15302500 NUSHAGAK RIVER AT EKWOK--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAR 26...	1130	--	58	5.7	.0	12.8	88
JUN 13...	1700	--	44	6.8	8.0	--	--
JUL 23...	1331	265	51	7.5	10.6	10.4	93
23...	1332	540	52	7.4	10.5	10.7	95
23...	1333	765	52	7.3	10.6	10.7	95

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE AB (UMHOS)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JAN 07...	1630	--	8340	62	.60	--	K10	<1	31	9.6
MAR 26...	1130	980	12200	54	.60	762	K2	K8	19	5.6
JUN 13...	1700	964	49800	50	4.0	761	K3	<1	20	6.0
JUL 23...	1330	930	33200	61	2.0	767	K12	K1	24	7.1

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
JAN 07...	1.8	4.7	.4	28	<5.0	1.6	.1	9.9	45
MAR 26...	1.3	1.8	.5	23	5.0	1.3	.1	8.2	34
JUN 13...	1.2	1.6	6.7	20	6.0	2.8	.1	6.4	43
JUL 23...	1.5	1.5	.4	26	6.0	1.0	<.1	5.7	37

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
JAN 07...	--	.31	.100	.21	.010	.010	<.010	4	90
MAR 26...	38	.16	.140	.43	.040	.020	.020	3	99
JUN 13...	43	.14	.070	1.20	.060	<.010	<.010	21	2820
JUL 23...	39	.10	<.060	1.60	.020	.020	.010	--	--

K NON-IDEAL COLONY COUNT

15302500 NUSHAGAK RIVER AT EKWOK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
MAR 26...	1130	1	0	1	<100	--	8	3	<1	<10
JUN 13...	1700	1	0	1	<100	--	7	1	<1	10
JUL 23...	1330	1	0	1	200	200	8	1	<1	<10

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
MAR 26...	<10	<1	1	8	7	1	270	130	140	3
JUN 13...	<10	<1	1	12	8	4	850	680	170	21
JUL 23...	<10	<1	<1	4	2	2	440	300	140	<1

DATE	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
MAR 26...	2	1	20	0	21	<.1	--	<.1	<1
JUN 13...	--	<1	40	30	6	.1	--	<.1	6
JUL 23...	--	<1	20	10	6	.5	.4	.1	1

DATE	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR 26...	--	<1	<1	<1	<1	<1	20	10	3
JUN 13...	--	<1	<1	<1	<1	<1	20	3	17
JUL 23...	0	1	<1	<1	<1	<1	20	10	10

15302840 ELVA LAKE OUTLET NEAR ALEGNAGIK

LOCATION.--Lat 59°36'15, long 159°06'50", in NE¼NE¼ sec.3, T.7 S., R.58 W., Hydrologic Unit 19040002, on right bank 200 ft (60 m) downstream from Elva Lake outlet and 30 mi (48 km) northwest of Dillingham.

DRAINAGE AREA.--9.00 mi² (23.3 km²).

PERIOD OF RECORD.--October 1979 to June 1982 (discontinued).

REVISED RECORDS.--WDR AK-81-1: 1980.

GAGE.--Water-stage recorder. Altitude of gage is 300 ft (91 m), from topographic map. Prior to June 26, 1980, at site 300 ft (90 m) downstream at datum 3.48 ft (1.061 m) lower.

REMARKS.--Records poor. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 360 ft³/s (10.2 m³/s) about June 5, 1980, gage height, 5.4 ft (1.65 m), from floodmarks, site and datum then in use, from rating curve extended above 210 ft³/s (5.95 m³/s); minimum daily, about 1 ft³/s (0.03 m³/s) Dec. 29, 1979 to Feb. 8, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge during period October 1981 to June 1982, about 175 ft³/s (5.0 m³/s) June 26-30; minimum daily, about 13 ft³/s (0.37 m³/s) Mar. 6-15 and Mar. 25 to Apr. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1981 TO JUNE 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	26	17	14	22	14	13	17	98			
2	30	26	17	14	25	14	13	17	98			
3	31	26	17	14	28	14	13	17	98			
4	32	26	17	14	30	14	13	17	98			
5	30	26	17	14	31	14	13	17	98			
6	29	23	16	14	31	13	13	22	105			
7	27	23	16	14	29	13	13	22	105			
8	26	23	16	14	26	13	13	22	105			
9	25	23	16	14	24	13	13	22	105			
10	25	23	16	14	22	13	13	22	105			
11	26	21	16	14	19	13	13	30	115			
12	27	21	16	14	19	13	13	30	115			
13	26	21	16	14	19	13	13	30	115			
14	26	21	16	14	19	13	13	30	115			
15	25	21	16	14	19	13	13	30	115			
16	24	20	16	14	16	14	13	41	130			
17	23	20	16	14	16	14	13	41	130			
18	22	20	16	14	16	14	13	41	130			
19	22	20	16	14	16	15	13	41	130			
20	24	20	16	14	16	16	13	41	130			
21	26	19	15	14	14	16	13	55	145			
22	29	19	15	14	14	15	13	55	145			
23	34	19	15	14	14	14	13	55	145			
24	40	19	15	14	14	14	13	55	145			
25	45	19	15	14	14	13	13	55	145			
26	42	18	15	15	14	13	13	75	175			
27	39	18	15	15	14	13	13	75	175			
28	36	18	15	15	14	13	13	75	175			
29	34	18	15	16	---	13	13	75	175			
30	31	18	15	18	---	13	13	75	175			
31	29	---	15	20	---	13	---	75	---			
TOTAL	914	635	490	449	555	423	390	1275	3840			
MEAN	29.5	21.2	15.8	14.5	19.8	13.6	13.0	41.1	128			
MAX	45	26	17	20	31	16	13	75	175			
MIN	22	18	15	14	14	13	13	17	98			
CFSM	3.28	2.36	1.76	1.61	2.20	1.51	1.44	4.57	14.2			
IN.	3.78	2.62	2.03	1.86	2.29	1.75	1.61	5.27	15.87			
AC-FT	1810	1260	972	891	1100	839	774	2530	7620			

CAL YR 1981 TOTAL 15539 MEAN 42.6 MAX 145 MIN 10 CFSM 4.73 IN 64.22 AC-FT 30820

15303150 SNAKE RIVER NEAR DILLINGHAM

LOCATION.--Lat 59°08'54", long 158°53'14", in NW¼SW¼ sec.9, T.12 S., R.57 W., Hydrologic Unit 19040002, on right bank at outlet of Lake Nunavaugaluk, 15 mi (24 km) northwest of Dillingham.

DRAINAGE AREA.--113 mi² (293 km²).

PERIOD OF RECORD.--August 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 34 ft (10.4 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Dec. 4 to June 11, which are poor. Discharge affected by storage in Lake Nunavaugaluk, surface area of 32 mi² (83 km²).

AVERAGE DISCHARGE.--9 years, 547 ft³/s (15.49 m³/s), 65.74 in/yr (1,670 mm/yr), 396,300 acre-ft/yr (489 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft³/s (70.0 m³/s) June 17, 1977, gage height, 6.81 ft (2.076 m); minimum daily, about 70 ft³/s (2.0 m³/s) Jan. 31 and Feb. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,340 ft³/s (66.3 m³/s) about June 6, gage height, 6.63 ft (2.021 m), from recorded range instage; minimum daily, about 200 ft³/s (5.7 m³/s) Dec. 23 to Jan. 29, Feb. 17 to Mar. 16, and Apr. 20-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	313	474	400	200	230	200	330	260	2000	1530	1130	573
2	295	460	390	200	240	200	330	270	2100	1500	1100	580
3	295	450	380	200	270	200	320	280	2200	1450	1060	573
4	284	440	370	200	300	200	310	290	2220	1400	1020	566
5	268	440	360	200	310	200	300	310	2240	1360	980	643
6	256	430	350	200	320	200	300	330	2260	1340	942	699
7	246	430	340	200	315	200	310	350	2200	1290	905	699
8	240	440	320	200	310	200	310	380	2150	1230	852	692
9	230	441	310	200	295	200	315	410	2100	1190	815	685
10	235	441	300	200	280	200	315	440	2050	1140	800	671
11	251	441	290	200	265	200	310	470	2000	1080	792	657
12	246	434	280	200	250	200	300	500	2010	1040	755	664
13	246	422	270	200	240	200	290	550	1970	1000	727	678
14	240	403	260	200	230	200	275	600	1900	965	699	699
15	235	397	250	200	220	200	260	650	1830	942	692	800
16	225	385	240	200	210	200	245	680	1760	935	657	928
17	215	373	230	200	200	210	230	720	1690	920	629	1200
18	210	361	230	200	200	225	220	760	1620	920	608	1590
19	210	337	220	200	200	250	210	810	1540	890	587	1830
20	230	325	210	200	200	280	200	860	1490	852	566	1940
21	240	313	210	200	200	320	200	910	1430	808	545	2040
22	273	300	210	200	200	370	200	960	1370	875	519	2150
23	361	300	200	200	200	370	200	1000	1230	1090	500	2130
24	441	313	200	200	200	350	200	1100	1080	1160	519	2070
25	500	337	200	200	200	340	210	1200	1060	1160	538	2100
26	526	385	200	200	200	340	210	1300	1080	1130	538	2220
27	538	385	200	200	200	340	220	1400	1120	1150	532	2210
28	532	379	200	200	200	340	220	1500	1270	1160	526	2200
29	519	403	200	200	---	340	230	1600	1500	1180	532	2180
30	506	403	200	210	---	340	240	1700	1540	1190	552	2100
31	486	---	200	220	---	340	---	1800	---	1160	573	---
TOTAL	9892	11842	8220	6230	6685	7955	7810	24390	52010	35037	22190	38767
MEAN	319	395	265	201	239	257	260	787	1734	1130	716	1292
MAX	538	474	400	220	320	370	330	1800	2260	1530	1130	2220
MIN	210	300	200	200	200	200	200	260	1060	808	500	566
CFSM	2.82	3.50	2.35	1.78	2.12	2.27	2.30	6.97	15.3	10.0	6.34	11.4
IN.	3.26	3.90	2.71	2.05	2.20	2.62	2.57	8.03	17.12	11.53	7.30	12.76
AC-FT	19620	23490	16300	12360	13260	15780	15490	48380	103200	69500	44010	76890

CAL YR 1981 TOTAL 167299 MEAN 458 MAX 1390 MIN 135 CFSM 4.05 IN 55.07 AC-FT 331800
WTR YR 1982 TOTAL 231028 MEAN 633 MAX 2260 MIN 200 CFSM 5.60 IN 76.05 AC-FT 458200

15304000 KUSKOKWIM RIVER AT CROOKED CREEK
(National stream-quality accounting and radiochemical networks station)

LOCATION.--Lat 61°52'16", long 158°06'03", in NE¼NE¼ sec.32, T.21 N., R.48 W., Hydrologic Unit 19040001, on right bank at village of Crooked Creek, 0.5 mi (0.8 km) upstream from Crooked Creek.

DRAINAGE AREA.--31,100 mi² (80,500 km²), approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 200 ft (61 m), from topographic map. Prior to Aug. 6, 1977, nonrecording gage at site 600 ft (180 m) downstream at same datum.

REMARKS.--Records poor for periods of no gage-height record prior to June 18 and after Sept. 7, good otherwise.

AVERAGE DISCHARGE.--31 years, 41,450 ft³/s (1,174 m³/s), 18.10 in/yr (460 mm/yr), 30,030,000 acre-ft/yr (37.0 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 392,000 ft³/s (11,100 m³/s) June 5, 1964, gage height, 25.74 ft (7.846 m); maximum gage height, 26.36 ft (8.034 m) about May 16, 1968, from floodmarks, backwater from ice; minimum daily discharge, about 6,100 ft³/s (170 m³/s) Mar. 1-31, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 167,000 ft³/s (4,730 m³/s) about Sept. 19, gage height, 14.25 ft (4.343 m) from floodmarks; maximum gage height, 21.4 ft (6.52 m) about May 16, from floodmarks, backwater from ice; minimum daily discharge, about 10,000 ft³/s (280 m³/s) Apr. 1-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48000	24000	19000	14000	12000	11000	10000	12000	95000	75900	118000	57300
2	44000	24000	19000	14000	12000	11000	10000	12000	95000	76000	117000	57300
3	40000	24000	18000	14000	12000	11000	10000	13000	90000	74700	111000	57000
4	38000	24000	18000	14000	12000	11000	10000	13000	90000	70200	107000	57700
5	38000	24000	18000	14000	12000	11000	10000	14000	95000	64600	98000	58300
6	36000	24000	18000	14000	12000	11000	10000	14000	100000	60100	90000	58800
7	36000	22000	18000	14000	12000	11000	10000	15000	95000	56600	85400	59100
8	34400	22000	17000	14000	12000	11000	10000	16000	95000	53800	79800	58800
9	34000	22000	17000	14000	12000	11000	10000	18000	110000	52200	76900	58000
10	32000	22000	17000	14000	12000	11000	10000	20000	105000	51800	75600	58000
11	30000	22000	17000	13000	11000	11000	10000	24000	100000	52100	74100	56000
12	30000	22000	17000	13000	11000	11000	10000	40000	100000	53700	73000	54000
13	30000	22000	17000	13000	11000	11000	10000	60000	95000	58900	72000	56000
14	28000	22000	16000	13000	11000	11000	10000	80000	95000	63000	70400	60000
15	28000	22000	16000	13000	11000	11000	10000	100000	95000	64100	70400	70000
16	28000	22000	16000	13000	11000	11000	10000	140000	93800	67000	74500	80000
17	28000	22000	16000	13000	11000	11000	10000	120000	88600	70100	76000	100000
18	26000	20000	16000	13000	11000	11000	10000	110000	83400	71200	77900	120000
19	26000	20000	15000	13000	11000	11000	10000	100000	80300	73900	83000	150000
20	26000	20000	15000	13000	11000	11000	10000	100000	77700	75200	83700	130000
21	26000	20000	15000	13000	11000	11000	10000	110000	76100	74000	81100	110000
22	26000	20000	15000	13000	11000	11000	10000	120000	76100	72100	78100	100000
23	26000	20000	15000	13000	11000	11000	10000	110000	77400	73500	75100	100000
24	26000	20000	15000	13000	11000	11000	10000	100000	76800	79600	70000	100000
25	24000	20000	15000	13000	11000	11000	11000	90000	75000	93200	65900	110000
26	24000	20000	15000	12000	11000	11000	11000	90000	73200	103000	64100	120000
27	24000	19000	15000	12000	11000	11000	11000	95000	71500	115000	62600	117000
28	24000	19000	14000	12000	11000	11000	11000	100000	70700	121000	60100	110000
29	24000	19000	14000	12000	---	11000	12000	95000	71200	117000	58100	105000
30	24000	19000	14000	12000	---	11000	12000	95000	74300	112000	57100	105000
31	24000	---	14000	12000	---	11000	---	95000	---	111000	56400	---
TOTAL	932400	642000	501000	407000	318000	341000	308000	2121000	2621100	2356200	2442300	2533300
MEAN	30080	21400	16160	13130	11360	11000	10270	68420	87370	76020	78780	84440
MAX	48000	24000	19000	14000	12000	11000	12000	140000	110000	121000	118000	150000
MIN	24000	19000	14000	12000	11000	11000	10000	12000	70700	51800	56400	54000
CFSM	.97	.69	.52	.42	.37	.35	.33	2.20	2.81	2.44	2.53	2.72
IN.	1.12	.77	.60	.49	.38	.41	.37	2.54	3.14	2.82	2.92	3.03
AC-FT	1849000	1273000	993700	807300	630800	676400	610900	4207000	5199000	4674000	4844000	5025000

CAL YR 1981 TOTAL 14642400 MEAN 40120 MAX 120000 MIN 10000 CFSM 1.29 IN 17.51 AC-FT 29040000
WTR YR 1982 TOTAL 15523600 MEAN 42530 MAX 150000 MIN 10000 CFSM 1.37 IN 18.57 AC-FT 30790000

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951, 1955-72, 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN							
17...	1600	--	150	--	--	--	--
17...	1601	375	122	7.6	12.2	10.7	99
17...	1602	575	134	7.7	12.1	10.6	98
17...	1603	700	144	7.8	12.1	10.6	98
17...	1604	900	149	7.8	12.1	10.2	94
17...	1605	975	154	7.9	11.9	10.5	97
JUL							
22...	1200	--	188	--	--	--	--
22...	1201	25.0	166	7.9	14.2	--	--
22...	1202	350	169	7.8	14.4	--	--
22...	1203	550	182	7.8	14.4	--	--
22...	1204	700	192	7.9	14.6	--	--
22...	1205	800	193	7.8	14.6	--	--
22...	1206	975	195	7.9	14.5	--	--
AUG							
19...	1016	395	160	7.7	11.5	--	--
19...	1017	570	165	7.7	11.5	--	--
19...	1018	695	170	7.7	11.5	--	--
19...	1019	820	171	7.7	11.5	--	--
19...	1020	995	170	7.7	11.2	--	--
SEP							
28...	0946	400	97	7.8	5.4	10.8	86
28...	0947	625	108	7.8	5.5	10.8	87
28...	0948	750	117	7.9	5.5	11.1	89
28...	0949	875	125	7.8	5.4	11.3	90
28...	0950	1050	128	7.8	5.3	11.3	90

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE LAB (UMHOS)	TEMPERATURE, AIR (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
JUN										
17...	1600	1215	86800	162	--	33	764	K2	K1	78
JUL										
22...	1200	1200	67200	188	21.0	60	--	K40	K22	89
AUG										
19...	1015	1210	77300	190	--	46	770	--	K9	87
SEP										
28...	0945	1250	111000	150	--	15	759	--	K12	69

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
JUN										
17...	23	5.0	2.0	.8	64	21	.9	.1	7.9	103
JUL										
22...	26	5.9	1.9	1.0	79	20	.7	.2	7.5	110
AUG										
19...	25	5.9	2.1	.9	71	19	.6	.2	7.6	--
SEP										
28...	20	4.6	1.7	.9	53	15	.9	.1	8.3	83

K NON-IDEAL COLONY COUNT

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	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, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L) AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JUN 17...	100	.18	<.060	.60	.070	.020	<.020	164	38400	--
JUL 22...	111	.11	.060	1.30	.060	.020	.020	167	30300	72
AUG 19...	104	.11	.130	.90	.110	.050	<.010	216	45100	53
28...	84	.13	.130	.80	.050	<.010	.020	132	39600	42

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
JUN 17...	1600	3	2	1	< 00	--	35	1	<1	20
JUL 22...	1200	4	3	1	100	60	40	1	<1	10
SEP 28...	0945	3	2	1	100	70	30	<1	<1	<10

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)
JUN 17...	--	<10	4	<1	12	8	4	5300	5000	310
JUL 22...	0	10	2	<1	17	14	3	7000	6800	160
SEP 28...	-	10	2	<1	17	--	<1	4600	4300	280

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
JUN 17...	<1	--	1	130	120	7	.2	--	<.1
JUL 22...	2	0	2	170	160	6	.2	.0	.2
SEP 28...	3	--	<1	150	140	9	.1	--	<.1

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 17...	12	<1	<1	<1	1	<1	30	20	10
JUL 22...	7	<1	<1	<1	1	<1	50	40	6
SEP 28...	<1	<1	<1	<1	<1	1	40	6	34

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/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)
JUL 22...	1200	<2.0	7.2	4.9	1.7	5.8	1.6	5.6	.04	.41

15304200 KISARALIK RIVER NEAR AKIAK

LOCATION.--Lat 60°21'10", long 159°55'00", in SE¼NW¼ sec.17, T.3 N., R.61 W., Hydrologic Unit 19040001, on left bank, 1.2 mi (1.9 km) upstream from Upper Falls, 4.2 mi (6.8 km) upstream from Quicksilver Creek, and 59.5 mi (95.7 km) southeast of Akiak.

DRAINAGE AREA.--270 mi² (700 km²), approximately,

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

GAGE.--Water-stage recorder. Altitude of gage is 1,050 ft (320 m), from topographic map.

REMARKS.--Records good except those for the period Nov. 2 to May 21, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,520 ft³/s (156 m³/s) June 28, 1982, gage height, 9.44 ft (2.877 m); minimum daily, about 165 ft³/s (4.7 m³/s) Jan. 1 to May 10, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,520 ft³/s (156 m³/s) June 28, gage height, 9.44 ft (2.877 m); minimum daily, about 165 ft³/s (4.7 m³/s) Jan. 1 to May 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	451	484	180	165	165	165	165	165	2190	3790	1360	706
2	451	470	180	165	165	165	165	165	2290	3380	1220	682
3	565	450	180	165	165	165	165	165	2070	3760	1120	647
4	554	420	170	165	165	165	165	165	2130	3690	1040	635
5	484	400	170	165	165	165	165	165	2290	3320	966	730
6	451	380	170	165	165	165	165	165	2380	3030	928	730
7	385	360	170	165	165	165	165	165	2140	3150	903	706
8	396	340	170	165	165	165	165	165	2030	3150	903	767
9	396	320	170	165	165	165	165	165	2020	3720	940	743
10	342	300	170	165	165	165	165	165	2420	3380	916	706
11	385	280	170	165	165	165	165	175	3120	3000	916	682
12	418	280	170	165	165	165	165	190	3230	2740	878	647
13	396	260	170	165	165	165	165	210	3170	2610	866	682
14	352	260	170	165	165	165	165	240	2990	2410	903	682
15	342	240	170	165	165	165	165	290	2860	2200	890	743
16	342	240	170	165	165	165	165	330	2910	2140	890	966
17	321	240	170	165	165	165	165	380	3150	2040	853	1040
18	268	220	170	165	165	165	165	440	3180	1990	828	1340
19	218	220	170	165	165	165	165	500	3440	1950	804	1830
20	342	220	170	165	165	165	165	580	3540	1850	767	1960
21	496	200	170	165	165	165	165	680	3580	1810	743	2550
22	484	200	170	165	165	165	165	779	3410	1720	718	2660
23	588	200	170	165	165	165	165	840	3270	1690	718	2380
24	647	190	170	165	165	165	165	853	3240	1580	730	2120
25	706	190	170	165	165	165	165	840	3380	1490	730	1880
26	730	190	170	165	165	165	165	1300	3620	1400	718	1750
27	682	190	170	165	165	165	165	2390	3820	1400	706	1630
28	623	180	170	165	165	165	165	2000	5070	1360	694	1490
30	542	180	170	165	---	165	165	1720	4360	1630	694	1290
31	508	---	170	165	---	165	---	1830	---	1570	718	---
TOTAL	14349	8284	5300	5115	4620	5115	4950	19847	92100	74280	26754	36794
MEAN	463	276	171	165	165	165	165	640	3070	2396	863	1226
MAX	730	484	180	165	165	165	165	2390	5070	3790	1360	2660
MIN	218	180	170	165	165	165	165	165	2020	1330	694	635
CFSM	1.72	1.02	.63	.61	.61	.61	.61	2.37	11.4	8.87	3.20	4.54
IN.	1.98	1.14	.73	.70	.64	.70	.68	2.73	12.69	10.23	3.69	5.07
AC-FT	28460	16430	10510	10150	9160	10150	9820	39370	182700	147300	53070	72980

CAL YR 1981 TOTAL 321282 MEAN 880 MAX 3300 MIN 170 CFSM 3.26 IN 44.27 AC-FT 637300
WTR YR 1982 TOTAL 297508 MEAN 815 MAX 5070 MIN 165 CFSM 3.02 IN 40.99 AC-FT 590100

NOTE.--No gage-height record Jan. 6 to Mar. 24.

15348000 FORTYMILE RIVER NEAR STEELE CREEK

LOCATION.--Lat 64°18'33", long 141°24'08", in SE¼NW¼ sec.16, T.7 S., R.32 E., Hydrologic Unit 19030001, on left bank 300 ft (91 m) downstream from bridge at mile 112.9 (181.7 km) on Taylor Highway, 0.3 mi (0.5 km) downstream from O'Brien Creek, 0.7 mi (1.1 km) southeast of Alaska Department of Highways road camp, and 4.4 mi (7.1 km) northwest of Steele Creek.

DRAINAGE AREA.--5,880 mi² (15,200 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1910 to October 1912, published as "at Steele Creek" (no winter records), October 1975 to September 1982 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,200.00 ft (365.760 m) National Geodetic Vertical Datum of 1929 (Alaska Department of Highways temporary bench mark). Prior to Oct. 16, 1912 at site 6.8 mi (10.9 km) downstream at different datum.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 6 to May 10, which are estimated and poor.

AVERAGE DISCHARGE.--7 years (water years 1976-82), 2,723 ft³/s (77.12 m³/s), 6.29 in/yr (160 mm/yr), 1,973,000 acre-ft/yr (2.43 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 72,000 ft³/s (2,040 m³/s) May 3, 1979, gage height 92.4 ft (28.16 m), from floodmarks, from rating curve extended above 34,000 ft³/s (960 m³/s); no flow during winter period in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1964 reached a stage of 34.5 ft (10.52 m) from floodmarks, at previous Taylor Highway bridge and at different datum; discharge, 84,000 ft³/s (2,380 m³/s), from rating curve extended above 43,000 ft³/s (1,220 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 53,000 ft³/s (1,500 m³/s) June 16, gage height, 88.23 ft (26.892 m), 88.45 ft (26.960 m) from floodmarks; minimum daily, 1.0 ft³/s (0.03 m³/s) Mar. 11 to May 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2420	35	7.0	2.8	1.6	1.1	1.0	1.0	18500	2820	1430	1280
2	2230	33	7.0	2.8	1.6	1.1	1.0	5.0	17700	2450	1350	2330
3	1850	31	7.0	2.8	1.6	1.1	1.0	10	19600	2090	1280	1790
4	1220	29	7.0	2.8	1.6	1.1	1.0	100	14900	1860	1190	1580
5	980	28	7.0	2.8	1.6	1.1	1.0	500	9100	1700	1120	1710
6	600	27	7.0	2.8	1.6	1.1	1.0	1000	9440	1550	1050	1620
7	450	26	7.0	2.8	1.6	1.1	1.0	2000	12400	1410	986	1530
8	350	25	7.0	2.8	1.6	1.1	1.0	3000	15900	1320	950	1830
9	280	24	7.0	2.8	1.6	1.1	1.0	5000	12400	1540	932	2260
10	240	23	7.0	2.8	1.6	1.1	1.0	8000	9280	4070	920	2350
11	200	22	7.0	2.8	1.6	1.0	1.0	9400	8150	6700	908	2180
12	180	21	7.0	2.8	1.6	1.0	1.0	12000	8800	8050	868	2090
13	150	20	7.0	2.8	1.6	1.0	1.0	18900	9490	11000	857	2040
14	130	19	7.0	2.8	1.6	1.0	1.0	22600	7310	7520	835	1950
15	120	18	7.0	2.8	1.6	1.0	1.0	24500	13600	7100	813	1830
16	110	17	4.5	2.1	1.3	1.0	1.0	23500	44800	6230	840	1740
17	100	16	4.5	2.1	1.3	1.0	1.0	25800	43700	19100	868	1630
18	90	16	4.5	2.1	1.3	1.0	1.0	31000	29300	23100	857	1540
19	85	15	4.5	2.1	1.3	1.0	1.0	42600	20300	13100	846	1470
20	75	15	4.5	2.1	1.3	1.0	1.0	43400	36600	8830	818	1430
21	70	14	4.5	2.1	1.3	1.0	1.0	37700	41300	6460	802	1430
22	65	13	4.5	2.1	1.3	1.0	1.0	33200	33200	4920	786	1380
23	60	13	4.5	2.1	1.3	1.0	1.0	31000	19400	4100	764	1460
24	55	13	4.5	2.1	1.3	1.0	1.0	29600	13600	3400	752	1680
25	52	12	4.5	2.1	1.3	1.0	1.0	27200	10300	2780	769	1630
26	48	12	4.5	2.1	1.3	1.0	1.0	29600	8110	2490	752	1470
27	47	11	4.5	2.1	1.3	1.0	1.0	29200	6600	2180	742	1370
28	44	11	4.5	2.1	1.3	1.0	1.0	33200	5430	1920	730	1320
29	42	10	4.5	2.1	---	1.0	1.0	27100	4410	1730	720	1220
30	40	10	4.5	2.1	---	1.0	1.0	22300	3540	1660	700	1250
31	37	---	4.5	2.1	---	1.0	---	21700	---	1550	7	---
TOTAL	12420	579	177.0	75.6	40.9	32.0	30.0	595116.0	507160	164730	27982	50390
MEAN	401	19.3	5.71	2.44	1.46	1.03	1.00	19200	16910	5314	903	1680
MAX	2420	35	7.0	2.8	1.6	1.1	1.0	43400	44800	23100	1430	2350
MIN	37	10	4.5	2.1	1.3	1.0	1.0	1.0	3540	1320	700	1220
CFSM	.07	.003	.001	.000	.000	.000	.000	3.27	2.88	.90	.15	.29
IN.	.08	.00	.00	.00	.00	.00	.00	3.77	3.21	1.04	.18	.32
AC-FT	24640	1150	351	150	81	63	60	1180000	1006000	326700	55500	99950

CAL YR 1981	TOTAL	1012628.00	MEAN	2774	MAX	32500	MIN	.00	CFSM	.47	IN 6.41	AC-FT 2009000
WTR YR 1982	TOTAL	1358732.50	MEAN	3723	MAX	44800	MIN	1.0	CFSM	.63	IN 8.60	AC-FT 2695000

15348000 FORTYMILE RIVER NEAR STEELE CREEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953-57, 1959, 1976, and 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY 27...	2000	25300	244	16700	59

15356000 YUKON RIVER AT EAGLE

LOCATION.--Lat 64°47'22", long 141°11'52", in NW¼ sec.31, T.1 S., R.33 E., Hydrologic Unit 19030002, on left bank at Eagle, 0.1 mi (0.2 km) upstream from Mission Creek, 1.1 mi (1.8 km) downstream from Castalia Creek, and 11 mi (18 km) downstream from the international boundary.

DRAINAGE AREA.--113,500 mi² (294,000 km²), approximately.

PERIOD OF RECORD.--January 1911 to December 1913, June 1950 to current year. Monthly discharge only for some periods, published in WSP 1372.

REVISED RECORDS.--WSP 1372: 1911-14. WSP 2136: 1957, 1964 (M).

GAGE.--Water-stage recorder and nonrecording gage read once or twice daily. Altitude of gage is 850 ft (260 m), from topographic map. See WSP 1936 for history of changes prior to Oct. 1, 1963. Recording gage since June 26, 1982.

REMARKS.--Records fair except those for Oct. 16 to May 25, which are estimated and poor.

AVERAGE DISCHARGE.--34 years, 82,410 ft³/s (2,334 m³/s), 9.86 in/yr (250 mm/yr), 59,700,000 acre-ft/yr (73.6 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 545,000 ft³/s (15,400 m³/s) June 12, 1964, gage height, 33.85 ft (10.317 m); maximum gage height, 35.94 ft (10.955 m) in May 1962, from floodmarks, backwater from ice; minimum daily discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 331,000 ft³/s (9,370 m³/s) June 17, gage height, 24.8 ft (7.56 m); minimum daily, about 16,000 ft³/s (450 m³/s) Mar. 26 - Apr. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106000	60000	34000	26000	19000	17000	16000	17000	227000	179000	146000	96400
2	110000	59000	33000	26000	19000	17000	16000	17000	231000	174000	150000	94000
3	109000	58000	33000	26000	18000	17000	16000	18000	241000	169000	148000	92900
4	105000	57000	33000	26000	18000	17000	16000	19000	250000	166000	142000	91800
5	101000	56000	32000	26000	18000	17000	16000	20000	250000	158000	146000	91800
6	97600	55000	32000	25000	18000	17000	16000	21000	250000	154000	154000	90700
7	95200	54000	31000	25000	18000	17000	16000	23000	250000	151000	156000	89600
8	95200	53000	31000	25000	18000	17000	16000	27000	250000	148000	152000	88500
9	92900	52000	30000	25000	17000	17000	16000	33000	250000	145000	146000	88500
10	91800	51000	30000	25000	17000	17000	16000	40000	243000	145000	140000	88500
11	89600	50000	30000	24000	17000	17000	16000	50000	243000	148000	134000	88500
12	87400	49000	29000	24000	17000	17000	16000	60000	261000	154000	129000	87400
13	87400	47000	29000	24000	17000	17000	16000	80000	267000	156000	123000	86300
14	87400	46000	29000	24000	17000	17000	16000	150000	263000	157000	119000	86300
15	87400	45000	29000	24000	17000	17000	16000	170000	263000	156000	119000	85200
16	87000	44000	28000	23000	17000	17000	16000	180000	304000	154000	116000	85200
17	85000	43000	28000	23000	17000	17000	16000	190000	328000	157000	118000	85200
18	83000	42000	28000	23000	17000	17000	16000	200000	309000	171000	122000	85200
19	82000	41000	28000	23000	17000	17000	16000	210000	289000	182000	126000	86300
20	81000	40000	28000	22000	17000	17000	16000	210000	285000	171000	127000	86300
21	80000	40000	27000	22000	17000	17000	16000	200000	295000	168000	123000	84100
22	79000	39000	27000	22000	17000	17000	16000	200000	281000	179000	118000	83000
23	77000	39000	27000	21000	17000	17000	16000	200000	259000	185000	114000	84100
24	75000	38000	27000	21000	17000	17000	16000	200000	235000	177000	111000	83000
25	72000	37000	27000	20000	17000	17000	16000	200000	231000	168000	109000	81000
26	70000	37000	26000	20000	17000	16000	16000	202000	218000	157000	106000	79000
27	68000	36000	26000	20000	17000	16000	16000	206000	202000	152000	105000	78000
28	66000	36000	26000	20000	17000	16000	16000	209000	195000	151000	104000	77100
29	65000	35000	26000	19000	---	16000	16000	220000	187000	146000	105000	75300
30	63000	34000	26000	19000	---	16000	16000	220000	182000	142000	102000	75300
31	61000	---	26000	19000	---	16000	---	226000	---	144000	97600	---
TOTAL	2636900	1373000	896000	712000	486000	521000	480000	4018000	7539000	4964000	3907600	2574500
MEAN	85060	45770	28900	22970	17360	16810	16000	129600	251300	160100	126100	85820
MAX	110000	60000	34000	26000	19000	17000	16000	226000	328000	185000	156000	96400
MIN	61000	34000	26000	19000	17000	16000	16000	17000	182000	142000	97600	75300
CFSM	.75	.40	.26	.20	.15	.15	.14	1.14	2.21	1.41	1.11	.76
IN.	.86	.45	.29	.23	.16	.17	.16	1.32	2.47	1.63	1.28	.84
AC-FT	5230000	2723000	1777000	1412000	964000	1033000	952100	7970000	14950000	9846000	7751000	5107000

CAL YR 1981 TOTAL 32077300 MEAN 87880 MAX 257000 MIN 21000 CFSM .77 IN 10.51 AC-FT 63630000
WTR YR 1982 TOTAL 30108000 MEAN 82490 MAX 328000 MIN 16000 CFSM .73 IN 9.87 AC-FT 59720000

NOTE.--No gage-height record Oct. 28 to May 25.

15388950 PORCUPINE RIVER AT OLD CROW

LOCATIONS.--Lat 67°33'50", long 139°53'00", Yukon Territory, Canada, on right bank 1.25 mi (2.01 km) downstream from Old Crow and 3.0 mile (4.8 km) downstream from the Old Crow River.

DRAINAGE-AREA.--21,400 mi² (55,400 km²), approximately.

PERIOD OF RECORD.--June 1961 to current year (no winter records in water years 1962-68).

GAGE.--Water-stage recorder. Altitude of gage is 1,000 ft (305 m) from topographic map. Prior to July 1972, non-recording gage 1.25 mi (2.01 km) upstream at different datum.

REMARKS.--Differences between figures published herein and corresponding figures in reports of the Water Survey of Canada are due to variations in automated program techniques. After December 1978 figures published in reports of the Water Survey of Canada are in the metric system and have been converted to the English system for this report.

COOPERATION.--Discharge records furnished by the Water Survey of Canada.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 237,000 ft³/s (6,710 m³/s) June 4, 1964; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown; minimum daily, 420 ft³/s (12.0 m³/s) Mar. 29, Apr. 3, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8860	2130	1490	713	487	473	441	501	145000	---	---	10300
2	8580	2080	1450	710	491	466	434	508	132000	---	---	9960
3	8190	2050	1430	706	498	470	424	519	120000	---	---	9600
4	7770	2030	1410	720	508	473	434	530	116000	---	---	9640
5	6360	2010	1390	734	519	477	445	537	113000	---	---	9820
6	6040	1990	1380	703	530	477	459	544	106000	---	---	10300
7	5300	1980	1380	671	530	480	473	551	90400	---	---	11000
8	4770	1980	1380	653	530	484	459	558	81600	---	---	11700
9	4480	1980	1410	639	523	487	452	565	76600	---	---	12700
10	4310	1990	1420	636	516	491	445	586	72700	---	---	13200
11	4170	1980	1420	621	501	477	438	607	68900	---	---	13300
12	4030	1970	1450	618	498	470	427	632	65000	---	---	14400
13	3950	1940	1450	614	494	456	424	671	---	---	---	15700
14	3920	1930	1460	607	491	445	427	742	---	---	---	15700
15	3740	1910	1470	600	487	438	438	830	---	---	---	15000
16	3640	1890	1480	600	480	431	441	953	---	---	---	14600
17	3480	1850	1480	604	473	434	452	1060	---	---	---	14300
18	3210	1800	1480	600	459	441	456	1200	---	---	---	13900
19	3050	1750	1480	583	452	448	456	1390	---	---	---	13400
20	2980	1730	1470	565	445	459	459	2300	---	10900	---	13000
21	2960	1710	1420	551	441	463	463	3880	---	---	---	12600
22	2930	1680	1350	547	441	463	466	5650	---	---	---	12700
23	2880	1660	1240	547	445	466	470	8120	---	---	---	13100
24	2820	1650	1150	540	452	459	473	12400	---	---	---	13600
25	2770	1630	1130	544	459	445	473	17700	---	---	15000	14800
26	2680	1620	1060	547	463	438	477	28200	---	---	15300	15700
27	2540	1600	971	540	470	427	477	42400	---	---	13900	16100
28	2440	1580	830	530	473	420	480	65300	---	---	12600	16800
29	2310	1570	759	508	---	424	487	109000	---	---	11400	16600
30	2240	1550	738	501	---	438	494	169000	---	---	11200	15300
31	2170	---	713	494	---	441	---	159000	---	---	10800	---
TOTAL	129570	55220	40141	18746	13556	14161	13644	636434	---	---	---	398820
MEAN	4180	1841	1295	605	484	457	455	20530	---	---	---	13290
MAX	8860	2130	1490	734	530	491	494	169000	---	---	---	16800
MIN	2170	1550	713	494	441	420	424	501	---	---	---	9600
CFSM	.20	.09	.06	.03	.02	.02	.02	.96	---	---	---	.62
IN.	.23	.10	.07	.03	.02	.02	.02	1.11	---	---	---	.69
AC-FT	257000	109500	79620	37180	26890	28090	27060	1262000	---	---	---	791100

15439800 BOULDER CREEK NEAR CENTRAL

LOCATION.--Lat 65°34'05", long 144°53'13", in NW¼ sec.32, T.9 N., R.14 E., Hydrologic Unit 19030002, on right bank, 2,000 ft (610 m) upstream from bridge at mile 125.4 (201.8 km) on Steese Highway, 0.7 mi (1.1 km) upstream from mouth, and 2.3 mi (3.7 km) west of Central.

DRAINAGE AREA.--31.3 mi² (81.1 km²).

PERIOD OF RECORD.--Annual maximums, water years 1964-66. May 1966 to September 1982 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder. Altitude of gage is 1,075 ft (328 m), from topographic map. Aug. 3, 1963 to 1966, crest-stage gage at upstream side of bridge 2,000 ft (610 m) downstream at different datum. May 23, 1966 to Sept. 27, 1968, water-stage recorder, on downstream side of bridge, at datum 7.02 ft (2.140 m) higher than previous datum. Sept. 28, 1969 to July 31, 1971, nonrecording gage on downstream side of bridge, datum of prior recording gage.

REMARKS.--Records fair except those for periods of no gage-height, Oct. 5 to May 11 and July 1 to Aug. 7, which are estimated and poor.

AVERAGE DISCHARGE.--16 years, 11.6 ft³/s (0.328 m³/s), 5.03 in/yr (128 mm/yr), 8,400 acre-ft/yr (10.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,150 ft³/s (32.6 m³/s) Aug. 13, 1967, gage height, 7.50 ft (2.286 m), site and datum then in use, 9.72 ft (2.963 m), from floodmarks at present site and datum, from rating curve extended above 70 ft³/s (2.0 m³/s) on the basis of slope-area measurement of peak flow; no flow at times during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 447 ft³/s (12.7 m³/s) June 16, gage height, 8.09 ft (2.466 m); no flow Oct. 21 to Apr. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	.00	.00	.00	.00	.00	.00	.10	67	8.6	4.3	3.8
2	3.2	.00	.00	.00	.00	.00	.00	.20	65	7.5	4.0	4.1
3	3.0	.00	.00	.00	.00	.00	.00	.30	59	6.3	3.8	4.0
4	3.0	.00	.00	.00	.00	.00	00	.40	38	5.8	3.5	4.7
5	3.1	.00	.00	.00	.00	.00	.00	.50	36	5.0	3.3	5.0
6	3.0	.00	.00	.00	.00	.00	.00	.80	44	4.5	3.2	5.0
7	2.8	.00	.00	.00	.00	.00	.00	1.2	52	4.1	3.1	4.5
8	2.6	.00	.00	.00	.00	.00	.00	2.0	100	4.0	3.0	4.5
9	2.4	.00	.00	.00	.00	.00	.00	3.0	51	5.0	2.9	5.0
10	2.2	.00	.00	.00	.00	.00	.00	5.0	35	12	2.8	5.2
11	2.0	.00	.00	.00	.00	.00	.00	11	32	20	2.8	5.0
12	1.8	.00	.00	.00	.00	.00	.00	20	23	30	2.8	5.0
13	1.6	.00	.00	.00	.00	.00	.00	50	19	40	2.7	4.7
14	1.4	.00	.00	.00	.00	.00	.00	70	16	23	2.7	4.5
15	1.2	.00	.00	.00	.00	.00	.00	80	106	20	3.0	4.4
16	1.0	.00	.00	.00	.00	.00	.00	90	340	15	3.0	4.2
17	.80	.00	.00	.00	.00	.00	.00	100	196	60	3.0	4.2
18	.60	.00	.00	.00	.00	.00	.00	140	180	90	3.0	4.1
19	.40	.00	.00	.00	.00	.00	.00	190	125	40	2.9	4.0
20	.20	.00	.00	.00	.00	.00	.00	200	152	28	2.9	4.0
21	.00	.00	.00	.00	.00	.00	.00	170	134	20	2.9	3.8
22	.00	.00	.00	.00	.00	.00	.00	150	79	15	2.8	3.8
23	.00	.00	.00	.00	.00	.00	.00	130	50	12	2.8	3.7
24	.00	.00	.00	.00	.00	.00	.00	120	40	10	2.7	3.7
25	.00	.00	.00	.00	.00	.00	.00	120	32	9.0	2.7	3.6
26	.00	.00	.00	.00	.00	.00	.00	130	21	7.4	2.7	3.5
27	.00	.00	.00	.00	.00	.00	.00	142	24	6.6	2.7	3.3
28	.00	.00	.00	.00	.00	.00	.00	147	17	5.8	2.6	3.5
29	.00	.00	.00	.00	---	.00	.00	113	13	5.2	2.6	3.6
30	.00	.00	.00	.00	---	.00	.00	96	11	4.8	2.7	3.8
31	.00	---	.00	.00	---	.00	---	93	---	4.5	2.9	---
TOTAL	39.80	.00	.00	.00	.00	.00	.00	2375.50	2157	529.1	92.8	126.2
MEAN	1.28	.000	.000	.000	.000	.000	.000	76.6	71.9	17.1	2.99	4.21
MAX	3.5	.00	.00	.00	.00	.00	.00	0	340	90	4.3	5.2
MIN	.00	.00	.00	.00	.00	.00	.00	.10	11	4.0	2.6	3.3
CFSM	.04	.000	.000	.000	.000	.000	.000	2.45	2.30	.55	.10	.14
IN.	.05	.00	.00	.00	.00	.00	.00	2.82	2.56	.63	.11	.15
AC-FT	79	.00	.00	.00	.00	.00	.00	4710	4280	1050	184	250

CAL YR 1981 TOTAL 3445.30 MEAN 9.44 MAX 220 MIN .00 CFSM .30 IN 4.09 AC-FT 6830
WTR YR 1982 TOTAL 5320.40 MEAN 14.6 MAX 340 MIN .00 CFSM .47 IN 6.32 AC-FT 10550

15453500 YUKON RIVER NEAR STEVENS VILLAGE

LOCATION.--Lat 65°52'32", long 149°43'04", in SE¼SW¼ sec.7, T.12 N., R.10 W., Hydrologic Unit 19030002, on right downstream side of pier five, 730 ft (222 m) from north abutment of bridge, on Dalton Highway, 0.5 mi (0.8 km) downstream from Woodcamp Creek, 2.5 mi (4.0 km) upstream from Ray River, and 21 mi (34 km) southwest of Stevens Village.

DRAINAGE AREA.--196,300 mi² (508,400 km²), approximately.

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 240.00 ft (73.152 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for periods of no gage-height record, Oct. 22 to May 25 and June 25 to July 27, which are estimated and poor.

AVERAGE DISCHARGE.--6 years, 119,900 ft³/s (3,396 m³/s), 8.29 in/yr (211 mm/yr), 86,870,000 acre-ft/yr (107 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 670,000 ft³/s (19,000 m³/s) about June 9, 1977, gage height, 54.49 ft (16.609 m), from floodmarks; minimum daily, about 17,000 ft³/s (480 m³/s) Apr. 6-30, 1982.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed downstream at Rampart (station no. 15468000), 950,000 ft³/s (26,900 m³/s) June 15, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 575,000 ft³/s (16,300 m³/s) June 6, gage height, 50.96 ft (15.533 m); minimum daily, about 17,000 ft³/s (480 m³/s) Apr. 6-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150000	72000	45000	37000	30000	22000	18000	18000	545000	390000	186000	135000
2	146000	71000	45000	36000	30000	22000	18000	18000	553000	370000	181000	133000
3	141000	70000	44000	36000	30000	22000	18000	19000	563000	340000	178000	132000
4	138000	68000	44000	36000	30000	21000	18000	20000	568000	320000	186000	130000
5	133000	67000	43000	36000	29000	21000	18000	21000	571000	300000	204000	132000
6	129000	66000	42000	36000	29000	21000	17000	22000	573000	280000	218000	133000
7	125000	64000	42000	36000	29000	21000	17000	23000	567000	270000	223000	131000
8	119000	64000	42000	35000	28000	21000	17000	25000	554000	250000	222000	130000
9	114000	62000	41000	35000	28000	20000	17000	29000	537000	240000	223000	132000
10	110000	61000	40000	35000	28000	20000	17000	32000	524000	230000	224000	131000
11	107000	60000	40000	35000	28000	20000	17000	37000	517000	210000	221000	129000
12	105000	60000	40000	35000	27000	20000	17000	42000	514000	200000	213000	128000
13	104000	58000	39000	35000	27000	20000	17000	50000	504000	200000	202000	128000
14	103000	58000	39000	35000	26000	20000	17000	64000	490000	210000	191000	129000
15	101000	56000	39000	35000	26000	20000	17000	86000	478000	220000	182000	129000
16	100000	56000	39000	35000	26000	19000	17000	130000	469000	220000	177000	129000
17	99300	56000	38000	35000	25000	19000	17000	210000	458000	230000	175000	129000
18	99300	54000	38000	35000	25000	19000	17000	300000	445000	230000	171000	130000
19	98700	54000	38000	35000	25000	19000	17000	350000	445000	230000	168000	131000
20	96900	52000	38000	35000	25000	19000	17000	360000	457000	220000	166000	135000
21	91700	52000	38000	35000	24000	19000	17000	340000	461000	220000	164000	140000
22	90000	50000	38000	34000	24000	19000	17000	330000	457000	230000	163000	143000
23	88000	50000	37000	34000	24000	19000	17000	310000	449000	240000	163000	146000
24	86000	50000	37000	34000	23000	18000	17000	320000	444000	240000	162000	148000
25	84000	49000	37000	34000	23000	18000	17000	340000	440000	240000	158000	147000
26	82000	49000	37000	34000	23000	18000	17000	376000	430000	230000	153000	145000
27	80000	48000	37000	33000	23000	18000	17000	382000	430000	220000	148000	143000
28	78000	47000	37000	32000	22000	18000	17000	398000	420000	214000	144000	141000
29	78000	47000	37000	32000	---	18000	17000	459000	420000	210000	141000	136000
30	76000	46000	37000	31000	---	18000	17000	494000	410000	200000	140000	132000
31	74000	---	37000	31000	---	18000	---	524000	---	193000	137000	---
TOTAL	3226900	1717000	1225000	1072000	737000	607000	515000	6129000	14693000	7597000	5585000	4037000
MEAN	104100	57230	39520	34580	26320	19580	17170	197700	489800	245100	180200	134600
MAX	150000	72000	45000	37000	30000	22000	18000	524000	573000	390000	224000	148000
MIN	74000	46000	37000	31000	22000	18000	17000	18000	410000	193000	137000	128000
CFSM	.53	.29	.20	.18	.13	.10	.09	1.01	2.50	1.25	.92	.69
IN.	.61	.33	.23	.20	.14	.12	.10	1.16	2.78	1.44	1.06	.77
AC-FT	6401000	3406000	2430000	2126000	1462000	1204000	1022000	12160000	29140000	15070000	11080000	8007000

CAL YR 1981 TOTAL 44541900 MEAN 122000 MAX 400000 MIN 26000 CFSM .62 IN 8.44 AC-FT 88350000
WTR YR 1982 TOTAL 47140900 MEAN 129200 MAX 573000 MIN 17000 CFSM .66 IN 8.93 AC-FT 93500000

15476000 TANANA RIVER NEAR TANACROSS

LOCATION.--Lat 63°23'18", long 143°44'47", in NE¼ sec.31, T.19 N., R.9 E., Hydrologic Unit 19030004, on right bank 0.2 mi (0.3 km) north of Cathedral Rapids, 0.3 mi (0.5 km) downstream from Cathedral Rapids Creek No. 1, 9 mi (14 km) upstream from Robertson River, and 13 mi (21 km) west of Tanacross.

DRAINAGE AREA.--8,550 mi² (22,140 km²), approximately.

PERIOD OF RECORD.--June 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,489.58 ft (454.024 m) National Geodetic Vertical Datum of 1929. Prior to June 13, 1959, on left bank at site 120 ft (37 m) upstream at same datum.

REMARKS.--Records estimated and poor for period of no gage-height record prior to May 6, good thereafter. Several observations of water temperature were made during the year. Satellite telemetry at station.

AVERAGE DISCHARGE.--29 years, 7,936 ft³/s (224.7 m³/s), 12.60 in/yr (320 mm/yr), 5,750 000 acre-ft/yr (7.09 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,100 ft³/s (1,110 m³/s) June 19, 1962, gage height, 11.65 ft (3.551 m); maximum gage height, 11.70 ft (3.566 m) July 22, 1975; minimum daily discharge, 1,400 ft³/s (40 m³/s) Mar. 1-31, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,800 ft³/s (787 m³/s) Aug. 2, gage height, 9.94 ft (3.030 m); minimum daily, 2,300 ft³/s (65.0 m³/s) Mar. 1 to Apr. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5300	3300	2800	2500	2400	2300	2300	2600	13600	19300	26500	11600
2	5100	3300	2800	2500	2400	2300	2300	2700	13500	19400	27300	10900
3	4900	3200	2700	2500	2400	2300	2300	2800	14000	20100	25000	10300
4	4700	3200	2700	2500	2400	2300	2300	2900	14600	18000	22400	9600
5	4600	3200	2700	2500	2400	2300	2300	3000	14300	16600	21400	8850
6	4500	3200	2700	2500	2400	2300	2300	3200	14200	16000	20600	8240
7	4400	3100	2700	2500	2400	2300	2300	3460	13900	15500	19800	7880
8	4400	3100	2700	2500	2400	2300	2300	3600	15600	15000	19600	7680
9	4300	3100	2700	2400	2400	2300	2300	3870	17000	15100	19000	7510
10	4200	3100	2700	2400	2400	2300	2300	4710	18000	16400	18500	7350
11	4200	3100	2700	2400	2400	2300	2300	6600	17900	18600	18000	7160
12	4100	3000	2700	2400	2400	2300	2300	7760	17200	21900	17500	6920
13	4000	3000	2600	2400	2400	2300	2300	12000	16300	25400	17000	6780
14	4000	3000	2600	2400	2400	2300	2300	16200	15100	24400	16500	6550
15	3900	3000	2600	2400	2400	2300	2300	16100	14300	23500	16000	6390
16	3900	3000	2600	2400	2400	2300	2300	14400	13500	21900	15700	6360
17	3800	2900	2600	2400	2400	2300	2300	14300	12600	20900	17800	6780
18	3800	2900	2600	2400	2400	2300	2300	14300	12000	20600	20600	7850
19	3700	2900	2600	2400	2400	2300	2300	14400	11800	19900	22100	9480
20	3700	2900	2600	2400	2400	2300	2300	14700	12400	19600	22500	11100
21	3600	2900	2600	2400	2400	2300	2300	15000	13900	20300	20500	10700
22	3600	2900	2600	2400	2400	2300	2300	14700	14800	20200	17700	10600
23	3600	2900	2600	2400	2400	2300	2300	14200	14300	19800	16900	10700
24	3500	2800	2500	2400	2400	2300	2300	13600	13400	20400	17100	10700
25	3500	2800	2500	2400	2400	2300	2300	13100	13700	21100	18100	10200
26	3500	2800	2500	2400	2400	2300	2300	12700	14600	22300	18900	9180
27	3400	2800	2500	2400	2400	2300	2400	12500	16100	23000	17400	8100
28	3400	2800	2500	2400	2400	2300	2400	12800	17200	23700	16400	7270
29	3400	2800	2500	2400	---	2300	2500	13500	18000	23800	15700	7030
30	3300	2800	2500	2400	---	2300	2500	13600	18800	23900	14300	6780
31	3300	---	2500	2400	---	2300	---	13900	---	24900	12600	---
TOTAL	123600	89800	81200	75200	67200	71300	69600	313200	446600	631500	589400	256540
MEAN	3987	2993	2619	2426	2400	2300	2320	10100	14890	20370	19010	8551
MAX	5300	3300	2800	2500	2400	2300	2500	16200	18800	25400	27300	11600
MIN	3300	2800	2500	2400	2400	2300	2300	2600	11800	15000	12600	6360
CFSM	.47	.35	.31	.28	.28	.27	.27	1.18	1.74	2.38	2.22	1.00
IN.	.54	.39	.35	.33	.29	.31	.30	1.36	1.94	2.75	2.56	1.12
AC-FT	245200	178100	161100	149200	133300	141400	138100	621200	885800	1253000	1169000	508800

CAL YR 1981 TOTAL 2660850 MEAN 7294 MAX 27600 MIN 2500 CFSM .85 IN 11.58 AC-FT 5278000
WTR YR 1982 TOTAL 2815140 MEAN 7713 MAX 27300 MIN 2300 CFSM .90 IN 12.25 AC-FT 5584000

15481000 TANANA RIVER NEAR HARDING LAKE

LOCATION.--Lat 64°24'04", long 146°56'56", in NE¼ sec.16, T.6 S., R.4 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 2 mi (3 km) southwest of Harding Lake, 6 mi (10 km) upstream from Salcha River, and 38 mi (61 km) southeast of Fairbanks.

DRAINAGE AREA.--17,240 mi² (44,650 km²).

PERIOD OF RECORD.--May 1968 to current year (gage heights only).

REVISED RECORDS.--WDR Alaska 1972: 1971.

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213 m), from topographic map.

REMARKS.--Records poor. NOAA satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded gage height, 16.74 ft (5.102 m) July 15, 1971, but may have been higher during period of no gage-height record, July 16-18, 1971; minimum gage height not determined.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1967 reached a gage height of 18.1 ft (5.52 m) from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 14.50 ft (4.420 m) July 19, but may have been higher July 14; minimum gage height not determined.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR JULY TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										---	13.57	11.32
2										---	13.17	10.94
3										---	12.99	10.70
4										---	12.97	10.72
5										---	12.70	10.55
6										---	12.43	10.20
7										---	12.20	10.10
8										---	12.15	10.26
9										---	12.16	10.30
10										---	12.16	10.20
11										---	12.18	10.12
12										---	12.20	10.05
13										---	12.13	9.96
14										---	11.99	10.09
15										---	12.19	10.62
16										14.07	12.44	11.39
17										13.90	12.30	12.61
18										13.90	12.13	11.96
19										14.40	12.01	11.16
20										14.11	12.17	11.58
21										13.58	12.31	12.11
22										13.53	12.36	11.80
23										13.50	12.28	11.26
24										13.47	12.26	10.91
25										13.69	12.26	10.72
26										13.79	12.22	10.55
27										13.59	12.19	10.38
28										13.61	12.09	10.18
29										13.74	11.79	10.04
30										13.89	11.63	9.93
31										13.97	11.47	---
MEAN										---	12.29	10.76
MAX										---	13.57	12.61
MIN										---	11.47	9.93

15484000 SALCHA RIVER NEAR SALCHAKET

LOCATION.--Lat 64°28'22", long 146°55'26", in NE¼ sec.22, T.5 S., R.4 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 0.2 mi (0.3 km) upstream from bridge on Richardson Highway, 0.5 mi (0.8 km) east of Sno-Shu Inn, 2 mi (3 km) upstream from mouth, and 6 mi (10 km) southeast of Salchaket.

DRAINAGE AREA.--2,170 mi² (5,620 km²), approximately.

PERIOD OF RECORD.--July 1909 to August 1910, published as "at mouth" (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 631.85 ft (192.588 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 10, 1910, nonrecording gage at site 1.5 mi (2.4 km) downstream at different datum. Oct. 1, 1948 to Apr. 24, 1953, nonrecording gage, and Apr. 25, 1953 to Oct. 16, 1967, water-stage recorder at site 800 ft (240 m) downstream at same datum.

REMARKS.--Records good except those for the period of no gage-height record, Oct. 13 to May 11, which are estimated and poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--34 years (water years 1949-82). 1,649 ft³/s (46.70 m³/s), 10.32 in/yr (262 mm/yr), 1,195,000 acre-ft/yr (1.47 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 97,000 ft³/s (2,750 m³/s) Aug. 14, 1967, gage height, 21.78 ft (6.639 m), present site, from floodmarks, from rating curve extended above 16,000 ft³/s (450 m³/s) on basis of slope-area measurement and slope-conveyance determination of peak flow; minimum not determined, monthly mean of 60 ft³/s (1.7 m³/s) published for March 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,000 ft³/sec (283 m³/sec) and maximum (*):

Date	Time	Discharge (ft³/sec)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/sec)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 29	0300	10,700	303	11.81	3.600	June 21	1400	*18,900	535	*14.31	4.368
June 4	0200	13,100	371	12.63	3.850						

Minimum daily discharge, 100 ft³/s (2.83 m³/s) Mar. 1 to Apr. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1490	540	310	230	140	100	100	200	6650	1720	2300	1700
2	1430	520	310	220	140	100	100	280	6120	1740	3000	2000
3	1370	500	300	220	130	100	100	400	8790	1820	2770	2160
4	1310	490	300	210	130	100	100	600	11200	1600	2380	2090
5	1260	480	300	210	130	100	100	1100	6560	1440	2120	2190
6	1190	460	290	210	130	100	100	1800	5600	1340	1920	2360
7	1130	440	290	200	130	100	100	2500	6810	1320	1750	2210
8	1120	430	290	200	130	100	100	3400	7370	1260	1620	2260
9	1130	420	280	200	120	100	100	3100	6200	1240	1580	3410
10	1100	410	280	190	120	100	100	3300	4750	1430	2250	3450
11	1050	400	280	190	120	100	100	3900	4230	2190	2830	3120
12	959	390	280	190	120	100	100	4400	4110	2870	2520	2870
13	880	380	280	1[illegible]	120	100	100	4900	3520	3320	2440	2820
14	860	370	28[illegible]	180	120	100	100	5530	3020	7070	2220	2780
15	840	360	2[illegible]0	170	110	100	100	4900	2430	5400	2020	2640
16	820	360	270	170	110	100	100	4520	2970	4150	2010	2540
17	800	350	270	170	110	100	100	4500	3680	3640	2130	2440
18	780	350	270	170	110	100	100	4840	4310	5750	2120	2340
19	760	340	270	160	110	100	100	5900	5150	7250	2420	2230
20	720	340	270	160	110	100	100	7580	6860	5090	2500	2120
21	700	330	260	160	110	100	100	7780	15800	3720	2300	2020
22	680	330	260	150	110	100	100	7730	7780	3000	2110	1950
23	660	330	250	150	110	100	100	6950	4960	2610	1970	1880
24	650	330	250	150	110	100	100	6410	3760	2320	1890	1830
25	640	330	250	150	110	100	100	6630	3160	2120	1870	1760
26	620	330	240	140	110	100	110	7750	2770	2000	1870	1710
27	600	320	240	140	110	100	120	8460	2460	1930	1800	1670
28	590	320	240	140	110	100	130	8790	2240	1840	1710	1640
29	580	320	230	140	---	100	140	8790	2040	1710	1620	1620
30	570	310	230	140	---	100	170	6320	1840	1620	1580	1610
31	560	---	230	140	---	100	---	6480	---	1710	1590	---
TOTAL	27849	11580	8380	5430	3320	3100	3170	149740	157140	86220	65210	67420
MEAN	898	386	270	175	119	100	106	4830	5238	2781	2104	2247
MAX	1490	540	310	230	140	100	170	8790	15800	7250	3000	3450
MIN	560	310	230	140	110	100	100	200	1840	1240	1580	1610
CFSM	.41	.18	.12	.08	.06	.05	.05	2.23	2.41	1.28	.97	1.04
IN.	.48	.20	.14	.09	.06	.05	.05	2.57	2.69	1.48	1.12	1.16
AC-FT	55240	22970	16620	10770	6590	6150	6290	297000	311700	171000	129300	133700

CAL YR 1981 TOTAL 579975 MEAN 1589 MAX 15600 MIN 210 CFSM .73 IN 9.94 AC-FT 1150000
WTR YR 1982 TOTAL 588559 MEAN 1612 MAX 15800 MIN 100 CFSM .74 IN 10.09 AC-FT 1167000

15485500 TANANA RIVER AT FAIRBANKS

LOCATION.--Lat 64°47'54", long 147°46'32", in SW¼ sec.28, T.1 S., R.1 W., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank at south end of Peger Road in Fairbanks, 2.9 mi (4.7 km) southeast of Fairbanks International Airport, and 4.6 mi (7.4 km) upstream from the Chena River.

DRAINAGE AREA.--Undefined. Part of river flows through Salchaket Slough and is ungaged.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft (121.920 m) National Geodetic Vertical Datum of 1929. Nonrecording gage prior to Sept. 14, 1973 at same site and datum.

REMARKS.--Records fair except those for period of no gage-height record, Nov. 2 to May 13, which are estimated and poor.

AVERAGE DISCHARGE.--9 years, 18,970 ft³/s (537.2 m³/s), 13,740,000 acre-ft/yr (16.9 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,100 ft³/s (2,130 m³/s) Aug. 3, 1979, gage height, 31.84 ft (9.705 m); maximum gage height, 32.24 ft (9.827 m) July 22, 1975; minimum daily discharge, 3,100 ft³/s (88 m³/s) Feb. 14 to Mar. 31, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 16, 1967 reached a stage of 34.4 ft (10.49 m), from floodmarks, discharge, about 125,000 ft³/s (3,500 m³/s), contained in reports of the Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 70,400 ft³/s (1,990 m³/s) July 19, gage height, 31.66 ft (9.650 m); minimum daily, 4,500 ft³/s (127 m³/s) Feb. 24 to Apr. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14600	11700	6100	5600	5000	4500	4500	7000	37300	42500	61600	32100
2	14400	12000	6100	5600	5000	4500	4500	7200	38500	41200	59200	30200
3	14300	11000	6100	5500	5000	4500	4500	7400	39400	39900	57000	28000
4	14000	11000	6100	5500	4900	4500	4500	7700	44800	36800	55800	26400
5	13000	10000	6100	5500	4900	4500	4500	8000	40800	36800	53600	25700
6	13000	9800	6000	5400	4900	4500	4600	8500	35900	36500	50600	24700
7	13000	9400	6000	5400	4900	4500	4700	9100	36600	34700	48100	24000
8	12000	9100	6000	5400	4900	4500	4700	9900	42100	34400	46200	24100
9	12000	8700	6000	5400	4900	4500	4800	11000	44100	36900	45500	24600
10	12000	8500	5900	5400	4800	4500	4800	13000	42500	35600	45100	24800
11	12000	8300	5900	5400	4800	4500	4900	18000	40300	46400	45600	24200
12	12100	7900	5900	5400	4800	4500	5000	27000	41600	51700	45000	23700
13	12000	7800	5900	5300	4800	4500	5100	34000	41300	55700	43400	23000
14	12400	7600	5900	5300	4800	4500	5200	37700	37400	62500	42900	22600
15	12900	7500	5800	5300	4800	4500	5300	39500	33800	67000	42300	24900
16	13400	7400	5800	5300	4700	4500	5400	40000	39800	60500	41800	27200
17	13800	7200	5800	5300	4700	4500	5500	39800	50900	57100	41200	35300
18	13700	7100	5800	5200	4700	4500	5600	37900	53800	58700	40800	38500
19	13800	6900	5800	5200	4600	4500	5600	37300	49500	65900	40300	32100
20	13700	6800	5800	5200	4600	4500	5700	39400	46500	66600	41200	31000
21	12700	6700	5800	5200	4600	4500	5800	41400	48800	62[illegible]	41700	35800
22	12400	6600	5700	5200	4600	4500	5800	40000	52500	59300	42200	36400
23	12400	6500	5700	5200	4600	4500	5900	39300	47000	59100	41500	31700
24	13000	6400	5700	5100	4500	4500	6000	37300	40900	57000	40300	28200
25	13400	6400	5700	5100	4500	4500	6100	37200	39400	54200	40200	26200
26	13800	6300	5700	5100	4500	4500	6200	37200	39200	60100	40200	24900
27	13700	6200	5600	5100	4500	4500	6300	39900	40400	61600	39300	24000
28	13300	6200	5600	5000	4500	4500	6500	41700	42500	59500	39000	22700
29	13000	6200	5600	5000	---	4500	6600	42700	46300	60300	36700	21500
30	12500	6100	5600	5000	---	4500	6800	39500	46100	61300	34500	20300
31	12300	---	5600	5000	---	4500	---	36100	---	63000	34000	---
TOTAL	404600	239300	181100	163600	132800	139500	161400	870700	1280000	1624900	1376800	818800
MEAN	13050	7977	5842	5277	4743	4500	5380	28090	42670	52420	44410	27290
MAX	14600	12000	6100	5600	5000	4500	6800	42700	53800	67000	61600	38500
MIN	12000	6100	5600	5000	4500	4500	4500	7000	33800	34400	34000	20300
AC-FT	802500	474700	359200	324500	263400	276700	320100	1727000	2539000	3223000	2731000	1624000

CAL YR 1981 TOTAL 6778700 MEAN 18570 MAX 65100 MIN 5300 AC-FT 13450000
WTR YR 1982 TOTAL 7393500 MEAN 20260 MAX 67000 MIN 4500 AC-FT 14670000

15485500 TANANA RIVER AT FAIRBANKS--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
OCT							
06...	1420	12300	.5	1640	54500	--	--
JUN							
04 ..	1300	46100	8.5	1940	241000	16	18
28...	1430	42700	17.5	1940	224000	15	19
JUL							
20...	1530	65400	15.0	2660	470000	12	16
AUG							
09...	1500	45500	13.5	1700	209000	28	32
SEP							
08...	1245	24100	9.5	644	41900	--	--
28...	1230	22700	5.5	812	49800	29	34

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT							
06...	--	--	--	--	--	--	--
JUN							
04...	21	23	38	59	81	97	100
28...	28	41	53	65	80	95	100
JUL							
20...	21	32	50	72	92	99	100
AUG							
09...	38	45	54	64	78	99	100
SEP							
08...	--	--	--	36	54	97	100
28...	--	43	--	57	69	97	100

15493000 CHENA RIVER NEAR TWO RIVERS

LOCATION.--Lat 64°53'55", long 146°24'42", in SW¼ sec.19, T.1 N., R.7 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on downstream side of bridge near midspan at mile 37.9 (61.0 km) on the Chena Hot Springs Highway, 12.5 mi (20.1 km) upstream from South Fork Chena River, 20 mi (32 km) east of Two Rivers, and 39 mi (63 km) east of Fairbanks.

DRAINAGE AREA.-941 mi² (2,437 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929 (Alaska Department of Highways TBM).

REMARKS.--Records good except those for period of no gage-height records, Oct. 28 to May 5, which are estimated and poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--15 years, 649 ft³/s (18.38 m³/s), 9.37 in/yr (238 mm/yr), 470,700 acre-ft/yr (580 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s (476 m³/s) May 12, 1975, gage height, 21.05 ft (6.416 m); minimum daily, 20 ft³/s (0.6 m³/s) Feb. 6 to Mar. 12, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 13, 1967 reached a stage of 26.6 ft (8.1 m), from floodmarks, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,620 ft³/s (187 m³/s) June 20, gage height, 18.45 ft (5.624 m); minimum daily, 64 ft³/s (1.8 m³/s) Apr. 13-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	651	240	190	160	100	76	68	120	2600	605	832	771
2	631	230	190	150	96	76	68	140	2400	694	977	903
3	606	230	190	150	96	76	68	170	2100	684	884	854
4	595	220	190	150	94	76	66	210	3560	627	789	861
5	584	220	190	140	92	76	66	300	2250	599	727	878
6	554	210	190	140	90	76	66	480	1920	596	682	817
7	546	210	190	140	88	76	66	800	1990	585	650	760
8	520	210	180	130	88	74	66	1000	1660	569	629	745
9	520	200	180	130	86	74	66	1200	1410	798	633	811
10	500	200	180	130	86	74	66	1520	1140	837	767	776
11	500	200	180	130	86	74	66	2440	1080	832	831	735
12	527	200	180	120	84	74	66	2400	967	761	814	753
13	529	200	180	120	84	72	64	2260	925	1230	783	820
14	525	200	180	120	84	72	64	2260	861	1660	722	794
15	519	200	180	120	84	72	64	2300	761	1260	704	754
16	519	200	180	120	84	72	64	2200	818	1520	708	730
17	515	200	180	120	84	72	64	2400	1090	1450	704	714
18	514	200	180	120	82	70	64	2700	1800	3040	800	699
19	509	200	180	110	82	70	64	3000	1980	2350	903	680
20	470	200	180	110	82	70	64	3540	4140	1490	852	663
21	440	200	170	110	82	68	64	3690	4780	1130	787	649
22	480	200	170	110	80	68	64	3540	2340	932	737	638
23	505	190	170	110	80	68	64	2940	1540	829	698	636
24	516	190	170	110	80	68	66	2760	1210	763	677	628
25	535	190	170	110	80	68	68	2980	1030	721	672	618
26	500	190	160	110	80	68	70	3420	890	719	667	616
27	450	190	160	110	78	68	74	3100	790	706	648	612
28	400	190	160	100	78	68	80	3060	719	669	631	612
29	350	190	160	100	---	68	88	2270	670	645	617	612
30	300	190	160	100	---	68	100	1980	622	635	612	612
31	260	---	160	100	---	68	---	2560	---	657	635	---
TOTAL	15570	6090	5480	3780	2390	2220	2048	63740	50043	30593	22772	21751
MEAN	502	203	177	122	85.4	71.6	68.3	2056	1668	987	735	725
MAX	651	240	190	160	100	76	100	3690	4780	3040	977	903
MIN	260	190	160	100	78	68	64	120	622	569	612	612
CFSM	.53	.22	.19	.13	.09	.08	.07	.19	1.77	1.05	.78	.77
IN.	.62	.24	.22	.15	.09	.09	.08	2.52	1.98	1.21	.90	.86
AC-FT	30880	12080	10870	7500	4740	4400	4060	126400	99260	60680	45170	43140

CAL YR 1981	TOTAL 245153	MEAN 672	MAX 6900	MIN 110	CFSM .71	IN 9.69	AC-FT 486300			
WTR YR 1982	TOTAL 226477	MEAN 620	MAX 4780	MIN 64	CFSM .66	IN 8.95	AC-FT 449200			

15493700 CHENA RIVER BELOW MOOSE CREEK DAM

LOCATION.--Lat 64°48'03", long 147°13'40", in SE¼ NW¼ Sec. 30, T.1 S., R.3 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on left bank just downstream from left seepage ditch, 1.4 mi (2.3 km) upstream from Potlatch Creek, 3.1 mi (5.0 km) downstream from Moose Creek Dam, 5.0 mi (8.0 km) northeast of North Pole, and 14.7 mi (23.7 km) east of Fairbanks.

DRAINAGE AREA.-1,430 mi² (3,704 km²).

PERIOD OF RECORD.--August 1979 to current year. Records for May 1972 to September 1980 at site 1.8 mi (2.9 km) upstream published as "near North Pole", (station 15493500) may not be equivalent owing to ground-water inflow and seepage through the dam.

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

REMARKS.--Records fair except those for the periods of no gage height record, Oct. 20 to Apr. 21, and June 9-23, which are estimated and poor. Higher flows were not regulated by Moose Creek Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,920 ft³/s (224 m³/s) June 21, 1982, gage height, 44.19 ft (13.469 m), from floodmarks; minimum daily 90 ft³/s (2.5 m³/s) Feb. 23 to Mar. 25, 1980.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 7,920 ft³/s (224 m³/s) June 21, gage height, 44.19 ft (13.469 m), from floodmarks; minimum daily, 120 ft³/s (3.4 m³/s) Mar. 22 to Apr. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	910	300	270	240	160	140	120	230	3190	1200	1110	955
2	880	300	270	240	160	140	120	290	2850	1200	1380	1070
3	855	290	270	230	160	140	120	400	3240	1200	1480	1170
4	825	290	270	230	160	140	120	540	4700	1200	1340	1170
5	805	290	270	220	160	140	120	580	4180	1100	1230	1180
6	776	280	270	220	160	130	120	740	3310	1100	1150	1180
7	740	280	270	210	160	130	120	1250	2990	1000	1080	1120
8	716	280	270	210	160	130	120	1970	2840	1000	1010	1080
9	712	280	270	210	160	130	120	2420	2600	1000	985	1140
10	696	280	270	200	160	130	120	2630	2400	1100	1020	1270
11	672	280	260	200	150	130	120	2840	2200	1100	1190	1220
12	640	280	260	200	150	130	120	3280	2000	1240	1230	1170
13	636	280	260	200	150	130	120	3520	1900	1390	1200	1170
14	640	280	260	190	150	130	120	3700	1800	2200	1150	1240
15	644	280	260	190	150	130	120	3500	1700	2310	1080	1210
16	640	280	260	190	150	130	120	3300	1600	2030	1040	1150
17	636	280	260	190	150	130	120	3200	1600	2220	1050	1110
18	620	270	260	180	150	130	120	3400	1800	2900	1060	1080
19	616	270	260	180	150	130	120	3700	2400	3780	1180	1060
20	520	270	260	180	150	130	120	4100	4000	3130	1260	1040
21	492	270	260	180	140	130	120	4400	7500	2420	1200	1010
22	510	270	260	180	140	120	120	4900	5200	1990	1140	985
23	568	270	260	180	140	120	130	5400	3600	1650	1080	955
24	596	270	260	180	140	120	130	4600	2770	1450	1060	930
25	616	270	260	170	140	120	130	4400	2440	1320	1020	915
26	648	270	250	170	140	120	130	4100	2080	1230	1000	895
27	540	270	250	170	140	120	140	3850	1770	1200	990	875
28	440	270	250	170	140	120	140	3750	1500	1150	975	870
29	380	270	250	170	--	120	160	3610	1400	1080	940	885
30	320	270	250	170	---	120	180	3060	1300	1040	920	885
31	300	---	250	170	---	120	---	3080	---	1020	930	---
TOTAL	19589	8340	8100	6020	4220	3980	3780	90740	82860	48950	34480	31990
MEAN	632	278	261	194	151	128	126	2927	2762	1579	1112	1066
MAX	910	300	270	240	160	140	180	5400	7500	3780	1480	1270
MIN	300	270	250	170	140	120	120	230	1300	1000	920	870
CFSM	.44	.19	.18	.14	.11	.09	.09	2.05	1.93	1.10	.78	.75
IN.	.51	.22	.21	.16	.11	.10	.10	2.36	2.16	1.27	.90	.83
AC-FT	38850	16540	16070	11940	8370	7890	7500	180000	164400	97090	68390	63450

CAL YR 1981 TOTAL 320772 MEAN 879 MAX 5810 MIN 120 CFSM .62 IN 8.34 AC-FT 636300
WTR YR 1982 TOTAL 343049 MEAN 940 MAX 7500 MIN 120 CFSM .66 IN 8.92 AC-FT 680400

15511000 LITTLE CHENA RIVER NEAR FAIRBANKS

LOCATION.--Lat 64°53'10", long 147°14'50", in SW¼NE¼ sec.25, T.1 N., R.2 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on downstream side of left bridge abutment at mile 11.9 (19.1 km) on Chena Hot Springs Highway, 22.5 mi (36.2 km) upstream from mouth, and 14 mi (23 km) northeast of Fairbanks.

DRAINAGE AREA.--372 mi² (963 km²).

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (150 m), from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 3 to May 3, which are estimated aand poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--16 years, 204 ft³/s (5.777 m³/s), 7.45 in/yr (189 mm/yr), 147,800 acre-ft/yr (182 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft³/s (481 m³/s) Aug. 13, 1967, gage height, 31.95 ft (9.738 m), from rating curve extended above 3,000 ft³/s (85 m³/s) on basis of contracted-opening determination of peak flow; no flow Mar. 11 to Apr. 15, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,890 ft³/s (53.5 m³/s) June 21, gage height, 21.97 ft (6.696 m); minimum daily, 15 ft³/s (0.42 m³/s) Feb. 26 to Mar. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	130	86	38	18	15	16	74	539	268	341	237
2	202	130	84	36	18	15	16	96	478	265	387	241
3	190	130	80	34	17	15	16	140	1200	248	336	227
4	180	130	76	33	17	15	16	210	1180	233	302	226
5	170	120	74	32	17	15	16	310	795	221	279	222
6	165	120	72	31	17	15	16	514	605	214	264	216
7	160	120	70	30	17	15	16	719	523	203	247	207
8	155	120	68	29	17	15	17	938	457	198	236	211
9	150	110	66	28	17	15	17	995	408	189	234	222
10	150	110	64	27	17	15	17	876	364	188	244	226
11	150	110	62	26	16	15	17	993	337	215	242	223
12	150	110	60	25	16	15	17	1100	311	236	231	221
13	150	110	58	25	16	15	18	1010	355	387	220	235
14	140	110	58	24	16	15	18	907	475	378	214	240
15	140	110	56	23	16	15	18	824	366	304	212	230
16	140	100	54	23	16	15	18	729	328	265	211	228
17	140	100	54	23	16	15	1	693	559	272	209	226
18	140	100	54	22	16	15	19	727	818	520	250	226
19	150	100	52	21	16	15	19	779	809	512	266	225
20	160	100	52	21	16	15	20	760	1100	373	252	223
21	180	98	52	21	16	15	20	800	1720	307	236	217
22	190	98	52	20	16	15	22	860	1010	273	224	214
23	190	98	52	20	16	15	24	741	686	258	215	210
24	180	96	50	20	16	15	26	655	536	253	205	200
25	170	96	50	19	16	15	29	626	454	254	203	198
26	170	96	48	19	15	15	32	675	397	292	212	198
27	160	94	46	19	15	15	35	613	353	315	210	190
28	150	94	44	19	15	15	42	595	319	282	198	198
29	150	92	42	18	---	15	49	491	296	258	195	206
30	140	90	42	18	---	15	60	449	278	245	191	206
31	140	---	40	18	---	16	---	585	---	246	201	---
TOTAL	5022	3222	1818	762	457	466	685	20484	18056	8672	7467	6549
MEAN	162	107	58.6	24.6	16.3	15.0	22.8	661	602	280	241	218
MAX	220	130	86	38	18	16	60	1100	1720	520	387	241
MIN	140	90	40	18	15	15	16	74	278	188	191	190
CFSM	.44	.29	.16	.07	.04	.04	.06	1.78	1.62	.75	.65	.59
IN.	.50	.32	.18	.08	.05	.05	.07	2.05	1.81	.87	.75	.65
AC-FT	9960	6390	3610	1510	906	924	1360	40630	35810	17200	14810	12990

CAL YR 1981 TOTAL 72713 MEAN 199 MAX 1350 MIN 18 CFSM .54 IN 7.27 AC-FT 144200
WTR YR 1982 TOTAL 73660 MEAN 202 MAX 1720 MIN 15 CFSM .54 IN 7.37 AC-FT 146100

15514000 CHENA RIVER AT FAIRBANKS

LOCATION.--Lat 64°50'45", long 147°42'04", in NW¼ sec.11, T.1 S., R.1 W., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 100 ft (30 m) downstream from Steese Highway Bridge, 800 ft (240 m) upstream from Wendell Street bridge, 0.3 mi (0.5 km) upstream from Noyes Slough, 11 mi (18 km) upstream from mouth, and 11 mi (18 km) downstream from Chena Slough.

DRAINAGE AREA.--1,980 mi² (5,130 km²), approximately.

PERIOD OF RECORD.--July 1947 to September 1948 (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder and nonrecording gage used as supplementary gage below stage of 1.30 ft (0.396 m). Datum of gage is 422.92 ft (128.906 m) National Geodetic Vertical Datum of 1929. See WSP 1936 and 2136 for history of changes prior to Apr. 27, 1968.

REMARKS.--Records good except those for periods of no gage-height record, Oct. 14 to May 9 and July 20 to Sept. 8, which are estimated and poor. Several observations of water temperature were made during the year. Higher flows were not regulated by Moose Creek Dam 31.8 mi (51.2 km) upstream.

AVERAGE DISCHARGE.--34 years (water years 1949-82), 1,394 ft³/s (39.48 m³/s), 9.56 in/yr (243 mm/yr), 1,010,000 acre-ft/yr (1.25 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,400 ft³/s (2,110 m³/s) Aug. 15, 1967, gage height, 18.82 ft (5.736 m), site then in use; minimum not determined, monthly means of 120 ft³/s (3.4 m³/s) published for February 1953 and March 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Outstanding floods in early May 1905 and 1911 reached stages of about 17 ft (5.2 m) and 16 ft (4.9 m) respectively, present site and datum, probably some backwater from ice, from profile of floodmarks in a report by Corps of Engineers. Flood of late August 1930 reached a stage of 16.8 ft (5.12 m), present site and datum, from information in above report. Flood of May 11-14, 1937 reached a stage of 15.7 ft (4.79 m) present datum, from floodmarks at Cushman Street bridge, 16.5 ft (5.03 m), present site and datum, from above report, backwater from ice. Prior to construction of a dike in 1941, it was possible for flood waters from the Tanana River in Piledriver Slough to be diverted to the Chena River through Chena Slough.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,470 ft³/s (240 m³/s) June 22, gage height, 8.02 ft (2.444 m); minimum daily, 200 ft³/s (5.7 m³/s) Mar. 16 to Apr. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1420	730	520	450	240	220	200	400	5530	1700	1550	1300
2	1390	680	520	450	240	220	200	500	5200	1590	1640	1400
3	1370	640	520	450	240	220	200	600	5500	1570	1800	1400
4	1360	610	520	450	240	220	200	800	5960	1580	1820	1400
5	1320	590	520	450	240	220	200	1100	5730	1510	1780	1400
6	1270	560	520	400	240	220	200	1500	4320	1420	1680	1400
7	1220	550	520	400	240	220	200	2000	3560	1370	1590	1300
8	1190	540	520	400	240	220	200	2600	3300	1310	1500	1200
9	1180	540	520	400	240	220	200	3000	3000	1200	1400	1380
10	1170	530	520	400	240	220	200	3380	2820	1200	1500	1540
11	1110	530	500	340	240	220	200	3560	2510	1200	1600	1560
12	1100	530	500	340	240	220	200	4200	2280	1500	1700	1490
13	1090	520	500	340	240	220	200	4890	2210	2000	1600	1490
14	1070	520	500	340	240	220	200	5020	2190	2420	1500	1500
15	1040	520	500	340	240	220	200	4710	2160	2870	1400	1580
16	990	520	500	300	220	200	200	4440	1990	2610	1300	1490
17	940	520	500	300	220	200	210	4410	1900	2710	1300	1360
18	920	520	500	300	220	200	210	4530	2000	2910	1400	1420
19	880	520	500	300	220	200	220	4920	3260	4260	1500	1400
20	840	520	500	300	220	200	220	5360	3760	4500	1700	1360
21	820	520	500	270	220	200	230	6000	6010	3700	1600	1330
22	800	520	500	270	220	200	240	6750	7820	3100	1500	1320
23	840	520	500	270	220	200	250	7020	5250	2500	1500	1280
24	880	520	500	270	220	200	260	6080	3890	2200	1400	1240
25	920	520	500	270	220	200	270	5650	3190	1900	1400	1220
26	940	520	490	250	220	200	280	5740	2740	1800	1370	1200
27	960	520	480	250	220	200	300	6220	2440	1700	1300	1180
28	1000	520	470	250	220	200	310	6080	2190	1600	1300	1170
29	920	520	460	250	---	200	330	6080	2000	1590	1200	1170
30	840	520	450	250	---	200	370	5520	1850	1510	1200	1160
31	760	---	450	250	---	200	---	5110	---	1500	1200	---
TOTAL	32550	16390	15500	10300	6460	6500	6900	128170	106560	64530	46230	40640
MEAN	1050	546	500	332	231	210	230	4135	3552	2082	1491	1355
MAX	1420	730	520	450	240	220	370	7020	7820	4500	1820	1580
MIN	760	520	450	250	220	200	200	400	1850	1200	1200	1160
CFSM	.53	.28	.25	.17	.12	.11	.12	2.09	1.79	1.05	.75	.68
IN.	.61	.31	.29	.19	.12	.12	.13	2.41	2.00	1.21	.87	.76
AC-FT	64560	32510	30740	20430	12810	12890	13690	254200	211400	128000	91700	80610

CAL YR 1981 TOTAL 434801 MEAN 1191 MAX 6130 MIN 250 CFSM .60 IN 8.17 AC-FT 862400
WTR YR 1982 TOTAL 480730 MEAN 1317 MAX 7820 MIN 200 CFSM .67 IN 9.03 AC-FT 953500

15514000 CHENA RIVER AT FAIRBANKS

LOCATION.--Lat 64°50'45", long 147°42'04", in NW¼ sec.11, T.1 S., R.1 W., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 100 ft (30 m) downstream from Steese Highway Bridge, 800 ft (240 m) upstream from Wendell Street bridge, 0.3 mi (0.5 km) upstream from Noyes Slough, 11 mi (18 km) upstream from mouth, and 11 mi (18 km) downstream from Chena Slough.

DRAINAGE AREA.--1,980 mi² (5,130 km²), approximately.

PERIOD OF RECORD.--July 1947 to September 1948 (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder and nonrecording gage used as supplementary gage below stage of 1.30 ft (0.396 m). Datum of gage is 422.92 ft (128.906 m) National Geodetic Vertical Datum of 1929. See WSP 1936 and 2136 for history of changes prior to Apr. 27, 1968.

REMARKS.--Records good except those for periods of no gage-height record, Oct. 14 to May 9 and July 20 to Sept. 8, which are estimated and poor. Several observations of water temperature were made during the year. Higher flows were not regulated by Moose Creek Dam 31.8 mi (51.2 km) upstream.

AVERAGE DISCHARGE.--34 years (water years 1949-82), 1,394 ft³/s (39.48 m³/s), 9.56 in/yr (243 mm/yr), 1,010,000 acre-ft/yr (1.25 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,400 ft³/s (2,110 m³/s) Aug. 15, 1967, gage height, 18.82 ft (5.736 m), site then in use; minimum not determined, monthly means of 120 ft³/s (3.4 m³/s) published for February 1953 and March 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Outstanding floods in early May 1905 and 1911 reached stages of about 17 ft (5.2 m) and 16 ft (4.9 m) respectively, present site and datum, probably some backwater from ice, from profile of floodmarks in a report by Corps of Engineers. Flood of late August 1930 reached a stage of 16.8 ft (5.12 m), present site and datum, from information in above report. Flood of May 11-14, 1937 reached a stage of 15.7 ft (4.79 m) present datum, from floodmarks at Cushman Street bridge, 16.5 ft (5.03 m), present site and datum, from above report, backwater from ice. Prior to construction of a dike in 1941, it was possible for flood waters from the Tanana River in Piledriver Slough to be diverted to the Chena River through Chena Slough.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,470 ft³/s (240 m³/s) June 22, gage height, 8.02 ft (2.444 m); minimum daily, 200 ft³/s (5.7 m³/s) Mar. 16 to Apr. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1420	730	520	450	240	220	200	400	5530	1700	1550	1300
2	1390	680	520	450	240	220	200	500	5200	1590	1640	1400
3	1370	640	520	450	240	220	200	600	5500	1570	1800	1400
4	1360	610	520	450	240	220	200	800	5960	1580	1820	1400
5	1320	590	520	450	240	220	200	1100	5730	1510	1780	1400
6	1270	560	520	400	240	220	200	1500	4320	1420	1680	1400
7	1220	550	520	400	240	220	200	2000	3560	1370	1590	1300
8	1190	540	520	400	240	220	200	2600	3300	1310	1500	1200
9	1180	540	520	400	240	220	200	3000	3000	1200	1400	1380
10	1170	530	520	400	240	220	200	3380	2820	1200	1500	1540
11	1110	530	500	340	240	220	200	3560	2510	1200	1600	1560
12	1100	530	500	340	240	220	200	4200	2280	1500	1700	1490
13	1090	520	500	340	240	220	200	4890	2210	2000	1600	1490
14	1070	520	500	340	240	220	200	5020	2190	2420	1500	1500
15	1040	520	500	340	240	220	200	4710	2160	2870	1400	1580
16	990	520	500	300	220	200	200	4440	1990	2610	1300	1490
17	940	520	500	300	220	200	210	4410	1900	2710	1300	1360
18	920	520	500	300	220	200	210	4530	2000	2910	1400	1420
19	880	520	500	300	220	200	220	4920	3260	4260	1500	1400
20	840	520	500	300	220	200	220	5360	3760	4500	1700	1360
21	820	520	500	270	220	200	230	6000	6010	3700	1600	1330
22	800	520	500	270	220	200	240	6750	7820	3100	1500	1320
23	840	520	500	270	220	200	250	7020	5250	2500	1500	1280
24	880	520	500	270	220	200	260	6080	3890	2200	1400	1240
25	920	520	500	270	220	200	270	5650	3190	1900	1400	1220
26	940	520	490	250	220	200	280	5740	2740	1800	1370	1200
27	960	520	480	250	220	200	300	6220	2440	1700	1300	1180
28	1000	520	470	250	220	200	310	6080	2190	1600	1300	1170
29	920	520	460	250	---	200	330	6080	2000	1590	1200	1170
30	840	520	450	250	---	200	370	5520	1850	1510	1200	1160
31	760	---	450	250	---	200	---	5110	---	1500	1200	---
TOTAL	32550	16390	15500	10300	6460	6500	6900	128170	106560	64530	46230	40640
MEAN	1050	546	500	332	231	210	230	4135	3552	2082	1491	1355
MAX	1420	730	520	450	240	220	370	7020	7820	4500	1820	1580
MIN	760	520	450	250	220	200	200	400	1850	1200	1200	1160
CFSM	.53	.28	.25	.17	.12	.11	.12	2.09	1.79	1.05	.75	.68
IN.	.61	.31	.29	.19	.12	.12	.13	2.41	2.00	1.21	.87	.76
AC-FT	64560	32510	30740	20430	12810	12890	13690	254200	211400	128000	91700	80610

CAL YR 1981 TOTAL 434801 MEAN 1191 MAX 6130 MIN 250 CFSM .60 IN 8.17 AC-FT 862400
WTR YR 1982 TOTAL 480730 MEAN 1317 MAX 7820 MIN 200 CFSM .67 IN 9.03 AC-FT 953500

15515500 TANANA RIVER AT NENANA
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 64°33'55", long 149°05'30", in SE¼ sec.14, T.4 S., R.8 W., Hydrologic Unit 19030004, on left bank on east end of Alaska Railroad dock in Nenana and 0.3 mi (0.5 km) upstream from Nenana River.

DRAINAGE AREA.--25,600 mi² (66,300 km²), approximately.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2136: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 338.50 ft (103.175 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 10, 1965, on right bank 280 ft (85 m) downstream from railroad bridge 0.5 mi (0.8 km) upstream at present datum. Mar. 10, 1965 to Mar. 23, 1968, nonrecording gage on railroad bridge 0.5 mi (0.8 km) upstream at present datum.

REMARKS.--Records good except those for period of no gage-height record, Oct. 28 to May 14, which are estimated and poor. NOAA Satellite telemetry at station.

AVERAGE DISCHARGE.--20 years, 23,530 ft³/s (666.4 m³/s), 12.48 in/yr (317 mm/yr), 17,050,000 acre-ft/yr (21.0 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 186,000 ft³/s (5,270 m³/s) Aug. 18, 1967, gage height, 18.90 ft (5.761 m), site then in use; minimum daily, 4,000 ft³/s (110 m³/s) Mar. 6-20, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1948 reached a stage of 15.9 ft (4.85 m), discharge, about 135,000 ft³/s (3,820 m³/s), contained in reports of Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 81,300 ft³/s (2,300 m³/s) June 22, gage height, 11.20 ft (3.414 m); minimum daily, 6,400 ft³/s (180 m³/s) Feb. 20 to Apr. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18200	13000	8000	7200	6600	6400	6400	9400	44100	53300	69200	37800
2	17700	13000	7800	7200	6600	6400	6400	9600	46100	49900	64900	35900
3	17300	12000	7800	7200	6600	6400	6400	10000	47500	47300	61200	33400
4	17100	12000	7800	7200	6600	6400	6400	11000	48400	44200	58500	31200
5	16600	12000	7800	7200	6600	6400	6400	12000	51000	42600	56400	29800
6	16000	12000	7800	7200	6600	6400	6400	13000	47900	42700	53500	28600
7	15600	11000	7800	7200	6600	6400	6600	14000	47600	41500	50900	27700
8	15000	11000	7800	7200	6600	6400	6600	17000	52800	40600	48800	27100
9	15000	11000	7800	7000	6600	6400	6800	22000	55100	42900	48100	27600
10	14000	10000	7800	7000	6600	6400	7000	27000	53100	46700	47800	28300
11	14000	10000	7800	7000	6600	6400	7000	37000	52700	51000	46900	27800
12	14000	10000	7800	7000	6600	6400	7200	41000	52300	56700	46500	27000
13	14600	9800	7800	7000	6600	6400	7200	43000	51100	60100	45900	26300
14	14600	9600	7800	7000	6600	6400	7400	44000	47600	67200	45300	26200
15	14900	9400	7800	7000	6600	6400	7600	45400	43900	72000	44600	27900
16	15100	9200	7800	7000	6600	6400	7600	46000	46100	70800	45300	33100
17	15400	9000	7800	7000	6600	6400	7800	46700	60600	67200	45900	41300
18	15200	8800	7800	7000	6600	6400	7800	46000	63400	66800	45200	44600
19	14500	8600	7800	6800	6600	6400	8000	44900	57700	71100	43800	41000
20	14600	8400	7600	6800	6400	6400	8000	46000	58500	76400	43000	37800
21	15800	8400	7600	6800	6400	6400	8000	49100	71000	74200	43500	40000
22	14600	8400	7600	6800	6400	6400	8000	50500	80000	68900	44000	42200
23	13700	8200	7600	6800	6400	6400	8200	50500	70800	66200	44000	40300
24	14300	8200	7400	6800	6400	6400	8200	48800	61400	65400	43300	35300
25	15200	8200	7400	6800	6400	6400	8200	46900	56900	64300	42800	31900
26	15500	8000	7400	6800	6400	6400	8400	46600	55600	66200	42600	29500
27	15400	8000	7400	6800	6400	6400	8400	47600	56200	68200	42200	28000
28	15000	8000	7400	6600	6400	6400	8800	50200	57700	66600	41500	26800
29	14000	8000	7400	6600	---	6400	8800	50700	60000	65400	40300	25600
30	14000	8000	7400	6600	---	6400	9200	48700	57900	66200	38400	24100
31	14000	---	7200	6600	---	6400	---	44500	---	68800	37500	---
TOTAL	470900	291200	237800	215200	183000	198400	225200	1119100	1655000	1851400	1471800	964100
MEAN	15190	9707	7671	6942	6536	6400	7507	36100	55170	59720	47480	32140
MAX	18200	13000	8000	7200	6600	6400	9200	50700	80000	76400	69200	44600
MIN	13700	8000	7200	6600	6400	6400	6400	9400	43900	40600	37500	24100
CFSM	.59	.38	.30	.27	.26	.25	.29	1.41	2.16	2.33	1.86	1.26
IN.	.68	.42	.35	.31	.27	.29	.33	1.63	2.40	2.69	2.14	1.40
AC-FT	934000	577600	471700	426800	363000	393500	446700	2220000	3283000	3672000	2919000	1912000

CAL YR 1981 TOTAL 8693900 MEAN 23820 MAX 81900 MIN 6900 CFSM .93 IN 12.63 AC-FT 17240000
WTR YR 1982 TOTAL 8883100 MEAN 24340 MAX 80000 MIN 6400 CFSM .95 IN 12.91 AC-FT 17620000

15515500 TANANA RIVER AT NENANA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-56, 1963-64, 1966-75, and 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC 17...	1415	7700	276	7.0	.0	.50	46	K0	152
MAR 04...	1430	6440	276	6.8	.0	2.6	K28	K14	164
MAY 19...	1430	44400	135	7.5	6.5	60	<15	<3	76
JUL 08...	1345	40100	219	7.4	19.5	330	430	--	104

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L CACO3)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
DEC 17...	31	46	9.0	4.2	2.5	120	35	1.5	.2
MAR 04...	43	49	10	4.9	2.3	120	34	1.5	.2
MAY 19...	11	23	4.7	2.6	1.9	--	9.0	1.6	.1
JUL 08...	23	31	6.4	3.8	1.9	80	29	2.0	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC 17...	15	183	192	.18	.150	.52	.110	.040	.020
MAR 04...	15	190	195	.20	.120	.31	.060	.030	<.010
MAY 19...	6.8	118	89	.24	.140	1.70	.480	.030	<.010
JUL 08...	7.7	130	130	.12	.140	1.50	.520	.020	.020

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
DEC 17...	3	2	1	<100	--	57	2	<1	10
MAR 04...	2	1	1	100	--	<100	1	<1	10
MAY 19...	--	--	--	--	--	--	--	--	--
JUL 08...	1	0	2	300	300	39	<1	<1	30

K NON-IDEAL COLONY COUNT

15515500 TANANA RIVER AT NENANA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
DEC 17...	--	<10	4	<3	16	12	4	4100	4100
MAR 04...	0	10	1	<1	7	4	3	910	830
MAY 19...	--	--	--	--	--	--	--	--	--
JUL 08...	--	<10	15	<1	120	110	7	30000	30000

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)
DEC 17...	21	19	17	2	180	80	100	.1	--
MAR 04...	80	7	--	<1	110	10	100	<.1	--
MAY 19...	--	--	--	--	--	--	--	--	--
JUL 08...	16	9	--	<1	670	660	13	.2	.0

DATE	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
DEC 17...	<.1	9	--	<1	<1	1	<1	<1	50
MAR 04...	<.1	2	--	<1	<1	2	<1	<1	30
MAY 19...	--	--	--	--	--	--	--	--	--
JUL 08...	.4	43	42	1	<1	<1	<1	<1	100

DATE	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED MG/L)	SEDIMENT, DISCHARGES, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN PENDED .062 MM
DEC 17...	20	30	--	--	--
MAR 04...	10	20	--	--	--
MAY 19...	--	--	1290	155000	56
JUL 08...	90	8	1410	153000	61

15535000 CARIBOU CREEK NEAR CHATANIKA

LOCATION.-Lat 65°09'00", long 147°33'05", in NW¼NE¼ sec.28, T.4 N., R.1 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on left bank 2.0 mi (3.2 km) upstream from mouth, 3.5 mi (5.6 km) northwest of Chatanika, and 21.6 mi (34.8 km) north of Fairbanks.

DRAINAGE AREA.--9.19 mi² (23.8 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 870 ft (270 m), from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 19 to June 22, which are estimated and poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--13 years, 4.86 ft³/s (0.138 m³/s), 7.18 in/yr (182 mm/yr), 3,520 acre-ft/yr (4.34 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 161 ft³/s (4.56 m³/s) July 11, 1981, gage height, 3.41 ft (1.039 m), from rating curve extended above 2.5 ft; no flow Dec. 11, 1975 to Apr. 4, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 100 ft³/s (2.83 m³/s) June 3; minimum daily, 1.8 ft³/s (0.05 m³/s) Mar. 11 to Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	3.7	2.7	2.4	2.0	1.9	1.8	6.0	12	5.5	12	5.8
2	5.9	3.7	2.7	2.4	2.0	1.9	1.8	6.6	90	5.4	9.6	5.7
3	5.9	3.7	2.7	2.4	2.0	1.9	1.9	7.4	100	5.1	8.3	5.8
4	5.9	3.7	2.7	2.4	2.0	1.9	1.9	8.8	40	4.9	7.6	5.7
5	5.6	3.7	2.7	2.4	2.0	1.9	1.9	11	28	4.9	7.2	5.5
6	5.4	3.7	2.7	2.4	2.0	1.9	1.9	14	20	4.8	6.9	5.5
7	5.2	3.7	2.7	2.4	2.0	1.9	1.9	17	17	4.8	6.7	5.4
8	5.0	3.7	2.7	2.2	2.0	1.9	1.9	25	14	4.8	6.5	5.4
9	5.0	3.7	2.7	2.2	2.0	1.9	2.0	23	13	4.6	6.3	5.4
10	4.8	3.7	2.7	2.2	2.0	1.9	2.0	22	11	4.8	6.2	5.4
11	4.8	3.7	2.7	2.2	2.0	1.8	2.1	27	10	4.9	6.2	5.2
12	4.8	3.7	2.7	2.2	2.0	1.8	2.1	25	9.0	6.1	6.0	5.4
13	4.8	3.7	2.7	2.2	2.0	1.8	2.1	23	12	11	5.8	5.4
14	4.8	3.7	2.7	2.2	2.0	1.8	2.2	20	10	7.8	5.8	5.4
15	4.6	3.7	2.7	2.2	2.0	1.8	2.2	18	9.0	6.9	5.8	5.4
16	4.3	3.2	2.4	2.2	1.9	1.8	2.2	17	17	6.9	5.8	5.4
17	4.3	3.2	2.4	2.2	1.9	1.8	2.3	17	20	14	7.4	5.4
18	4.3	3.2	2.4	2.2	1.9	1.8	2.4	18	15	14	9.6	5.4
19	4.4	3.2	2.4	2.2	1.9	1.8	2.4	19	28	8.9	7.8	5.4
20	4.5	3.2	2.4	2.2	1.9	1.8	2.5	18	70	7.4	7.0	5.4
21	4.5	3.2	2.4	2.1	1.9	1.8	2.6	22	28	6.7	6.7	5.2
22	5.0	3.2	2.4	2.1	1.9	1.8	2.8	19	15	12	6.3	5.2
23	4.9	3.2	2.4	2.1	1.9	1.8	2.9	17	8.7	11	6.2	4.9
24	4.8	3.2	2.4	2.1	1.9	1.8	3.1	15	7.8	10	6.0	4.9
25	4.7	3.2	2.4	2.1	1.9	1.8	3.3	14	7.0	9.6	5.8	4.9
26	4.5	3.2	2.4	2.1	1.9	1.8	3.6	17	6.7	12	5.7	4.9
27	4.5	3.2	2.4	2.1	1.9	1.8	3.8	15	6.2	9.2	5.5	5.1
28	4.5	3.2	2.4	2.1	1.9	1.8	4.2	13	5.8	7.8	5.4	5.7
29	4.5	3.2	2.4	2.1	---	1.8	4.7	12	5.5	7.2	5.4	5.8
30	4.5	3.2	2.4	2.1	---	1.8	5.0	16	5.5	6.9	5.4	5.7
31	4.5	---	2.4	2.1	---	1.8	---	15	---	11	5.5	---
TOTAL	151.1	103.5	78.9	68.5	54.7	56.8	77.5	517.8	641.2	240.9	208.4	161.7
MEAN	4.87	3.45	2.55	2.21	1.95	1.83	2.58	16.7	21.4	7.77	6.72	5.39
MAX	5.9	3.7	2.7	2.4	2.0	1.9	5.0	27	100	14	12	5.8
MIN	4.3	3.2	2.4	2.1	1.9	1.8	1.8	6.0	5.5	4.6	5.4	4.9
CFSM	.53	.38	.28	.24	.21	.20	.28	1.82	2.33	.85	.73	.59
IN.	.61	.42	.32	.28	.22	.23	.31	2.10	2.60	.98	.84	.65
AC-FT	300	205	156	136	108	113	154	1030	1270	478	413	321

CAL YR 1981 TOTAL 2254.1 MEAN 6.18 MAX 82 MIN 1.5 CFSM .67 IN 9.12 AC-FT 4470
WTR YR 1982 TOTAL 2361.0 MEAN 6.47 MAX 100 MIN 1.8 CFSM .70 IN 9.56 AC-FT 4680

15564900 KOYUKUK RIVER AT HUGHES

LOCATION.--Lat 66°02'51", long 154°15'30", in SE¼SE¼ sec.33, T.8 N., R.22 E., Hydrologic Unit 19030005, on left bank at north end of runway at Hughes and 0.6 mi (1.0 km) upstream from Hughes Creek.

DRAINAGE AREA.--18,700 mi² (48,400 km²), approximately.

PERIOD OF RECORD.--June 1960 to September 1982 (discontinued).

REVISED RECORDS.--WSP 1936: 1960.

GAGE.-Nonrecording gage read twice daily. Altitude of gage is 250 ft (76 m), from topographic map. Prior to Sept. 30, 1960, on right bank at same datum.

REMARKS.-Records fair except those for period of no gage-height record, Oct. 4 to June 14, which are estimated and poor.

AVERAGE DISCHARGE.--22 years, 14,540 ft³/s (411.8 m³/s), 10.56 in/yr (268 mm/yr), 10,530,000 acre-ft/yr (13.0 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 266,000 ft³/s (7,530 m³/s) June 6, 1964, gage height, 31.09 ft (9.476 m); maximum gage height, 34.33 ft (10.464 m) May 26, 1965, from floodmarks, backwater from ice; minimum daily discharge, 200 ft³/s (5.7 m³/s) Apr. 1-15, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.-Flood of August 1937 reached a stage of about 34 ft (10.4 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.-Maximum discharge observed, 139,000 ft³/s (3,940 m³/s) June 15, gage height, 25.79 ft (7.861 m); minimum daily discharge, 520 ft³/s (14.7 m³/s) Apr. 21 to May 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6900	2000	1500	1200	900	660	560	520	80000	30100	48000	20200
2	6000	2000	1500	1200	900	660	560	540	80000	26500	44000	23200
3	5250	2000	1500	1200	900	660	560	560	85000	26500	39000	25000
4	4900	2000	1500	1200	900	660	560	580	90000	25000	35000	26200
5	4600	2000	1500	1200	900	660	560	600	100000	24000	31000	24800
6	4500	1900	1500	1200	900	660	560	620	85000	22200	28000	23200
7	4300	1900	1500	1200	900	660	560	660	78000	24800	25000	22200
8	4100	1900	1500	1200	900	660	560	720	85000	34400	22800	20800
9	3900	1900	1500	1200	900	660	560	800	100000	33400	21200	19500
10	3700	1900	1500	1200	900	660	560	900	120000	26800	20000	18500
11	3600	1800	1400	1200	800	660	560	1100	110000	23200	20000	17800
12	3400	1800	1400	1200	800	660	560	1500	100000	21200	20800	22000
13	3300	1800	1400	1200	800	660	560	2000	110000	21000	21800	26800
14	3200	1800	1400	1200	800	660	560	3000	120000	20500	23000	33100
15	3100	1800	1400	1200	800	660	560	4500	133000	19000	28900	38200
16	3000	1700	1400	1100	800	600	560	7000	118000	17500	37500	38900
17	2900	1700	1400	1100	800	600	560	11000	81500	16800	39200	48500
18	2800	1700	1400	1100	800	600	560	20000	68600	18500	36000	82500
19	2700	1700	1400	1100	800	600	560	40000	57300	22500	34700	112000
20	2600	1700	1400	1100	800	600	560	70000	52500	23200	33700	102000
21	2600	1600	1300	1100	700	600	520	110000	51700	24000	31900	87500
22	2500	1600	1300	1100	700	600	520	80000	50100	25000	31600	79500
23	2400	1600	1300	1100	700	600	520	81000	46900	26000	29000	77200
24	2300	1600	1300	1100	700	600	520	82000	46100	28000	26500	65900
25	2300	1600	1300	1100	700	600	520	84000	46100	32200	24200	59700
26	2200	1600	1300	1000	700	600	520	86000	43100	56500	23000	54100
27	2200	1600	1300	1000	700	600	520	88000	39600	55300	21800	49300
28	2100	1600	1300	1000	700	600	520	90000	35800	48900	20000	45300
29	2100	1600	1300	1000	---	600	520	90000	33700	55300	19000	41700
30	2000	1600	1300	1000	---	600	520	80000	32800	60100	18000	38600
31	2000	---	1300	1000	---	600	---	80000	---	54000	19000	---
TOTAL	103450	53000	43300	35000	22600	19500	16400	1117600	2279800	942400	873600	1344200
MEAN	3337	1767	1397	1129	807	629	547	36050	75990	30400	28180	44810
MAX	6900	2000	1500	1200	900	660	560	110000	133000	60100	48000	112000
MIN	2000	1600	1300	1000	700	600	520	520	32800	16800	18000	17800
CFSM	.18	.09	.08	.06	.04	.03	.03	1.93	4.06	1.63	1.51	2.40
IN.	.21	.11	.09	.07	.04	.04	.03	2.22	4.54	1.87	1.74	2.67
AC-FT	205200	105100	85890	69420	44830	38680	32530	2217000	4522000	1869000	1733000	2666000

CAL YR 1981 TOTAL 5473120 MEAN 14990 MAX 90000 MIN 800 CFSM .80 IN 10.89 AC-FT 10860000
WTR YR 1982 TOTAL 6850850 MEAN 18770 MAX 133000 MIN 520 CFSM 1.00 IN 13.63 AC-FT 13590000

15565447 YUKON RIVER AT PILOT STATION
(National stream-quality accounting, pesticide, and radiochemical networks station)

LOCATION.--Lat 61°56'04", long 162°52'50", in SW¼SE¼ sec.5, T.21 N., R.74 W., Hydrologic Unit 19030006, on right bank 0.2 mi (0.3 km) downstream from village of Pilot Station, 2.4 mi (3.9 km) downstream from Atchuelinguk River, and 19 mi (31 km) upstream from Andreafsky River.

DRAINAGE AREA.--321,000 mi² (831,000 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (6 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Oct. 8 to June 17, which are poor.

AVERAGE DISCHARGE.--7 years, 219,700 ft³/s (6,222 m³/s), 9.29 in/yr (236 mm/yr), 159,200,000 acre-ft/yr (196 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 751,000 ft³/s (21,300 m³/s) May 27 or 28, 1982, gage height, 28.6 ft (8.72 m), from floodmarks; maximum gage height, 30.2 ft (9.20 m) about May 23, 1976, from floodmarks, backwater from ice; minimum daily discharge, about 37,000 ft³/s (1,000 m³/s) Apr. 11-26, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 751,000 ft³/s (21,300 m³/s), May 27 or 28, gage height, 28.6 ft (8.72 m), from floodmarks; minimum daily, about 38,000 ft³/s (1,080 m³/s) Apr. 16-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280000	150000	100000	80000	65000	55000	40000	40000	600000	661000	467000	387000
2	280000	140000	100000	80000	65000	55000	40000	40000	650000	657000	470000	382000
3	280000	140000	100000	80000	65000	55000	40000	40000	650000	652000	474000	375000
4	280000	140000	100000	80000	65000	55000	40000	40000	650000	649000	477000	367000
5	300000	140000	100000	80000	60000	55000	40000	40000	650000	640000	477000	364000
6	281000	140000	95000	75000	60000	50000	40000	40000	650000	631000	476000	361000
7	280000	130000	95000	75000	60000	50000	40000	40000	650000	624000	475000	357000
8	280000	130000	95000	75000	60000	50000	40000	45000	650000	615000	473000	351000
9	270000	130000	95000	75000	60000	50000	40000	45000	650000	602000	470000	346000
10	260000	130000	95000	75000	60000	50000	40000	45000	700000	588000	467000	340000
11	250000	130000	90000	75000	60000	50000	40000	45000	700000	573000	465000	335000
12	240000	130000	90000	75000	60000	50000	40000	50000	700000	561000	462000	330000
13	240000	120000	90000	75000	60000	50000	40000	50000	700000	547000	459000	329000
14	230000	120000	90000	75000	60000	50000	40000	55000	700000	533000	459000	323000
15	220000	120000	90000	70000	60000	50000	40000	60000	700000	520000	459000	320000
16	220000	120000	90000	70000	60000	50000	38000	70000	700000	507000	458000	320000
17	210000	120000	85000	70000	60000	45000	38000	90000	700000	494000	458000	323000
18	200000	120000	85000	70000	60000	45000	38000	110000	670000	483000	456000	328000
19	200000	120000	85000	70000	55000	45000	38000	130000	671000	473000	452000	330000
20	190000	120000	85000	70000	55000	45000	38000	160000	671000	465000	451000	336000
21	190000	110000	85000	70000	55000	45000	38000	200000	669000	457000	447000	344000
22	190000	110000	85000	70000	55000	45000	38000	240000	667000	452000	442000	348000
23	180000	110000	85000	70000	55000	45000	38000	280000	667000	447000	435000	359000
24	180000	110000	85000	70000	55000	45000	38000	320000	666000	444000	429000	365000
25	180000	110000	85000	70000	55000	45000	38000	380000	664000	442000	424000	377000
26	170000	110000	80000	65000	55000	45000	38000	480000	665000	441000	418000	389000
27	170000	110000	80000	65000	55000	40000	38000	600000	664000	443000	413000	401000
28	160000	110000	80000	65000	55000	40000	38000	700000	660000	446000	406000	412000
29	160000	100000	80000	65000	---	40000	38000	650000	657000	452000	400000	417000
30	150000	100000	80000	65000	---	40000	38000	650000	661000	459000	395000	430000
31	150000	---	80000	65000	---	40000	---	600000	---	464000	392000	---
TOTAL	6871000	3670000	2760000	2235000	1650000	1475000	1170000	6335000	20052000	16422000	13906000	10746000
MEAN	221600	122300	89030	72100	58930	47580	39000	204400	668400	529700	448600	358200
MAX	300000	150000	100000	80000	65000	55000	40000	700000	700000	661000	477000	430000
MIN	150000	100000	80000	65000	55000	40000	38000	40000	600000	441000	392000	320000
CFSM	.69	.38	.28	.23	.18	.15	.12	.64	2.08	1.65	1.40	1.12
IN.	.80	.43	.32	.26	.19	.17	.14	.73	2.32	1.90	1.61	1.25
AC-FT	13630000	7279000	5474000	4433000	3273000	2926000	2321000	12570000	39770000	32570000	27580000	21310000

CAL YR 1981 TOTAL 82232000 MEAN 225300 MAX 560000 MIN 40000 CFSM .70 IN 9.53 AC-FT 163100000
WTR YR 1982 TOTAL 87292000 MEAN 239200 MAX 700000 MIN 38000 CFSM .75 IN 10.12 AC-FT 173100000

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-56, 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
OCT							
07...	1401	800	248	7.6	2.6	13.2	96
07...	1402	1550	240	7.4	2.6	--	--
07...	1403	2050	242	7.4	2.6	13.2	96
DEC							
20...	1500	--	--	--	.0	--	--
JUN							
18...	1730	--	130	7.6	--	--	--
18...	1731	925	--	7.5	13.6	8.5	82
18...	1732	1525	--	7.6	13.7	8.6	83
18...	1733	2125	--	7.7	13.8	8.9	86
AUG							
20...	1701	635	186	7.6	13.8	--	--
20...	1702	1285	189	7.6	13.8	--	--
20...	1703	1685	187	7.6	13.8	--	--
20...	1704	1985	186	7.6	13.8	--	--
20...	1705	2285	184	7.5	13.9	--	--
SEP							
29...	1531	550	182	8.0	7.0	10.6	88
29...	1532	1250	180	8.1	7.0	10.9	91
29...	1533	1600	177	8.1	6.9	11.1	92
29...	1534	1900	177	8.1	7.0	11.2	93
29...	1535	2150	174	8.1	7.0	11.8	98

DATE	TIME	STREAM WIDTH (FT)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE LAB (UMHOS)	TEMPERATURE, AIR (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT										
07...	1400	2315	314000	231	--	34	767	K2	K7	120
DEC										
20...	1500	2250	84600	--	-29.0	4.2	--	--	--	140
JUN										
18...	1730	2725	670000	142	25.5	74	761	K1	K5	70
AUG										
20...	1700	2535	484000	202	17.0	190	--	--	--	96
SEP										
29...	1530	2400	420000	197	--	64	757	--	--	94

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT										
07...	34	8.0	3.3	1.6	86	34	1.3	.1	7.0	139
DEC										
20...	41	10	4.3	1.3	--	--	1.4	.2	11	169
JUN										
18...	22	3.6	1.6	1.2	58	22	1.0	.1	4.4	100
AUG										
20...	28	6.3	2.8	1.3	80	24	1.0	.1	6.7	125
SEP										
29...	27	6.5	2.4	1.0	77	25	1.1	.1	7.2	117

K NON-IDEAL COLONY COUNT

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)
OCT 07...	142	.22	.18	.180	.190	.45	.25	.63	.19	.44
DEC 20...	--	--	.19	--	.240	--	--	.59	--	--
JUN 18...	91	--	<.10	--	.100	--	--	.70	--	--
AUG 20...	118	--	.10	--	.140	--	--	.90	--	--
SEP 29...	117	--	.14	--	.110	--	--	.80	--	--

DATE	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	TRITIUM IN WATER MOLE-CULES (TU)	TRITIUM WATER MOLE-CULES COUNT ERROR (TU)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 07...	.85	.62	.120	.020	--	6.8	78.0	4.5	213	181000
DEC 20...	--	--	.020	.030	.030	--	70.4	2.5	3	685
JUN 18...	--	--	.080	.020	<.020	--	47.5	1.9	--	--
AUG 20...	--	--	.390	.040	<.010	--	51.6	1.9	--	--
SEP 29...	--	--	.050	<.010	.010	--	56.7	2.1	E200	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT 07...	1400	4	2	2	200	100	100	1	0	1	10
JUN 18...	1730	3	2	1	100	60	43	2	--	<1	10
SEP 29...	1530	3	2	1	100	60	44	<1	--	<1	<10

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 07...	10	0	5	4	1	15	12	3	4700	4500	180
JUN 18...	--	<10	8	--	<1	18	10	8	8400	8100	280
SEP 29...	--	10	4	--	<1	21	--	<1	7100	6900	250

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)
OCT 07...	5	4	1	110	100	10	.1	.1	.0	9	5
JUN 18...	4	0	4	230	190	40	.3	.0	.6	14	12
SEP 29...	2	--	<1	180	160	17	.1	--	<.1	12	11

E ESTIMATED

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 07...	4	0	0	0	0	0	0	40	20	20
JUN 18...	2	<1	--	<1	<1	--	<1	40	--	<3
SEP 29...	1	<1	--	<1	<1	--	<1	70	--	<3

DATE	TIME	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 18...	1730	<1	<.1	<1.0	<.1	<.1	<.1	<.1	<.1

DATE	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 18...	<.1	<.1	<.1	<.1	<.1	<.1	<1.0	<1.00	<10

15668200 CRATER CREEK NEAR NOME

LOCATION.--Lat 64°55'48", long 164°52'12", in NW¼NW¼ sec.36, T.6 S., R.31 W., Hydrologic Unit 19020002, on right bank 15 ft (5 m) upstream from bridge at mile 43 (69 km) on Nome-Kougarok Highway, 1.1 mi (1.8 km) upstream from mouth, and 34 mi (55 km) northeast of Nome.

DRAINAGE AREA.--21.9 mi² (56.7 km²).

PERIOD OF RECORD.--Annual maximum, water years 1964-65, 1967-75. August 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 480 ft (150 m), from topographic map. Sept. 18, 1964 to Aug. 29, 1975, crest-stage gage at same site and datum.

REMARKS.--Records fair except those for Oct. 15 to June 13, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--7 years, 55.1 ft³/s (1.560 m³/s), 34.17 in/yr (868 mm/yr), 39,920 acre-ft/yr (49.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,540 ft³/s (71.9 m³/s) July 10, 1975, gage height, 19.71 ft (6.008 m) from floodmarks, road and culvert washed out, from slope-area measurement of peak flow; no flow for several weeks of most winters.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 881 ft³/s (25.0 m³/s) June 20, gage height, 13.24 ft (4.036 m), only peak above base of 550 ft³/s (16 m³/s); maximum gage height, 14.43 ft (4.398), June 11 backwater due to ice; no flow Mar. 1 to Apr. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	14	6.0	1.5	1.0	.00	.00	1.0	100	232	80	52
2	21	14	5.0	1.5	1.0	.00	.00	1.0	150	189	80	51
3	21	14	5.0	1.5	1.0	.00	.00	1.0	150	168	78	51
4	20	12	5.0	1.5	.50	.00	.00	1.0	130	200	78	51
5	21	12	5.0	1.5	.50	.00	.00	2.0	200	278	76	76
6	20	12	5.0	1.5	.50	.00	.00	2.0	180	273	76	72
7	20	10	5.0	1.5	.50	.00	.00	2.0	180	208	74	68
8	20	10	4.0	1.5	.50	.00	.00	2.0	180	186	74	65
9	20	10	4.0	1.5	.50	.00	.00	3.0	180	182	74	64
10	18	10	4.0	1.5	.50	.00	.00	3.0	190	141	72	63
11	17	9.0	4.0	1.5	.50	.00	.00	3.0	190	133	61	62
12	16	9.0	4.0	1.5	.50	.00	.00	3.0	190	145	61	61
13	16	9.0	4.0	1.0	.50	.00	.00	4.0	190	133	76	62
14	16	9.0	4.0	1.0	.50	.00	.00	4.0	256	121	78	76
15	20	8.0	3.0	1.0	.50	.00	.00	5.0	203	153	69	87
16	21	8.0	3.0	1.0	.50	.00	.00	5.0	203	125	69	113
17	21	8.0	3.0	1.0	.50	.00	.00	6.0	248	111	68	92
18	21	8.0	3.0	1.0	.50	.00	.00	6.0	301	105	65	82
19	20	8.0	3.0	1.0	.50	.00	.00	7.0	455	99	64	84
20	20	7.0	3.0	1.0	.50	.00	.00	7.0	633	90	63	84
21	30	7.0	3.0	1.0	.50	.00	.00	8.0	471	82	60	99
22	25	7.0	3.0	1.0	.50	.00	.00	8.0	478	81	59	144
23	40	7.0	2.0	1.0	.50	.00	.00	9.0	355	81	56	124
24	30	7.0	2.0	1.0	.50	.00	.00	9.0	357	69	55	133
25	25	7.0	2.0	1.0	.50	.00	.00	10	458	58	53	144
26	20	6.0	2.0	1.0	.50	.00	.00	14	564	48	56	167
27	18	6.0	2.0	1.0	.50	.00	.00	18	526	83	55	152
28	18	6.0	2.0	1.0	.50	.00	.00	24	524	120	53	157
29	16	6.0	2.0	1.0	---	.00	.00	30	319	100	53	158
30	16	6.0	2.0	1.0	---	.00	.00	40	232	90	54	150
31	16	---	1.5	1.0	---	.00	---	50	---	90	53	---
TOTAL	644	266.0	105.5	37.0	15.50	.00	.00	288.0	8793	4174	2043	2844
MEAN	20.8	8.87	3.40	1.19	.55	.000	.000	9.29	293	135	65.9	94.8
MAX	40	14	6.0	1.5	1.0	.00	.00	50	633	278	80	167
MIN	16	6.0	1.5	1.0	.50	.00	.00	1.0	100	48	53	51
CFSM	.95	.41	.16	.05	.03	.000	.000	.42	13.4	6.16	3.01	4.33
IN.	1.09	.45	.18	.06	.03	.00	.00	.49	14.94	7.09	3.47	4.83
AC-FT	1280	528	209	73	31	.00	.00	571	17440	8280	4050	5640

CAL YR 1981 TOTAL 13462.00 MEAN 36.9 MAX 450 MIN .00 CFSM 1.69 IN 22.87 AC-FT 26700
WTR YR 1982 TOTAL 19210.00 MEAN 52.6 MAX 633 MIN .00 CFSM 2.40 IN 32.63 AC-FT 38100

NOTE.--No gage-height record Oct. 15 to June 9.

15744500, KOBUK RIVER NEAR KIANA

LOCATION.--Lat 66°58'25", long 160°07'51", in NW¼SE¼ sec.11, T.18 N., R.7 W., Hydrologic Unit 19020001, on left bank 5.8 mi (9.3 km) upstream from Portage Creek, 9.7 mi (15.6 km) upstream from Squirrel River, and 9.8 mi (15.8 km) upstream from Kiana.

DRAINAGE AREA.--9,520 mi² (24,660 km²), approximately.

PERIOD OF RECORD.--September 1976 to current year.

REVISED RECORDS.--WDR AK-81-1: 1977 (M), 1978, 1979-80 (M).

GAGE --Water-stage recorder. Altitude of gage is 35 ft (10.7 m), from topographic map.

REMARKS.--Records estimated and poor for period of no gage-height record prior to June 8, those for June 8 to July 2 are fair, and records thereafter are good.

AVERAGE DISCHARGE.--6 years, 15,540 ft³/s (440.1 m³/s), 22.17 in/yr (563 mm/yr), 11,260,000 acre-ft/yr (13.9 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 152,000 ft³/s (4,300 m³/s), June 7, 1982, gage height, 59.46 ft (18.123 m), from floodmarks, from rating curve extended above 70,000 ft³/s (1,980 m³/s); minimum daily, 1,300 ft³/s (37 m³/s) Apr. 1 to May 16, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 152,000 ft³/s (4,300 m³/s) June 7, gage height, 59.46 ft (18.123 m), from floodmarks, from rating curve extended above 70,000 ft³/s (1,980 m³/s); minimum daily 1,300 ft³/s (37 m³/s) Apr. 1 to May 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10000	3600	2200	1700	1500	1400	1300	1300	130000	32300	40000	18000
2	9600	3700	2200	1700	1500	1400	1300	1300	120000	31000	39500	17100
3	9300	3500	2100	1700	1500	1400	1300	1300	120000	36600	37300	16600
4	9000	3400	2100	1700	1500	1400	1300	1300	130000	34600	33800	16600
5	8600	3300	2100	1700	1500	1400	1300	1300	140000	29800	30400	16700
6	8400	3200	2100	1700	1500	1400	1300	1300	150000	27300	27200	16600
7	8200	3100	2100	1700	1500	1400	1300	1300	150000	25700	24200	15900
8	8000	3100	2000	1700	1500	1400	1300	1300	134000	23900	21800	15200
9	7600	3000	2000	1700	1500	1400	1300	1300	120000	22800	20000	15600
10	7400	3000	2000	1700	1500	1400	1300	1300	106000	22300	18700	17100
11	7200	2900	2000	1600	1500	1400	1300	1300	101000	20700	17800	19900
12	7000	2900	2000	1600	1500	1400	1300	1300	97200	19800	17600	25000
13	6700	2800	2000	1600	1500	1400	1300	1300	86900	18900	18300	35000
14	6400	2800	1900	1600	1500	1400	1300	1300	80300	18800	21300	52000
15	6200	2700	1900	1600	1500	1400	1300	1300	82200	18800	27300	66000
16	6000	2700	1900	1600	1500	1400	1300	1300	82700	18800	30200	74000
17	5800	2600	1900	1600	1500	1400	1300	1400	83500	18600	34000	84000
18	5600	2600	1900	1600	1500	1400	1300	1500	79600	17600	41400	90000
19	5400	2600	1900	1600	1400	1400	1300	1700	70800	16900	42000	90000
20	5200	2500	1900	1600	1400	1400	1300	2000	63600	16600	42000	88000
21	4900	2500	1800	1600	1400	1400	1300	2500	58200	16800	42400	82000
22	4800	2400	1800	1600	1400	1400	1300	3200	53500	16200	40100	74000
23	4700	2400	1800	1600	1400	1400	1300	4100	52200	15600	35700	68000
24	4600	2400	1800	1500	1400	1400	1300	5600	49800	16700	32200	62000
25	4400	2300	1800	1500	1400	1400	1300	8600	47100	22800	29200	58000
26	4200	2300	1800	1500	1400	1400	1300	13000	44500	31600	26800	54000
27	4100	2300	1800	1500	1400	1400	1300	28000	40900	36400	24700	52000
28	4000	2300	1800	1500	1400	1400	1300	80000	38200	37800	22700	49000
29	3900	2200	1700	1500	---	1400	1300	120000	35900	36100	21000	47000
30	3800	2200	1700	1500	---	1400	1300	130000	33900	36700	20000	44000
31	3700	---	1700	1500	---	1400	---	130000	---	39900	18900	---
TOTAL	194700	83300	59700	49800	41000	43400	39000	552400	2582000	778400	898500	1379300
MEAN	6281	2777	1926	1606	1464	1400	1300	17820	86070	25110	28980	45980
MAX	10000	3700	2200	1700	1500	1400	1300	130000	150000	39900	42400	90000
MIN	3700	2200	1700	1500	1400	1400	1300	1300	33900	15600	17600	15200
CFSM	.66	.29	.20	.17	.15	.15	.14	1.87	9.04	2.64	3.04	4.83
IN.	.76	.33	.23	.19	.16	.17	.15	2.16	10.09	3.04	3.51	5.39
AC-FT	386200	165200	118400	98780	81320	86080	77360	1096000	5121000	1544000	1782000	2736000

CAL YR 1981 TOTAL 5084300 MEAN 13930 MAX 75700 MIN 1700 CFSM 1.46 IN 19.87 AC-FT 10080000
WTR YR 1982 TOTAL 6701500 MEAN 18360 MAX 150000 MIN 1300 CFSM 1.93 IN 26.19 AC-FT 13290000

15798700 NUNAVAK CREEK NEAR BARROW

LOCATION.--Lat 71°15'35", long 156°46'57", in SE¼ sec.18, T.22 N., R.18 W., North Slope Borough, Hydrologic Unit 19010003, 0.7 mi (1.1 km) downstream from Emaiksoun Lake, 1.2 mi (1.9 km) upstream from Nunavak Bay, and 2.3 mi (3.7 km) south of Barrow Post Office. Prior to May 29, 1982 at site 10 ft (3 m) downstream.

DRAINAGE AREA.--2.79 mi² (7.23 km²), approximately.

PERIOD OF RECORD.--October 1971 to current year.

REVISED RECORDS.--WDR AK-76-1: 1972.

GAGE.--Water-stage recorder. Altitude of gage is 19 ft (5.8 m), from topographic map. Prior to May 29, 1982 at site 10 ft (3 m) downstream at datum about 29.6 ft (9.02 m) higher.

REMARKS.--Records fair. No gage-height record prior to June 10. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--11 years, 0.90 ft³/s (0.025 m³/s), 4.38 in/yr (111 mm/yr), 652 acre-ft/yr (804,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 131 ft³/s (3.71 m³/s) June 10, 1980, gage height, 4.86 ft (1.481 m) at site and datum then in use, flow over snow; no flow during all winter months and at times during summer months.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28 ft³/s (0.793 m³/s) June 16, gage height 32.07 ft (9.775 m); maximum gage height, 32.55 ft (9.921 m) about June 10, backwater from snow and ice; no flow prior to June 3, Aug. 8-13, and after Aug. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.79	.07	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.50	.07	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.01	.42	.05	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.02	.40	.04	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.05	.38	.03	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.20	.50	.02	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	13	.59	.01	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	10	.50	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	12	.42	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	7.0	.34	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	3.0	.26	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	5.0	.20	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	9.5	.16	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	17	.13	.01	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	24	.12	.01	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	25	.10	.03	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	24	.09	.06	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	19	.08	.04	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	12	.08	.06	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	8.5	.07	.04	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	8.3	.06	.02	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	9.5	.06	.01	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	8.3	.06	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	6.8	.08	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	6.1	.07	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	3.3	.07	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	1.6	.08	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	1.2	.07	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	1.0	.06	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.92	.06	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.05	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	237.30	6.85	.57	.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	7.91	.22	.018	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	25	.79	.07	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00
CFSM	.000	.000	.000	.000	.000	.000	.000	.000	2.84	.08	.006	.000
IN.	.00	.00	.00	.00	.00	.00	.00	.00	3.16	.09	.01	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	471	14	1.1	.00

CAL YR 1981	TOTAL 730.57	MEAN 2.00	MAX 70	MIN .00	CFSM .72	IN 9.74	AC-FT 1450		
WTR YR 1982	TOTAL 244.72	MEAN .67	MAX 25	MIN .00	CFSM .24	IN 3.26	AC-FT 485		

15896000 KUPARUK RIVER NEAR DEADHORSE
(National stream-quality accounting network station)

LOCATION.--Lat 70°16'34", long 148°57'35", in NE¼ sec.25, T.11 N., R.12 E., North Slope Borough, Hydrologic Unit 19010001, near right bank, 1.8 mi (2.9 km) northeast of SE Eileen State No. 1, 2.1 mi (3.4 km) south of Arctic Slope/Alaska General Camp, 10 mi (16 km) upstream from mouth on Gwyder Bay, and 13 mi (21 km) northwest of Deadhorse.

DRAINAGE AREA.--3,130 mi² (8,107 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929 (levels by private engineering firm).

REMARKS.--Water-discharge records estimated and poor for period of no gage-height record, Oct. 1 to June 3, fair thereafter. Winter low flow may be discontinuous as the flow probably varies significantly along the main stem of the river due to the formation of aufeis in the vicinity of springs. Flow may cease at other points.

AVERAGE DISCHARGE.--11 years, 1,396 ft³/s (39.53 m³/s), 6.06 in/yr (154 mm/yr), 1,011,000 acre-ft/yr (1.25 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 118,000 ft³/s (3,340 m³/s) June 7, 1978, gage height, 37.6 ft (11.46 m), from rangeline on recorder chart; no flow at times during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 104,000 ft³/s (2,940 m³/s) June 7, gage height, 37.09 ft (11.305 m); no flow Nov. 15 to May 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	30	.00	.00	.00	.00	.00	.00	2000	2320	280	408
2	400	30	.00	.00	.00	.00	.00	.00	6000	2020	295	422
3	380	30	.00	.00	.00	.00	.00	.00	20000	1710	280	429
4	360	20	.00	.00	.00	.00	.00	.00	25100	1410	275	471
5	340	20	.00	.00	.00	.00	.00	.00	45000	1240	275	471
6	320	20	.00	.00	.00	.00	.00	.00	69400	1120	265	436
7	300	20	.00	.00	.00	.00	.00	.00	87200	957	265	443
8	280	20	.00	.00	.00	.00	.00	.00	93200	860	260	443
9	260	10	.00	.00	.00	.00	.00	.00	80600	744	260	422
10	240	10	.00	.00	.00	.00	.00	.00	78400	654	295	429
11	220	10	.00	.00	.00	.00	.00	.00	59200	576	295	436
12	200	10	.00	.00	.00	.00	.00	.00	30400	528	280	464
13	180	10	.00	.00	.00	.00	.00	.00	14800	499	270	492
14	160	10	.00	.00	.00	.00	.00	.00	13500	478	255	500
15	150	.00	.00	.00	.00	.00	.00	.00	30000	443	250	500
16	140	.00	.00	.00	.00	.00	.00	.00	29700	394	230	480
17	130	.00	.00	.00	.00	.00	.00	.00	17700	362	235	470
18	120	.00	.00	.00	.00	.00	.00	.00	12000	362	245	450
19	110	.00	.00	.00	.00	.00	.00	.00	10800	362	255	430
20	100	.00	.00	.00	.00	.00	.00	.00	8850	368	270	420
21	90	.00	.00	.00	.00	.00	.00	.00	7450	344	265	400
22	90	.00	.00	.00	.00	.00	.00	.00	6550	315	270	390
23	80	.00	.00	.00	.00	.00	.00	.00	7450	295	315	380
24	70	.00	.00	.00	.00	.00	.00	.00	6850	300	394	370
25	70	.00	.00	.00	.00	.00	.00	.00	5920	285	408	360
26	60	.00	.00	.00	.00	.00	.00	10	7050	295	443	350
27	60	.00	.00	.00	.00	.00	.00	20	5400	310	450	340
28	50	.00	.00	.00	.00	.00	.00	60	4130	310	433	330
29	50	.00	.00	.00	---	.00	.00	200	3380	300	401	330
30	40	.00	.00	.00	---	.00	.00	400	2750	270	394	320
31	40	---	.00	.00	---	.00	---	900	---	270	401	---
TOTAL	5500	250.00	.00	.00	.00	.00	.00	1590.00	790680	20701	9509	12586
MEAN	177	8.33	.000	.000	.000	.000	.000	51.3	26360	668	307	420
MAX	410	30	.00	.00	.00	.00	.00	900	93200	2320	450	500
MIN	40	.00	.00	.00	.00	.00	.00	.00	2000	270	230	320
CFSM	.06	.003	.000	.000	.000	.000	.000	.02	8.42	.21	.10	.13
IN.	.07	.00	.00	.00	.00	.00	.00	.02	9.40	.25	.11	.15
AC-FT	10910	496	.00	.00	.00	.00	.00	3150	1568000	41060	18860	24960

CAL YR 1981	TOTAL	518260.00	MEAN	1420	MAX	25900	MIN	.00	CFSM .45	IN 6.16	AC-FT	1028000
WTR YR 1982	TOTAL	840816.00	MEAN	2304	MAX	93200	MIN	.00	CFSM .74	IN 9.99	AC-FT	1668000

15896000 KUPARUK RIVER NEAR DEADHORSE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72, 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 19...	1700	109	120	7.3	.0	1.0	K8	K14	83	4	29	2.8
JUN 15...	1600	29000	56	7.1	4.5	12	--	--	40	9	13	2.0
JUL 31...	1800	274	160	7.0	8.0	2.1	--	--	81	8	28	2.7
SEP 13...	1400	502	160	7.0	2.0	.50	100	--	83	17	29	2.8

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
OCT 19...	1.8	.5	79	5.0	2.3	.1	2.1	103	92	<.09	.080
JUN 15...	1.3	.9	31	<5.0	2.0	<.1	1.8	51	--	.22	.130
JUL 31...	2.0	.6	73	<5.0	1.6	<.1	1.5	90	--	<.10	.110
SEP 13...	1.9	.4	66	5.0	1.7	<.1	1.6	97	94	<.10	.110

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
OCT 19...	.56	.030	.030	.020	0	0	0	100	50	54	1
JUN 15...	1.00	.130	<.010	<.010	1	--	<1	<100	--	24	1
JUL 31...	1.00	.030	.010	<.010	--	--	--	--	--	--	--
SEP 13...	.40	.050	.030	.030	<1	--	<1	100	50	51	<1

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 19...	<1	<10	0	<1	<3	6	3	3	90	--	<10
JUN 15...	<1	10	<10	2	<1	8	0	8	3100	2900	170
JUL 31...	--	--	--	--	--	--	--	--	--	--	--
SEP 13...	<1	<10	<10	1	<1	7	4	3	130	120	10

K NON-IDEAL COLONY COUNT

15896000 KUPARUK RIVER NEAR DEADHORSE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)
OCT 19...	5	5	0	<10	--	2	.1	.1	.0	1	1
JUN 15...	5	3	2	90	70	18	.4	.0	.4	11	8
JUL 31...	--	--	--	--	--	--	--	--	--	--	--
SEP 13...	3	--	<1	10	7	3	.2	.1	.1	6	--

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 19...	0	0	0	0	<1	0	10	5	5	3	.88	--
JUN 15...	3	<1	--	4	<1	<1	30	20	15	88	6890	80
JUL 31...	--	--	--	--	--	--	--	--	--	14	10	97
SEP 13...	<1	<1	--	<1	<1	<1	20	10	6	31	42	99

15896700 PUTULIGAYUK RIVER NEAR DEADHORSE

LOCATION.--Lat 70°16'03", long 148°37'41", in NE¼ sec. 32, T. 11 N., R. 14 E., North Slope Borough, Hydrologic Unit 19010001, at midchannel 200 ft (61 m) upstream from culvert causeway, 0.2 mi (0.3 km) downstream from unnamed tributary, 6.2 mi (10.0 km) northwest of Deadhorse, and 7.3 mi (11.7 km) upstream from mouth on Prudhoe Bay.

DRAINAGE AREA.--176 mi² (456 km²), approximately.

PERIOD OF RECORD.--May 1970 to September 1979 and October 1981 to September 1982.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929 (levels by private engineering firm). Prior to June 4, 1972, on right bank 150 ft (46 m) downstream at same datum.

REMARKS.--Records fair except those for periods of no gage-height record prior to June 13 and Sept. 15-30, which are estimated and poor.

AVERAGE DISCHARGE.--10 years (water years 1970-79, 1982), 41.6 ft³/s (1.178 m³/s), 3.21 in/yr (82 mm/yr), 30,140 acre-ft/yr (37.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,980 ft³/s (141 m³/s) June 6, 1971, gage height, 24.50 ft (7.468 m), at site then in use; no flow during winter periods each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 12, 1980 had a stage of 22.6 ft (6.89 m) and discharge of 5,800 ft³/s (164 m³/s), from information by private engineering firm.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,290 ft³/s (64.9 m³/s) June 14, gage height, 18.82 ft (5.736 m); no flow Oct. 12 to May 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	.00	.00	.00	.00	.00	.00	.00	1.0	102	12	15
2	7.0	.00	.00	.00	.00	.00	.00	.00	2.0	92	16	15
3	5.0	.00	.00	.00	.00	.00	.00	.00	2.0	80	17	15
4	4.0	.00	.00	.00	.00	.00	.00	.00	3.0	71	18	14
5	3.0	.00	.00	.00	.00	.00	.00	.00	5.0	64	19	14
6	2.0	.00	.00	.00	.00	.00	.00	.00	9.0	56	19	14
7	2.0	.00	.00	.00	.00	.00	.00	.00	17	48	19	14
8	2.0	.00	.00	.00	.00	.00	.00	.00	35	42	19	14
9	2.0	.00	.00	.00	.00	.00	.00	.00	70	36	19	14
10	1.0	.00	.00	.00	.00	.00	.00	.00	170	34	19	15
11	1.0	.00	.00	.00	.00	.00	.00	.00	600	32	18	16
12	.00	.00	.00	.00	.00	.00	.00	.00	1600	28	17	16
13	.00	.00	.00	.00	.00	.00	.00	.00	2000	25	16	16
14	.00	.00	.00	.00	.00	.00	.00	.00	2220	24	16	16
15	.00	.00	.00	.00	.00	.00	.00	.00	2090	21	14	16
16	.00	.00	.00	.00	.00	.00	.00	.00	1770	19	13	15
17	.00	.00	.00	.00	.00	.00	.00	.00	1480	16	12	15
18	.00	.00	.00	.00	.00	.00	.00	.00	1320	16	12	15
19	.00	.00	.00	.00	.00	.00	.00	.00	1140	14	13	14
20	.00	.00	.00	.00	.00	.00	.00	.00	973	14	15	14
21	.00	.00	.00	.00	.00	.00	.00	.00	819	11	16	14
22	.00	.00	.00	.00	.00	.00	.00	.00	735	11	15	13
23	.00	.00	.00	.00	.00	.00	.00	.00	637	10	14	13
24	.00	.00	.00	.00	.00	.00	.00	.00	528	9.6	14	12
25	.00	.00	.00	.00	.00	.00	.00	.00	425	9.3	13	12
26	.00	.00	.00	.00	.00	.00	.00	.00	314	9.3	14	11
27	.00	.00	.00	.00	.00	.00	.00	.00	245	9.6	14	11
28	.00	.00	.00	.00	.00	.00	.00	.00	194	10	14	10
29	.00	.00	.00	.00	---	.00	.00	.00	158	9.6	14	10
30	.00	.00	.00	.00	---	.00	.00	.00	122	9.3	14	10
31	.00	---	.00	.00	---	.00	---	1.0	---	9.6	15	---
TOTAL	39.00	.00	.00	.00	.00	.00	.00	1.00	19684.0	942.3	480	413
MEAN	1.26	.000	.000	.000	.000	.000	.000	.032	656	30.4	15.5	13.8
MAX	10	.00	.00	.00	.00	.00	.00	1.0	2220	102	19	16
MIN	.00	.00	.00	.00	.00	.00	.00	.00	1.0	9.3	12	10
CFSM	.007	.000	.000	.000	.000	.000	.000	.000	3.73	.17	.09	.08
IN.	.01	.00	.00	.00	.00	.00	.00	.00	4.16	.20	.10	.09
AC-FT	77	.00	.00	.00	.00	.00	.00	2.0	39040	1870	952	819

WTR YR 1982 TOTAL 21559.30 MEAN 59.1 MAX 2220 MIN .00 CFSM .34 IN 4.56 AC-FT 42760

15907900 ATIGUN RIVER TRIBUTARY NEAR PUMP STATION 4

LOCATION.--Lat 68°22'25", long 149°18'48", in NE¼SE¼ sec.28, T.12 S., R.12 E., North Slope Borough, Hydrologic Unit 19010001, on right bank 0.2 mi (0.3 km) upstream from culvert at mile 191 on Dalton Highway, 0.9 mi (1.4 km) above mouth and 4 mi (6 km) south of Pump Station 4.

DRAINAGE AREA.--32.6 mi² (84.4 km²).

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,790 ft (850 m), from topographic map.

REMARKS.--Records estimated and poor for period of no gage-height record prior to June 15 fair thereafter.

AVERAGE DISCHARGE.--6 years, 30.4 ft³/s (0.861 m³/s), 12.66 in/yr (322 mm/yr), 22,020 acre-ft/yr (27.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 767 ft³/s (22.0 m³/s) July 19, 1981, gage height, 14.04 ft (4.279 m), from rating curve extended above 260 ft³/s (7.4 m³/s) on basis of slope-area measurement at a gage height of 14.5 ft (4.42 m); no flow during winter periods.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of July 29-30, 1976 reached a stage of 14.5 ft (4.42 m), from flood-marks, discharge, 1,000 ft³/s (28.3 m³/s), from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 628 ft³/s (17.8 m³/s) July 11, gage height, 13.67 ft (4.167 m); no flow Oct. 16 to May 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	.00	.00	.00	.00	.00	.00	.00	40	219	82	26
2	2.5	.00	.00	.00	.00	.00	.00	.00	35	158	95	23
3	2.5	.00	.00	.00	.00	.00	.00	.00	30	102	148	21
4	2.0	.00	.00	.00	.00	.00	.00	.00	25	163	86	20
5	2.0	.00	.00	.00	.00	.00	.00	.00	20	187	67	19
6	2.0	.00	.00	.00	.00	.00	.00	.00	20	277	69	18
7	1.5	.00	.00	.00	.00	.00	.00	.00	20	173	70	17
8	1.5	.00	.00	.00	.00	.00	.00	.00	50	157	65	17
9	1.5	.00	.00	.00	.00	.00	.00	.00	40	152	67	17
10	1.0	.00	.00	.00	.00	.00	.00	.00	60	215	69	16
11	1.0	.00	.00	.00	.00	.00	.00	.00	80	334	64	15
12	1.0	.00	.00	.00	.00	.00	.00	.00	100	335	60	15
13	.50	.00	.00	.00	.00	.00	.00	.00	90	197	65	14
14	.50	.00	.00	.00	.00	.00	.00	.00	70	154	73	14
15	.50	.00	.00	.00	.00	.00	.00	.00	50	146	56	14
16	.00	.00	.00	.00	.00	.00	.00	.00	44	154	41	13
17	.00	.00	.00	.00	.00	.00	.00	.00	46	130	36	13
18	.00	.00	.00	.00	.00	.00	.00	.00	87	119	31	13
19	.00	.00	.00	.00	.00	.00	.00	.00	123	95	31	12
20	.00	.00	.00	.00	.00	.00	.00	.00	127	97	57	12
21	.00	.00	.00	.00	.00	.00	.00	2.0	132	96	53	12
22	.00	.00	.00	.00	.00	.00	.00	5.0	173	110	44	12
23	.00	.00	.00	.00	.00	.00	.00	10	200	98	37	11
24	.00	.00	.00	.00	.00	.00	.00	15	194	76	33	11
25	.00	.00	.00	.00	.00	.00	.00	20	187	54	31	11
26	.00	.00	.00	.00	.00	.00	.00	30	219	45	32	11
27	.00	.00	.00	.00	.00	.00	.00	50	251	40	32	11
28	.00	.00	.00	.00	.00	.00	.00	45	267	48	30	10
29	.00	.00	.00	.00	---	.00	.00	40	285	53	30	10
30	.00	.00	.00	.00	---	.00	.00	30	176	67	27	10
31	.00	---	.00	.00	---	.00	---	20	---	77	26	---
TOTAL	22.50	.00	.00	.00	.00	.00	.00	267.00	3241	4328	1707	438
MEAN	.73	.000	.000	.000	.000	.000	.000	8.61	108	140	55.1	14.6
MAX	2.5	.00	.00	.00	.00	.00	.00	50	285	335	148	26
MIN	.00	.00	.00	.00	.00	.00	.00	.00	20	40	26	10
CFSM	.02	.000	.000	.000	.000	.000	.000	.26	3.31	4.29	1.69	.45
IN.	.03	.00	.00	.00	.00	.00	.00	.30	3.70	4.94	1.95	.50
AC-FT	45	.00	.00	.00	.00	.00	.00	530	6430	8580	3390	869

CAL YR 1981 TOTAL 9997.00 MEAN 27.4 MAX 356 MIN .00 CFSM .84 IN 11.41 AC-FT 19830
WTR YR 1982 TOTAL 10003.50 MEAN 27.4 MAX 335 MIN .00 CFSM .84 IN 11.41 AC-FT 19840

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited stream-flow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are useable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in Alaska made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. For some stations, measurements made periodically through the year are also included. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1982

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Southeast Alaska				
#15011858	Keta River below Red Creek near Ketchikan	Lat 55°23'18", long 130°22'30", in NW¼ NE¼ sec.9, T.75 S., R.99 E., about 300 ft downstream from Red Creek, 5.7 mi upstream from mouth, and 51 mi east of Ketchikan.	50.6	1980-82	8- 5-82	228
#15011865	Hill Creek above White Creek near Ketchikan	Lat 55°25'16", long 130°27'00", in SW¼ SE¼ sec.25, T.74 S., R.98 E., about 500 ft upstream from White Creek and 47 mi east of Ketchikan.	5.53	c1978, 1980-82	10-29-81 8- 5-82	33 26
#15011875	Hill Creek near mouth near Ketchikan	Lat 55°22'56", long 130°24'23", in SE¼ NW¼ sec.8, T.75 S., R.99 E., about 0.5 mi upstream from mouth and 49 mi east of Ketchikan.	14.0	c1978, 1980-82	10-31-81 8- 5-82	162 40
#15011890	Beaver Creek near Ketchikan	Lat 55°2_'42", long 130°30'58", in SE¼ NE¼ sec.28, T.74 S., R.98 E., 0.8 mi upstream from mouth and 45 mi east of Ketchikan.	1.98	c1978, 1980-82	10-24-81 8- 5-82	16 3.7
		South-central Alaska				
15273050	Rabbit Creek at Anchorage	Lat 61°04'54", long 149°49'30", in SW¼ SW¼ sec.33, T.12 N., R.3 W., Municipality of Anchorage, on right bank 0.2 mi downstream from Old Seward Highway, 0.5 mi upstream from Little Rabbit Creek, and 9.5 mi south of Anchorage Post Office.	a15	‡1979-80, 1981-82	10-16-81 11-16-81 12-15-81 1-18-82 3- 3-82 4- 1-82 5- 5-82 6- 7-82 7- 6-82 8- 3-82	21 19 13 8.2 6.6 7.7 8.0 59 21 27
15273102	Little Rabbit Creek at Anchorage	Lat 61°04'37", long 149°48'47", in NE¼ NE¼ sec.4, T.11 N., R.3 W., Municipality of Anchorage, 250 ft downstream from Old Seward Highway, 0.2 mi upstream from mouth, and 10 mi south of Anchorage Post Office.	5.94	‡1979-80, 1981-82	10-16-81 11-16-81 12-15-81 1-18-82 4- 1-82 5- 5-82 6- 7-82 7- 6-82 8- 3-82	8.1 6.3 4.4 1.9 4.2 4.5 28 4.7 7.0
#15280998	Palmer Creek near Palmer	Lat 61°31'57", long 149°01'33", in NE¼SE¼ sec.26, T.17 N., R.2 E., Matanuska-Susitna Borough, 250 ft east of McKechnie Road, 2.4 mi upstream from mouth, and 5.5 mi southeast of Palmer.	--	1981-82	3-24-82 8- 3-82	37 42

\# See analyses of samples collected at water-quality partial-record stations.
‡ Operated as a continuous-record station.
a Approximately.
c Published in miscellaneous measurements table.

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		South-central Alaska--Continued				
15283800	Wolverine Creek near Palmer	Lat 61°39'22", long 149°01'57", in NE¼NE¼ sec.14, T.18 N., R.2 E., Matanuska-Susitna Borough 200 ft downstream from bridge and 4.5 mi northeast of Palmer.	--	1981-82	3-24-82	26
#15285000	Wasilla Creek near Palmer	Lat 61°38'47", long 149°11'45", in SW¼ sec.13, T.18 N., R.1 E., Matanuska-Susitna Borough, 60 ft upstream from culvert entrance on Wasilla-Fishhook Road and 4.1 mi northeast of Palmer.	16.8	c1954-55, †1976-77, c†1978-80, †1981-82	3-10-82 8- 6-82 9-13-82	5.8 41 76
#15285200	Wasilla Creek near Wasilla	Lat 61°34'09", long 149°18'50", in NE¼NW¼ sec.17, T.17 N., R.1 E., Matanuska-Susitna Borough, 100 ft downstream from bridge at Parks Highway and 4.2 mi east of Wasilla.	39.5	c1947-49, c1955, 1978, †1981-82	3- 9-82 3-11-82 8- 6-82	5.2 5.0 44
#15286000	Cottonwood Creek near Wasilla	Lat 61°34'30", long 149°24'35", in SW¼ sec.11, T.17 N., R.1 W., Matanuska-Susitna Borough, downstream from Wasilla-Matanuska road, 0.8 mi downstream from Wasilla Lake, and 1.1 mi southwest of Wasilla.	28.5	‡1949-54, 1981-82	3- 9-82 8- 6-82	17 23
15286050	Cottonwood Creek at Loop Road near Wasilla	Lat 61°31'40", long 149°31'31", in NE¼ NW¼ sec.31, T.17 N., R.1 W., Matanuska-Susitna Borough, at culvert exit on Loop Road and 4.6 mi southwest of Wasilla.	--	1981-82	3- 9-82 8- 6-82	21 26
#15286500	Lucile Creek near Wasilla	Lat 61°33'44", long 149°46'31", in SW¼ NW¼ sec.14, T.17 N., R.3 W., Matanuska-Susitna Borough, 50 ft downstream from culvert, 2.0 mi southwest of Big Lake Junction, and 11.2 mi east of Wasilla.	--	1981-82	3-10-82	0.76
#15286550	Little Meadow Creek at Big Lake Junction near Wasilla	Lat 61°34'38", long 149°43'33", in SE¼ sec.12, T.17 N., R.3 W., Matanuska-Susitna Borough, 500 ft downstream from former Parks Highway, 2.4 mi upstream from Lucile Creek, and 5.5 mi southwest of Houston.	a17	c1974-77, 1981-82	3-10-82	8.4
#15287000	Fish Creek at Big Lake outlet near Wasilla	Lat 61°32'03", long 149°49'30", in SE¼ sec.28, T.17 N., R.3 W., Matanuska-Susitna Borough, at outlet of Big Lake and 13 mi southwest of Wasilla.	a68	c1971, c1974-77, 1981-82	3-10-82	25
15287050	Fish Creek near Knik	Lat 61°26'20", long 149°47'00", in NE¼ sec.34, T.16 N., R.3 W., Matansuka-Susitna Borough, 150 ft upstream from bridge on Goose Bay Road and 2.2 mi southwest of Knik.	a100	c1974-77, 1981-82	3- 9-82	27
#15292800	Montana Creek near Montana	Lat 62°06'32", long 150°03'12", in SW¼ sec.5, T.23 N., R.4 W., Matanuska-Susitna Borough, at Parks Highway bridge and 2.1 mi north of Montana.	164	†1963-72, c1973, 1981-82	3-11-82	28
15294002	Willow Creek at Hatcher Pass Road near Willow	Lat 61°45'49", long 149°40'54", in NE¼ SW¼ sec.5, T.19 N., R.2 W., Matanuska-Susitna Borough, 0.2 mi downstream from old bridge crossing 2.5 mi upstream from Peters Creek, and 12 mi east of Willow.	50.1	1978-79, 1981-82	3-11-82 8-26-82	26 108
#15294003	Peters Creek above Purches Creek near Willow	Lat 61°49'08", long 149°38'20", in SW¼ SE¼ sec.16, T.20 N., R.2 W., Matanuska-Susitna Borough, 100 ft upstream from Purches Creek and 14.5 mi northeast of Willow.	40.0	1981-82	3-23-82 8-20-82	18 99

\# See analyses of samples collected at water-quality partial-record stations.
† Operated as a crest-stage partial-record station.
‡ Operated as a continuous-record station.
a Approximately.
c Published in miscellaneous measurements table.

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		South-central Alaska--Continued				
#15294004	Purches Creek at mouth near Willow	Lat 61°49'05", long 149°38'17", in SW¼ SE¼ sec.16, T.20 N., R.2 W., Matanuska-Susitna Borough, 100 ft upstream from mouth and 14.5 mi northeast of Willow.	30.6	1981-82	3-23-82 8-20-82	11 78
#15294007	Deception Creek above tributary near Houston	Lat 61°41'48", long 149°46'19", in SE¼ NW¼ sec.35, T.19 N., R.3 W., Matanuska-Susitna Borough, 0.2 mi upstream from unnamed left bank tributary and 4.8 mi northeast of Houston.	17.9	1978-82	3-23-82 8-20-82	4.2 20
#15294008	Deception Creek tributary near Houston	Lat 61°41'40", long 149°46'21", in SE¼ NW¼ sec.35, T.19 N., R.3 W., Matanuska-Susitna Borough, 0.1 mi upstream from mouth and 4.7 mi northeast of Houston.	8.89	1978-82	3-23-82 8-20-82	0.07 9.3
#15294012	Willow Creek at Parks Highway	Lat 61°46'03", long 150°03'48", in SW¼ NE¼ sec.6, T.19 N., R.4 W., Matanuska-Susitna Borough, at bridge at Parks Highway, 0.9 mi downstream from Deception Creek, and 1.7 mi northwest of Willow.	233	1978-82	3-12-82	88
#15294020	Kroto Creek (head of Deshka River) near Peters Creek	Lat 62°20'55", long 150°37'13", in NW¼ NW¼ sec.17, T.26 N., R.7 W., Matanuska-Susitna Borough, at bridge at Petersville Road, and 3.9 mi southeast of Peters Creek.	21.0	1978, 1981-82	3-15-82	9.4
15294025	Moose Creek near Talkeetna	Lat 62°19'00", long 150°26'30", in NE¼ sec.30, T.26 N., R.7 W., Matanuska-Susitna Borough, at bridge on Petersville Road, and 10.5 mi west of Talkeetna.	52.3	†1972-75, †c1978-80, †1981-82	3-15-82 7-26-82 9-17-82	8.6 747 440
#15294416	Judy Creek near Tyonek	Lat 61°17'58", long 151°26'00", in SW¼ NE¼ sec.16, T.14 N., R.12 W., 1,000 ft upstream of confluence with Sue's Creek, 1.0 mi upstream of Bishop Creek, and 19 mi northwest of Tyonek	6.12	1982	7-20-82	5.5
#15294418	Scarp Creek near Tyonek	Lat 61°15'59", long 151°19'14", in NE¼ NW¼ sec.31, T.14 N., R.11 W., 500 ft upstream of Wobnair Creek and 15 mi northwest of Tyonek.	9.98	1982	7-20-82	9.0
#15294430	Threemile Creek near Tyonek	Lat 61°08'51", long 151°07'09", in SE¼ NW¼ sec.7, T.12 N., R.10 W., Kenai Peninsula Borough, 400 ft downstream from Tukallah Lake and 5.5 mi north of Tyonek.	20.4	1981-82	7-19-82 8-27-82	14 5.4
#15294435	East Fork Chuit Creek near Tyonek	Lat 61°10'48", long 151°30'58", in NE¼ NE¼ sec.36, T.13 N., R.13 W., 150 ft upstream of Camp Creek, 0.5 mi upstream of mouth, and 15 mi northwest of Tyonek.	7.44	1982	7-20-82	10
#15294436	Camp Creek at mouth near Tyonek	Lat 61°10'47", long 151°30'54", in NE¼ NE¼ sec.36, T.13 N., R.13 W., 100 ft upstream of mouth and 15 mi northwest of Tyonek.	2.18	1982	7-20-82	3.0
#15294438	Cole Creek at mouth near Tyonek	Lat 61°08'52", long 151°28'38", in SW¼ NW¼ sec.7, T.12 N., R.12 W., 75 ft upstream of mouth and 13 mi northwest of Tyonek.	8.24	1982	7-20-82	7.8
#15294439	Bass Creek near Tyonek	Lat 61°12'03", long 151°25'42", in NW¼ SE¼ sec.21, T.13 N., R.12 W., 4 mi upstream of mouth and 14 mi northwest of Tyonek.	6.22	1982	7-20-82	5.5

See analyses of samples collected at water-quality partial-record stations.
† Operated as a crest-stage partial-record station.
a Approximately.
c Published in miscellaneous measurements table.

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		South-central Alaska--Continued				
#15294441	Bass Creek at mouth near Tyonek	Lat 61°08'56", long 151°26'45", in SE¼ NW¼ sec.8, T.12 N., R.12 W., 500 ft upstream of mouth and 12 mi northwest of Tyonek.	17.4	1982	7-20-82	16
#15294443	Middle Creek at mouth near Tyonek	Lat 61°07"08", long 151°19'42", in SE¼ NW¼ sec.24, T.12 N., R.12 W., 1,500 ft upstream of mouth and 7.5 mi northwest of Tyonek.	14.2	1982	7-20-82	14
#15294445	Upper Lone Creek near Tyonek	Lat 61°10'50", long 151°17'53", in NW¼ NW¼ sec.32, T.13 N., R.11 W., 1,000 ft upstream of confluence with Middle and East Fork and 10 mi northwest of Tyonek.	5.64	1982	7-20-82	9.4
#15294448	Lone Creek near Tyonek	Lat 61°07'51", long 151°18'06", in SE¼ NW¼ sec.18, T.12 N., R.11 W., Kenai Peninsula Borough, 1.0 mi from mouth and 7.0 mi northwest of Tyonek.	18.6	1981-82	3-22-82 7-19-82 8-27-82	20 26 12
#15294452	Tyonek Creek near Tyonek	Lat 61°03'45", long 151°13'03", in NW¼ NW¼ sec.10, T.11 N., R.11 W., Kenai Peninsula Borough, 1.8 mi from mouth and 2.8 mi southwest of Tyonek.	13.7	c1980, 1981-82	7-19-82 8-27-82	14 7.0
#15294454	Old Tyonek Creek near Tyonek	Lat 61°02'45", long 151°20'25", in SE¼ NE¼ sec.14, T.11 N., R.12 W., Kenai Peninsula Borough, 500 ft upstream from unnamed tribu[illegible] and 7 mi southwest of Tyonek.	14.1	c1980, 1981-82	7-19-82 8-27-82	19 5.0
15294455	Unnamed tributary to Old Tyonek Creek near Tyonek	Lat 61°02'41", long 151°20'26", in SE¼ NE¼ sec.14, T.11 N., R.12 W., Kenai Peninsula Borough, 100 ft from mouth and 7 mi southwest of Tyonek.	10.6	c1980, 1981-82	7-19-82 8-27-82	3.8 0.92
#15294458	Nikolai Creek near Tyonek	Lat 61°05'02", long 151°35'19", in NW¼ SE¼ sec.33, T.12 N., R.13 W., Kenai Peninsula Borough at bridge 15 mi west of Tyonek.	48.4	1981-82	3-22-82 7-19-82 8-27-82	105 146 82

\# See analyses of samples collected at water-quality partial-record stations.
c Published in miscellaneous measurements table.

Crest-stage partial-record stations

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1982

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (ft)	Discharge (ft^3/s)
		Southeast Alaska					
15087585	Twelvemile Creek near Petersburg	Lat 56°58'07", long 133°04'05", in NW¼SE¼ sec.31, T.56 S., R.77 E., on Kupreanof Island, in Tongass National Forest, 0.8 mi upstream from mouth at Fredrick Sound, and 10 mi northwest of Petersburg.	9.39	1973-77, 1979-82	1982	11.84	1,140
15087595	Kadake Creek near Kake	Lat 56°46'45", long 134°00'42", in W½ SW¼ sec.1, T.59 S., R.72 E., on Kuiu Island, in Tongass National Forest, 1.5 mi upstream from mouth at Kadake Bay and 15 mi south of Kake.	43.6	1972-76, 1982	11- 5-81	101.92	7,350
		South-central Alaska					
15198500	Station Creek near Mentasta	Lat 62°56'12", long 143°39'54", in SW¼ sec.2, T.13 N., R.9 E., on left bank, 0.3 mi upstream from wooden bridge on Mentasta Village Road, 1 mi west of Slana-Tok Highway, and 4 mi east of Mentasta.	15.3	1970-77, 1979-82	8- -82	11.51	140
15199000	Copper River Tributary near Slana	Lat 62°43'03", long 144°14'21", in SW¼ sec.23, T.11 N., R.6 E., on right bank 20 ft upstream from culvert at mi 51.8 on the Slana-Tok Highway and 9 mi west of Slana.	4.32	1963-82	8- -82	12.56	115
+15201000	Dry Creek near Glennallen	Lat 62°08'49", long 145°28'31", in NE¼ sec.7, T.4 N., R.1 W., on right bank 500 ft upstream from culvert at mi 119 Richardson Highway and 3.3 mi north of Glennallen.	11.4	1963-82	5- 9-82	17.61	280
+15201100	Little Nelchina River Tributary near Eureka Lodge	Lat 61°59'17", long 147°00'34", in NW¼ sec.2, T.2 N., R.10 W., Matanuska Susitna Borough, on right bank at mi 132 Glenn Highway and 6 mi northeast of Eureka Lodge.	7.81	1965-82	5-15-82	11.26	65
+c15208100	Squirrel Creek at Tonsina	Lat 61°40'05", long 145°10'26", in NW¼ sec.26, T.2 S., R.1 E., on right bank 150 ft upstream from highway bridge at mi 79.5 Richardson Highway, 0.3 mi northeast of Tonsina River bridge, 0.3 mi upstream from mouth, and 0.4 mi north of Tonsina.	70.5	1964-65, ‡1966-75, 1976-82	5- -82	2.05	372
+15208200	Rock Creek near Tonsina	Lat 61°45'32", long 145°09'14", in NW¼ sec.25, T.1 S., R.1 E., on right bank at mi 86.1 Richardson Highway, and 6.7 mi north of Tonsina Lodge.	14.3	1966-82	5-10-82	u	21
+15209000	Chititu Creek near May Creek	Lat 61°22'12", long 142°40'50", in NW¼ sec.11, T.6 S., R.15 E., on right bank 10 ft below wooden bridge on May Creek-Dan Creek Road and 2 mi north of May Creek landing strip.	30.9	1973-82	9- -82	5.03	380
+15209100	May Creek near May Creek	Lat 61°20'42", long 142°41'49", in SE¼ sec.15, T.6 S., R.15 E., on left bank 100 ft west of the May Creek-Dan Creek Road and 0.3 mi northwest of the north end of the May Creek landing strip.	10.4	1973-82	5- -82	5.79	68

\+ See analysis of samples collected at miscellaneous sites.
‡ Operated as a continuous-record station.
c Published in miscellaneous measurements table.
u Unknown.

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (ft)	Discharge (ft^3/s)
		South-central Alaska--Continued					
+15211700	Strelna Creek near Chitina	Lat 61°30'40", long 144°04'00", in NE¼ sec.22, T.4 S., R.7 E., 300 ft upstream from timber bridge on Chitina-McCarthy Road and 13 mi east of Chitina.	23.8	1971-82	9-15-82	d22.11	130
+c15211900	O'Brien Creek near Chitina	Lat 61°28'59", long 144°27'23", in NW¼NW¼ sec.35, T.4 S., R.5 E., 100 ft upstream from timber bridge on trail to Copper River gaging station, 0.1 mi upstream from mouth at Copper River, and 2.5 mi south of Chitina.	44.8	1970-82	8- 7-81 7- -82	3.40 2.39	g1,940 570
15212500	Boulder Creek near Tiekel	Lat 61°20'08", long 145°18'26", in NW¼ sec.19, T.6 S., R.1 E., on left downstream wingwall at mi 51.4 Richardson Highway, and 0.7 mi north of Tiekel.	9.80	1964-82	7-23-82	10.15	180
15238600	Spruce Creek near Seward	Lat 60°04'10", long 149°27'08", on left bank 0.7 mi upstream from mouth at Resurrection Bay and 2.4 mi south of Seward.	9.26	1966, ‡1967-79, 1980-82	9- -82	9.46	3,420
15239500	Fritz Creek near Homer	Lat 59°42'30", long 151°20'35", in SW¼ sec.28, T.5 S., R.12 W., Kenai Peninsula Borough, on left bank 200 ft above culvert on East Road and 9 mi northeast of Homer.	10.4	1963-82	9- -82	16.13	125
15243950	Porcupine Creek near Primrose	Lat 60°20'30", long 149°22'15", in NE¼ sec.24, T.3 N., R.1 W., Kenai Peninsula Borough, on right bank at 18-mi campground road 0.2 mi upstream from mouth at Kenai Lake and 0.8 mi west of Primrose.	16.8	1963-82	9- -82	w13.44	n
15254000	Crescent Creek near Cooper Landing	Lat 60°29'49", long 149°40'38", in NW¼ sec.29, T.5 N., R.3 W., Kenai Peninsula Borough, on left bank at bridge on Old Seward-Kenai Highway, 4.2 mi downstream from Crescent Lake, and 4.4 mi east of Cooper Landing.	31.7	‡1949-66, 1967-82	u	11.52	300
15266500	Beaver Creek near Kenai	Lat 60°33'50", long 151°07'03", in SE¼ sec.36, T.6 N., R.11 W., on right bank 75 ft downstream from culvert on Kenai-Soldotna Road, 2.0 mi upstream from mouth, and 4.5 mi east of Kenai.	a51.0	‡1968-78, 1980-82	9- -82	1.85	120
15271900	Cub Creek near Hope	Lat 60°52'12", long 149°26'02", in NW¼ sec.15, T.9 N., R.1 W., Kenai Peninsula Borough, on right wingwall of culvert on Hope Highway 0.1 mi upstream from mouth at Sixmile Creek and 7.7 mi southeast of Hope.	1.80	1965-79, 1981-82	6- -82	12.20	n
15272530	California Creek at Girdwood	Lat 60°57'53", long 149°08'02", in NW¼ sec.17, T.10 N., R.2 E., Municipality of Anchorage, at culverts on Alyeska Highway, 0.2 mi west of Girdwood Post Office, and 2.0 mi northeast of Seward-Anchorage Highway.	6.96	1967-82	9- -82	14.88	135
15283500	Eska Creek near Sutton	Lat 61°43'44", long 148°54'31", in NE¼ sec.21, T.19 N., R.3 E., Matanuska-Susitna Borough, on right bank 100 ft below culverts on Eska-Jonesville Road and 1.5 mi northeast of Sutton.	13.4	1966, 1971-82	7-25-82	6.87	210

\+ See analyses of samples collected at miscellaneous sites.
‡ Operated as a continuous-record station.
a Approximately.
c Published in miscellaneous measurement table.
d At different site and datum.
g Not previously published.
n Not determined.
u Unknown.
w Backwater.

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (ft)	Discharge (ft^3/s)
		South-central Alaska--Continued					
#/15285000	Wasilla Creek near Palmer	Lat 61°38'47", long 149°11'45", in SW¼ sec.13, T.18 N., R.1 E., Matanuska-Susitna Borough, on left bank 60 ft upstream from culvert entrance on Wasilla Fishhook Road and 4.1 mi northeast of Palmer.	16.6	1971, 1976-82	7-25-82	10.24	162
15291100	Rart Creek near Denali	Lat 63°03'04", long 147°16'22", in SE¼ sec.36, T.21 S., R.2 E., Matanuska-Susitna Borough, on right bank above culverts at mi 69.2 Denali Highway and 10.7 mi southeast of Denali.	4.33	1963-77, 1979-82	6- -82	11.37	123
15293000	Caswell Creek near Caswell	Lat 61°56'55", long 150°03'14", in SW¼ sec.32, T.22 N., R.4 W., Matanuska-Susitna Borough, below culvert on Parks Highway and 2.3 mi south of Caswell.	19.6	1963-82	1982	u	u
/15294025	Moose Creek near Talkeetna	Lat 62°19'00", long 150°26'30", in NE¼ sec.30, T.26 N., R.7 W., Matanuska-Susitna Borough, at bridge on Petersville Road and 10.5 mi west of Talkeetna.	52.3	1972-82	7-25-82	26.73	1,580
15297475	Red Cloud Creek Tributary near Kodiak	Lat 57°49'00", long 152°37'20", in SW¼ sec.24, T.27 S., R.21 W., Kodiak Island Borough, 0.1 mi upstream from mouth and 8.4 mi northwest of Kodiak.	1.51	1963-82	2- 5-82	13.26	354
		Southwest Alaska					
15300200	Roadhouse Creek near Iliamna	Lat 59°45'26", long 154°50'49", in SW¼ sec.11, T.5 W., R.32 W., 100 ft below culverts on Iliamna Road and 2.1 mi east of Iliamna airport.	20.8	1973-76, 1978-82	6- 7-82	11.53	150
15302900	Moody Creek at Aleknagik	Lat 59°16'34", long 158°35'42", in SE¼ sec.30, T.10 S., R.55 W., on left bank 12 ft upstream from culvert entrance and 500 ft upstream from mouth at Wood River at the Aleknagik Mission.	1.28	1969-73, 1975-82	6- 6-82	18.63	32
15303010	Silver Salmon Creek near Aleknagik	Lat 59°13'34", long 158°40'21", in NW¼ sec.14, T.11 S., R.56 W., on right bank 4.5 mi upstream from mouth at Wood River and 4 mi southwest of Aleknagik.	4.46	1965-67, 1969-82	9-22-82	10.49	190
		Yukon Alaska					
15305900	Dennison Fork near Tetlin Junction	Lat 63°25'24", long 142°29'00", in SW¼ sec.14, T.19 N., R.15 E., on right bank 10 ft upstream from culvert at mi 10.7 Taylor Highway and 8.3 mi northeast of Tetlin Junction.	2.93	1964-82	5-26-82	11.87	33
15305920	West Fork Tributary near Tetlin Junction	Lat 63°40'03", long 142°16'00", in SW¼ sec.23, T.22 N., R.16 E., on left bank 7 ft upstream from culvert at mi 32 Taylor Highway and 26.5 mi northeast of Tetlin Junction.	1.02	1967-82	6-20-82	12.52	66
15305950	Taylor Creek near Chicken	Lat 63°54'27", long 142°12'58", in NW¼ sec.35, T.25 N., R.16 E., on right bank 29 ft upstream from bridge at mi 50.3 Taylor Highway and 14.5 mi southwest of Chicken.	38.4	1967-82	6- -82	14.04	380
15344000	King Creek near Dome Creek	Lat 64°23'38", long 141°24'43", in SW¼ sec.16, T.6 S., R.32 E., on left bank at mile 120 Taylor Highway, 1000 ft upstream from culvert at mi 119.8 Taylor Highway 0.4 mi upstream from mouth at O'Brien Creek, 4.09 mi east of Dome Creek, and 29 mi south of Eagle.	5.99	1975-82	6- -82	13.44	163

See analyses of samples collected at water-quality partial-record stations.
/ Also low-flow partial-record station.
u Unknown.

 Annual maximum discharge at crest-stage gage partial-record stations during water year 1982--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (ft)	Discharge (ft^3/s)
		Yukon Alaska--Continued					
15453481	West Fork Dall River Tributary near Stevens Village	Lat 66°17'53", long 150°23'10", in SW¼ sec.17, T.17 N., R.13 W., on left bank 20 ft upstream from culvert on Dalton Highway, 2.3 mi upstream from mouth, and 43 mi northwest of Stevens Village.	4.18	1981-82	5- -82	f15.20	60
15453610	Ray River Tributary near Stevens Village	Lat 65°56'57", long 150°55'00", in SE¼ sec.17, T.13 N., R.11 W., on right bank 10 ft upstream from culvert on TAPS haul road and 22 mi west of Stevens Village.	8.00	1977-82	9-19-82	16.29	n
15457700	Erickson Creek near Livengood	Lat 65°34'30", long 148°56'18", in SE¼ sec.26, T.9 N., R.7 W., at culvert at mi 12.5 on the TAPS haul road and 12.5 mi northwest of Livengood.	26.3	1973-82	7- -82	21.48	360
15470300	Little Jack Creek near Nabesna	Lat 62°32'47", long 143°19'30", in SE¼ sec.22, T.9 N., R.11 E., on left bank 0.2 mi upstream from wooden bridge at mi 25.8 Nabesna Road and 15.6 mi northwest of Nabesna.	6.73	1975-82	7- -82	15.62	70
15470330	Chalk Creek near Nabesna	Lat 62°30'19", long 143°09'24", in NE¼ sec.3, T.8 N., R.12 E., on right bank 0.1 mi upstream from wooden bridge at mi 32.3 Nabesna Road and 10.3 mi northwest of Nabesna.	14.8	1975-82	5- -82	16.25	82
15470340	Jack Creek near Nabesna	Lat 62°27'52", long 143°06'18", in NW¼ sec.24, T.8 N., R.12 E., on left bank 0.1 mi above bridge on Nabesna Road and 7 mi northwest of Nabesna.	115	1975-82	/- -82	19.63	n
15471000	Bitters Creek near Northway Junction	Lat 63°09'38", long 142°05'20", in SE¼ sec.13, T.16 N., R.17 E., on left bank 52 ft upstream from culvert at mi 1,280 Alaska Highway 1 mi upstream from mouth at Tanana River and 13.5 mi northwest of Northway Junction.	15.4	1964, 1966-82	8- -82	12.74	195
15471500	Tanana River Tributary near Tetlin Junction	Lat 63°16'45", long 142°30'27", in SE¼ sec.3, T.17 N., R.15 E., on left bank 6 ft upstream from culvert at mi 1,297.8 Alaska Highway and 3.7 mi southeast of Tetlin Junction.	2.4	1965-82	5- -82	12.08	17
15473600	Log Cabin Creek near Log Cabin Inn	Lat 63°01'48", long 143°20'36", on right bank 20 ft upstream from bridge at mi 97.4 on the old section of the Slana-Tok Highway and 24.9 mi southwest of Tok.	10.7	1966-82	8- -81 5- -82	12.10 11.42	g304 285
15476049	Tanana River Tributary near Cathedral Rapids	Lat 63°24'24", long 143°48'28", in SE¼ sec.23, T.19 N., R.8 E., on left bank 0.3 mi upstream from culvert at mi 1,341 Alaska Highway 0.5 mi upstream from mouth at Tanana River and 2.5 mi northwest of Cathedral Rapids.	3.09	1970, 1973-82	5- -82	13.87	110
15476300	Berry Creek near Dot Lake	Lat 63°41'23", long 144°21'47", in NW¼ sec.13, T.22 N., R.5 E., on left bank 100 ft upstream from bridge at mile 1,371.4 on Alaska Highway, 1.9 mi upstream from mouth, and 6.0 mi west of Dot Lake.	65.1	1963-71, ‡1972-81, 1982	6-20-82	12.47	735
15476400	Dry Creek near Dot Lake	Lat 63°41'32", long 144°34'16", in NW¼ sec.24, T.14 S., R.16 E., on piling near right bank 64 ft above bridge at mi 1,378.1 Alaska Highway 0.6 mi upstream from mouth at Tanana River and 15.7 mi west of Dot Lake.	57.6	1964-65, ‡1966-69, 1970-82	6-20-82	13.99	930

‡ Operated as a continuous-record station.
f Ice effect.
g Not previously published.
n Not determined.

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (ft)	Discharge (ft^3/s)
		Yukon Alaska--Continued					
15478010	Rock Creek near Paxson	Lat 63°04'16", long 146°06'17", in NW¼ sec.30, T.21 S., R.9 E., on right bank 25 ft upstream at mi 24.8 Denali Highway and 18 mi west of Paxson.	50.3	1963-82	6- -82	9.98	375
15478050	McCallum Creek near Paxson	Lat 63°13'27", long 145°38'56", in SW¼ sec.33, T.19 S., R.11 E., on right bank upstream wingwall 8 ft upstream from bridge at mi 202.4 Richardson Highway 0.5 mi upstream from mouth at Phelan Creek and 14.5 mi northwest of Paxson.	15.5	1967-82	8- -82	11.62	520
15480000	Banner Creek at Richardson	Lat 64°17'24", long 146°20'56", in SW¼ sec.22, T.7 S., R.7 E., Fairbanks North-Star Borough, on left bank 400 ft upstream from bridge at mi 295.4 Richardson Highway 0.1 mi upstream from mouth at Tanana River and 0.4 mi northwest of Richardson.	20.2	1963-82	6- -82	13.37	108
15490000	Monument Creek at Chena Hot Springs	Lat 65°03'17", long 146°03'05", in SE¼ sec.26, T.3 N., R.8 E., Fairbanks North-Star Borough , on left bank 800 ft from lodge at Chena Hot Springs, 0.4 mi upstream from unnamed tributary, and 1.3 mi upstream from North Fork Chena River.	26.7	1967, 1970-77, 1979-82	6-20-82	26.34	286
15515800	Seattle Creek near Cantwell	Lat 63°19'32", long 148°14'49", on line between sec.25 and 26, T.18 S., R.4 W., Matanuska-Susitna Borough, on left downstream wingwall of bridge at mi 110.9 Denali Highway and 22.4 mi southeast of Cantwell.	36.2	1964-65, ‡1966-75, 1976-77, 1979-82	6- -82	5.41	630
15516200	Slime Creek near Cantwell	Lat 63°30'34", long 148°48'39", in SE¼ sec.24, T.16 S., R.7 W., on left bank upstream from culvert on Parks Highway and 9.1 mi northeast of Cantwell.	6.90	1966-82	6- -82	13.56	176
15518250	Birch Creek near Rex	Lat 64°10'35", long 149°17'26", in SW¼ sec.35, T.8 S., R.9 W., on left bank 20 ft upstream from culvert on the Parks Highway and 4.2 mi south of Rex.	4.10	1965-82	7- -82	11.18	160
15519200	Brooks Creek Tributary near Livengood	Lat 65°23'02", long 148°56'12", on line between sec.2, T.6 N., R.7 W., and sec. 35, T.7 N., R.7 W., on right bank 20 ft upstream from culvert at mi 84 Elliot Highway and 15 mi southwest of Livengood.	7.81	1964-82	5-23-81	w9.47	h45
15520000	Idaho Creek near Miller House	Lat 65°21'13", long 146°09'33", in NW¼ sec.17, T.6 N., R.8 E., Fairbanks North-Star Borough, on right bank 100 ft downstream from culverts at mi 79 Steese Highway and 30 mi southwest of Miller House.	5.31	1963-82	6-20-82	14.81	n
15541600	Globe Creek near Livengood	Lat 65°17'08", long 148°07'56", 0.1 mi upstream from culverts at mi 38 Elliot Highway 9 mi upstream from mouth and 19 mi southeast of Livengood.	23.0	1964-82	6- -82	14.78	290
15564868	Snowden Creek near Wiseman	Lat 67°44'16", long 149°45'10", in SW¼ sec.26, T.34 N., R.10 N., on right bank 20 ft upstream from culvert on the Dalton Highway and 24.5 mi northeast of Wiseman.	16.7	1968, 1977-82	8- -82	24.68	290
15564872	Nugget Creek near Wiseman	Lat 67°29'25", long 149°52'20", in NW¼ sec.3, T.31 N., R.10 W., on right bank 300 ft upstream from culvert at the Dalton Highway and 8.7 mi northeast of Wiseman.	9.47	1975-82	7- -82	16.08	142
15564879	Slate Creek at Coldfoot	Lat 67°15'17", long 150°10'24", in NW¼ sec.15, T.28 N., R.12 W., at bridge on Dalton Highway and at Coldfoot.	73.4	1977, 1980-82	1981 1982	15.73 17.60	g395 n

‡ Operated as a continuous-record station.
h At least this high.
n Not determined.
w Backwater.

 Annual maximum discharge at crest-stage gage partial-record stations during water year 1982--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (ft)	Discharge (ft^3/s)
		Yukon Alaska--Continued					
15564884	Prospect Creek near Prospect Camp	Lat 66°46'56", long 150°41'06", in NW¼ sec.31, T.23 N., R.14 W., on left bank 200 ft upstream from bridge on the Dalton Highway, 0.4 mi downstream from TAPS pipeline crossing, 1.5 mi upstream from mouth, and 2.1 mi south of Pump Station 5.	110	1968, 1975-82	5-20-24-82	f8.89	1,490
15564887	Bonanza Creek Tributary near Prospect Camp	Lat 66°36'52", long 150°41'24", in SE¼ sec.25, T.21 N., R.15 W., on right bank 0.3 mi downstream from culverts on the Dalton Highway, 3.4 mi upstream from mouth, and 13.5 mi south of Pump Station 5.	11.7	1975-82	7- -82	19.22	215
		Northwest Alaska					
15585000	Goldengate Creek near Nome	Lat 64°26'03", long 165°02'46", in SW¼ sec.15, T.12 S., R.32 W., on right bank 500 ft upstream from culvert on Nome-Council Road and 11 mi southeast of Nome.	1.55	1965, 1977-82	6- -82	11.78	42
15619000	Dexter Creek near Nome	Lat 64°35'11", long 165°16'39", in NE¼ sec.33, T.10 S., R.33 W., on left bank 800 ft upstream from culvert on Nome-Teller Road 0.2 mi upstream from mouth and 7 mi northeast of Nome.	2.99	1978, 1981-82	5- -81 6- -82	12.50 12.50	g144 144
15624998	Arctic Creek above tributary near Nome	Lat 64°38'16", long 165°42'42", in NE¼ sec.8, T.10 S., R.35 W., on right bank 300 ft upstream from culvert on Nome-Teller Road 2 mi upstream from mouth and 13 mi northwest of Nome.	1.13	1975, 1979-82	6- -82	18.58	94
15633000	Washington Creek near Nome	Lat 64°42'52", long 165°49'13", in NW¼ sec.14, T.9 S., R.35 W., 400 ft upstream from culvert on Nome-Teller Road and 19 mi northwest of Nome.	6.34	1964-82	8- 4-79 5- -81 6- -82	20.06 19.77 19.88	e99 g59 77
15668100	Star Creek near Nome	Lat 64°55'40", long 164°57'39", in NW¼ sec.33, T.6 S., R.31 W., on right bank upstream from culvert at mi 40.5 Nome-Taylor road 0.9 mi upstream from mouth and 32 mi northeast of Nome.	3.79	1964-65, 1967-82	6- -82	11.39	120
		Arctic Slope Alaska					
15906000	Sagavanirktok River Tributary near Pump Station 3	Lat 68°41'13", long 149°05'42", in NE¼SW¼ sec.4, T.9 S., R.13 E., North-Slope Borough on left bank 30 ft upstream from culverts on Dalton Highway, 16.5 mi upstream from mouth, and 14 mi south of Pump Station 3.	28.4	1979-82	6- -82	18.24	n
15910200	Happy Creek at Happy Valley	Lat 69°08'50", long 148°49'50", in SE¼ sec.30, T.3 S., R.14 E., North-Slope Borough, on right bank at Happy Valley Camp 1 mi upstream from mouth and 17.5 mi south of Sagwon.	34.5	1972-82	6- -82	17.02	920

e Estimated.
f Ice effect.
g Not previously published.
n To be determined.

Discharge measurements made at miscellaneous sites during water year 1982

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		Southeast Alaska				
15056500 Chilkat River near Klukwan	Lynn Canal	Lat 59°24'55", long 135°55'45", in sec.29, T.28 S., R.56 E., at Wells Bridge at mi 23.7 Haines Highway and 2 mi northwest of Klukwan.	a760	‡1959-61, 1981	4- 6-82	300
Little Boulder Creek	Klehini River	Lat 59°25'46", long 136°07'47", in sec.19, T.28 S., R. 55 E., 100 ft upstream from bridge at mi 31.7 Haines Highway and 8 mi northwest of Klukwan.	--	1981	4- 9-82 8-27-82	22 92
Chilkat River below Tsirku River near Klukwan	Lynn Canal	Lat 59°23'48", long 135°52'58", in SE¼SE¼ sec.33, T.28 S., R.56 E., at mi 21.5 Haines Highway, just below Tsirku River, 0.5 mi southeast of Klukwan.	--	--	4- 6-82	564
Unnamed Tributary to Chilkat River near Klukwan	Chilkat River	Lat 59°23'52", long 135°52'31", in NW¼SE¼SE¼ sec.34, T.28 S., R.56 E., 2000 ft downstream from Klukwan.	--	--	2-11-82	2.6
Chilkat River at Klukwan	Lynn Canal	Lat 59°23'26", long 135°51'40", in SW¼NW¼ sec.5, T.29 S., R.57 E., at mi 20.5 Haines Highway 1 mi southeast of Klukwan.	--	--	4- 6-82	602
Little Salmon River above mouth near Klukwan	Tsirku River	Lat 59°23'02", long 135°59'02", in SW¼SE¼ sec.4, T.29 S., R.56 E., 1000 ft above mouth 3 mi southeast of Klukwan.	--	--	4- 6-82	79
Little Salmon River near mouth near Klukwan	Tsirku River	Lat 59°23'09", long 135°59'20", in NW¼SE¼ sec.4, T.29 S., R.56 E., 500 ft above mouth 3 mi southeast of Klukwan.	--	--	4- 6-82	59
+Chilkat Lake Outlet	Tsirku River	Lat 59°21'47", long 135°56'27", in NE¼NW¼ sec.14, T.29 S., R.56 E., 1500 ft downstream from mouth of Chilkat Lake and 3 mi southwest of Klukwan.	a43	1981	4- 6-82	27
Clear Creek at mouth	Chilkat Lake Outlet	Lat 59°22'00", long 135°56'20", in SE¼SW¼ sec.11, T.29 S., R.56 E., at mouth, 2.7 mi southwest of Klukwan.	--	--	4- 6-82	33
Chilkat Lake Outlet above mouth near Klukwan	Tsirku River	Lat 59°22'10", long 135°56'10", in SE¼SW¼ sec.11, T.29 S., R.56 E., 500 ft above mouth, 2.5 mi southwest of Klukwan.	--	--	4- 6-82	68
15056580 Tsirku River above Tsirku Fan near Klukwan	Chilkat River	Lat 59°22'28", long 135°55'25", NW¼NW¼ SE¼NW¼, sec.11, T.29 S., R.56 E., 1000 ft downstream of tributary from Chilkat Lake and 2 mi southwest of Klukwan.	--	1981	4- 6-82	142
		South-Central Alaska				
+Tulsona Creek near Gakona	Copper River	Lat 62°25'52", long 144°57'56", in SW¼ sec.36, T.8 N., R.2 E., at bridge on Glenn Highway and 16.1 mi east of Gakona.	91.4	1977	5-13-77 9-20-77 3-30-82 7-28-82	407 40 38 38
+Fish Creek at lake outlet near Sourdough	West Fork Gulkana River	Lat 62°34'19", long 145°53'38", in SW¼ sec.12, T.9 N., R.4 W., 0.25 mi below Fish Lake outlet, and 12.2 mi west of Sourdough.	--	--	3-30-82	0.68

\+ See analysis of samples collected at miscellaneous sites.
‡ Operated as a continuous-record station.
a Approximately.

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		South-Central Alaska--Continued				
+15200270 Sourdough Creek at Sourdough	Gulkana River	Lat 62°31'46", long 145°30'52", in S½ sec.25, T.9 N., R.2 W., at bridge on Richardson Highway, mi 147.4, and at Sourdough.	68.0	--	3-29-82 7-28-82	0.01 17
+Mendeltna Creek near Glennallen	Tazlina Lake	Lat 62°03'00", long 146°32'25", in SE¼ sec.8, T.3 N., R.7 W., at bridge on Glenn Highway, mi 153, 0.1 mi west of Mendeltna Lodge, and 33 mi east of Glennallen.	196	--	3-29-82 7-28-82 9-23-82	77 133 106
+Tolsona Creek near Glennallen	Tazlina River	Lat 62°06'04", long 145°57'58", in NE¼ sec.28, T.4 N., R.4 W., at bridge on Glenn Highway and 14 mi west of Glennallen	180	1948	3-30-82 7-28-82 8-19-82 9-21-82	<.1 66 20 36
15201895 Moose Creek at Glennallen	Tazlina River	Lat 62°06'35", long 145°33'26", in SW¼ sec.23, T.4 N., R.2 W., at bridge on Glenn Highway, and at Glennallen.	177	1948, 1973-74	9-21-82	11
Copper River at McCarthy Road Bridge near Chutina	Prince William Sound	Lat 61°31'35", long 144°24'30", in NE¼ sec.13, T.4 S., R.5 E., 0.9 mi downstream from mouth of Kotsina River, 1.0 mi upstream from mouth of Chitina River, and 1.2 mi northeast of Chitina.	--	--	7-30-82	55,700
+15207800 Little Tonsina River near Tonsina	Tonsina River	Lat 61°28'49", long 145°09'05", in NW¼ sec.36, T.4 S., R.1 E., on right bank, 50 ft downstream from Richardson Highway crossing, and 15.4 mi south of Tonsina.	22.7	‡1972-78	7-29-82	60
+†15208100 Squirrel Creek at Tonsina	Tonsina River	Lat 61°40'05", long 145°10'26", in NW¼ sec.26, T.2 S., R.1 E., on right bank 150 ft upstream from highway bridge at mi 79.5 Richardson Highway, 0.3 mi northeast of Tonsina River bridge, 0.3 mi upstream from mouth, and 0.4 mi north of Tonsina.	70.5	†1964-65, ‡1966-75, †1976-81	3-31-82 4- 1-82 7-29-82	32 e25 25
†15211900 O'Brien Creek near Chitina	Copper River	Lat 61°28'59", long 144°27'23", in NW¼NW¼ sec.35, T.4 S., R.5 E., 100 ft upstream from timber bridge on trail to Copper River gaging station, 0.1 mi upstream from mouth at Copper River, and 2.5 mi south of Chitina.	44.8	†1970-81	4- 1-82 7-30-82 9-22-82	5.8 101 100
#15274550 Little Campbell Creek at Nathan Drive near Anchorage	Campbell Creek	Lat 61°09'13", long 149°52'18", in SW¼SE¼ sec.6, T.12 N., R.3 W., Municipality of Anchorage, on right bank 0.2 mi upstream from mouth and 4.5 mi south of Anchorage Post Office.	a15	‡1981	10- 1-81 10-13-81 11-09-81	4.9 22 5.7
#15274820 South Branch of South Fork Chester Creek Tributary near Baxter Road at Anchorage	Chester Creek	Lat 61°11'49", long 149°45'46", SW¼NW¼ sec.29, T.13 N., R.3 W., Municipality of Anchorage, north of parking lot of ALASCOM building, north of 36th Avenue.	.015	--	8-15-82 8-15-82 8-15-82 8-15-82 8-15-82 9- 3-82 9- 3-82	.08 .004 .18 .05 .09 1.1 .13
+15274970 South Fork Chester Creek at Northern Lights Boulevard near Anchorage	Chester Creek	Lat 61°11'45", long 149°49'37", in NE¼NW¼ sec.28, T.13 N., R.3 W., Municipality of Anchorage, at Northern Lights Boulevard and Providence Drive and 2.5 mi southeast of Anchorage.	--	1977, 1980-81	2- 4-82 2- 5-82 2- 5-82 2- 6-82 2- 6-82 6- 6-82 6- 6-82 6- 7-82	32 18 18 13 14 32 34 35

\# See analysis of samples collected at water-quality partial-record stations.
\+ See analysis of samples collected at miscellaneous sites.
† Operated as a crest-stage partial-record station.
‡ Operated as a continuous-record station.
a Approximately.

Discharge measurements made at miscellaneous sites during water year 1982--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		South-Central Alaska--Continued				
+Middle Fork Chester Creek at Nichols Street at Anchorage	Chester Creek	Lat 61°12'07", long 149°48'36", in NE¼SE¼ sec.21, T.13 N., R.3 W., Municipality of Anchorage, 20 ft above culvert at Nichols Street and 2.8 mi east of Anchorage.	--	1980-81	2- 4-82 2- 5-82 2- 5-82 2- 6-82 2- 6-82 6- 6-82 6- 6-82 6- 7-82	8.6 4.1 3.9 3.3 3.3 10 8.4 18
+15275000 Chester Creek at Anchorage	Cook Inlet	Lat 61°11'59", long 149°50'07", in SW¼ sec.21, T.13 N., R.3 W., Municipality of Anchorage, on right bank 10 ft upstream from culverts on Lake Otis Road, 3.2 mi upstream from mouth, and 2.3 mi southeast of Anchorage.	20	†1958-76, 1977, 1980-81	2- 4-82 2- 5-82 2- 5-82 2- 6-82	38 20 21 17
♯15275055 Chester Creek Tributary near 36th Avenue at Anchorage	Chester Creek	Lat 61°11'26", long 149°51'41", in SE¼SW¼ sec.23, T.13 N., R.3 W., Municipality of Anchorage, culvert on right bank on South Branch South Fork Chester Creek approximately 100 yards off Baxter Road.	1.0	--	8-15-82 9-13-82 9-14-82 9-28-82	0.76 3.4 1.5 0.67
+Peters Creek (Upper) near Peters Creek	Knik Arm	Lat 61°23'35", long 149°25'19", in SE¼NE¼ sec.15, T.15 N., R.1 W., 600 ft south of Peters Creek Valley Road and 1.2 mi southeast of Peters Creek.	--	1981	10- 6-81	101
Portage Creek near Gold Creek	Susitna River	Lat 62°50'00", long 149°22'35", 450 ft upstream from confluence with Susitna River, approximately 14 river miles upstream of Gold Creek and just below Devil Canyon.	--	--	8-19-82	454
15296554 Thumb River near Larsen Bay	Karluk Lake	Lat 57°21'26", long 153°59'41", in NW¼SE¼ sec.31, T.32 S., R.29 W., on Kodiak Island, 600 ft upstream from inlet to Karluk Lake and 12.5 mi south of Larsen Bay. (See page 183 of this report.)	25.3	1979-81	3- 2-82 4- 6-82 5-20-82	34 35 110
Shotgun Creek	Falls Creek	Lat 57°39'20", long 152°56'15", in NW¼NW¼ sec.23, T.29 S., R.23 W., on Kodiak Island, 1.0 mi upstream from mouth and 14 mi south of Port Lions.	a1.9	1978-81	9- 7-82	17
Rolling Rock Creek	Kizhuyak River	Lat 56°41'40", long 152°54'00", in NW¼ sec.1, T.29 S., R.23 W., on Kodiak Island, 0.75 mi upstream from mouth and 12 mi south of Port Lions.	a2.1	1979-81	9- 8-82	7.3
		Southwest Alaska				
+Izavieknik River Inlet Upper Togiak Lake near Togiak	Upper Togiak Lake	Lat 59°52'08", long 159°26'12", in SW¼SW¼ sec.33, T.3 S., R.59 W., at inlet to upper Togiak Lake, 65 mi northeast of Togiak.	29	1980	3-20-82	13
+Izavieknik River outlet Upper Togiak Lake near Togiak	Togiak Lake	Lat 59°48'22", long 159°29'30", in NE¼NW¼ sec.30, T.4 S., R.59 W., at outlet of upper Togiak Lake, 60 mi northeast of Togiak.	62	1980	3-20-82	62
+Trail Creek above mouth near Togiak	Izavieknik River	Lat 59°47'27", long 159°30'30", in SW¼NE¼ sec.36, T.4 S., R.60 W., above mouth, 59 mi northeast of Togiak.	227	1980	3-20-82	91
+Izavieknik River at Inlet Togiak Lake near Togiak	Togiak Lake	Lat 59°43'10", long 159°32'42", in NW¼NE¼ sec.30, T.5 S., R.60 W., at inlet to Togiak Lake, 55 mi northeast of Togiak.	384	1980	3-23-82	363

♯ See analysis of samples collected at water-quality partial-record stations.
\+ See analysis of samples collected at miscellaneous sites.
† Operated as a crest-stage partial-record station.
a Approximately.

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		Southwest Alaska--Continued				
+West Creek near Togiak	Togiak Lake	Lat 59°37'21", long 159°38'30", in SE¼SW¼ sec.27, T.6 S., R.61 W., 0.7 mi upstream from mouth, 47 mi northeast of Togiak.	17	1980	3-19-82	20
+Bruin Creek near Togiak	Togiak Lake	Lat 59°35'24", long 159°36'49", in NE¼NW¼ sec.11, T.7 S., R.61 W., at mouth 45 mi northeast of Togiak.	12	1980	3-19-82	6.6
+Togiak River at Togiak Lake Outlet near Togiak	Togiak Bay	Lat 59°31'57", long 159°41'39", in NE¼NW¼ sec.32, T.7 S., R.61 W., at outlet of Togiak Lake, 40 mi northeast of Togiak.	515	1980	3-19-82	571
+Ongivinuck River above mouth near Togiak	Togiak River	Lat 59°23'24", long 159°44'12", in NW¼ sec.21, T.9 S., R.62 W., 5.1 mi upstream from mouth, 38 mi northeast of Togiak.	204	--	3-19-82	321
+Togiak River below Ongivinuck River near Togiak	Togiak Bay	Lat 59°23'48", long 159°50'42", in SE¼NW¼ sec.14, T.9 S., R.62 W., 2 mi downstream from Ongivinuck River, 29 mi northeast of Togiak.	829	1980	3-23-82	1,140
+Narogurum River near Togiak	Togiak Bay	Lat 59°22'36", long 160°00'24", in SW¼SE¼ sec.23, T.9 S., R.63 W., at mouth 25 mi northeast of Togiak.	259	1980	3-18-82	282
+Togiak River above Pungokepuk Creek near Togiak	Togiak Bay	Lat 59°16'44", long 160°11'48", in NE¼SE¼ sec.27, T.10 S., R.64 W., 2 mi upstream from Pungokepuk Creek, 16 mi northeast of Togiak.	1,408	1980	3-18-82	1,620
+Pungokepuk Creek above Togiak River near Togiak	Togiak River	Lat 59°15'33", long 160°11'24", in NW¼NW¼ sec.2, T.11 S., R.64 W., at mouth, 15 mi northeast of Togiak.	99	1980	3-18-82	81
		Yukon Alaska				
South Branch Salchaket Slough at Bonnifield Trail near Fairbanks	Tanana River	Lat 64°44'15", long 147°43'19", in SW¼SE¼ sec.15, T.2 S., R.2 W., at Bonnifield Trail Crossing and 7.0 mi southwest of Fairbanks International Airport Terminal.	--	1980	2- 2-82	579
North Branch Salchaket Slough at Bonnifield Trail near Fairbanks	Tanana River	Lat 64°44'44", long 147°43'19", in NW¼NE¼ sec.15, T.2 S., R.2 W., at Bonnifield Trail Crossing and 6.6 mi southwest of Fairbanks International Airport Terminal.	--	--	2- 2-82	14
+15511500 Steele Creek near Fairbank	Chena River	Lat 64°53'36", long 147°29'12", in SW¼SE¼ sec.23, T.1 N., R.1 E., 500 ft upstream from culvert at mile 4.5 on Chena Hot Springs Road and 7.7 mi northeast of Fairbanks.	10.7	†c1967-74, 1976-79, 1981	(Listed below)	

10- 2-81	0.98	10-28-81	0.73	12- 9-81	e0.0	5-27-82	4.4	7-16-82	3.0
10- 5-81	1.6	11-06-81	0.55	5- 6-82	18	6-11-82	2.7	8- 3-82	1.9
10-16-81	1.1	11-12-81	0.35	5-13-82	14	6-30-82	1.7	8-13-82	1.2
10-23-81	1.1	11-27-81	e0.0	5-24-82	6.7	7- 7-82	1.9		

Jim River near Prospect Camp	South Fork Koyukuk River	Lat 66°53'05", long 150°31'18", in SE¼ sec.23, T.24 N., R.14 W., at bridge on Dalton Highway, 400 ft downstream from TAPS pipeline crossing and 6.3 mi northeast of Pump Station 5.	223	1975, 1978	10-22-81 4-15-82 5-26-82	50 7.1 1160

\+ See analysis of samples collected at miscellaneous sites.
† Operated as a crest-stage partial-record station.
c Published in Miscellaneous Measurements Table.

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		Northwest Alaska				
+Unalakleet River above Old Woman River near Unalakleet	Norton Sound	Lat 64°01'40", long 159°49'38", in NW¼SW¼ sec.10, T.17 S., R.6 W., 31 mi northeast of Unalakleet and 62.3 mi upstream from mouth.	292	--	8-25-82	595
+Old Woman River at mouth near Unalakleet	Unalakleet River	Lat 64°01'37", long 159°49'40", in SW¼ sec.10, T.17 S., R.6 W., 0.1 mi upstream from mouth and 31 mi northeast of Unalakleet.	315	--	8-24-82	500
+Unalakleet River below Old Woman River near Unalakleet	Norton Sound	Lat 64°01'11", long 159°52'48", in SW¼NE¼ sec.17, T.17 S., R.6 W., 30 mi northeast of Unalakleet and 59.7 mi upstream from mouth.	611	--	8-25-82	1,070
+North Fork Unalakleet River near Unalakleet	Unalakleet River	Lat 63°58'56", long 159°58'16", in SW¼SE¼ sec.26, T.1[illegible] S., R.7 W., 0.5 mi upstream from mouth and 26 mi northeast of Unalakleet.	267	--	8-26-82	637
+Unalakleet River above Chiroskey River near Unalakleet	Norton Sound	Lat 63°55'38", long 160°20'22", in NE¼SW¼ sec.13, T.18 S., R.9 W., 14 mi northeast of Unalakleet and 25 mi upstream from mouth.	1,032	--	8-27-82	1,990
+Chiroskey River above mouth near Unalakleet	Unalakleet River	Lat 63°55'14", long 160°19'29", in NE¼NE¼ sec.24, T.18 S., R.9 W., 0.3 mi upstream from mouth, 14 mi northeast of Unalakleet.	296	--	8-28-82	367
+Unalakleet River above North River near Unalakleet	Norton Sound	Lat 63°52'35", long 160°36'43", in NW¼NW¼ sec.3, T.19 S., R.10 W., 6 mi east of Unalakleet and 6.8 mi upstream from mouth.	1,388	--	8-29-82	2,170
+North River at mouth near Unalakleet	Unalakleet River	Lat 63°52'40", long 160°38'50", in NE¼NE¼ sec.5, T.19 S., R.10 W., 0.4 mi upstream from mouth and 4 mi east of Unalakleet.	495	--	8-29-82	1,050
+South River near mouth near Unalakleet	Unalakleet River	Lat 63°51'40", long 160°39'20", in SW¼NE¼ sec.8, 1.8 mi upstream from mouth and 4 mi southeast of Unalakleet.	140	--	8-30-82	137
15621000 Snake River near Nome	Norton Sound	Lat 64°33'51", long 165°30'26", in SW¼SE¼ sec.5, T.11 S., R.34 W., on downstream side of bridge on Nome-Teller Road, 5.4 mi northwest of Nome.	a85.7	‡1966-81	10-15-81 2- 4-82 4- 2-82 7-22-82 8-27-82 9-29-82	123 28.2 35.4 119 142 450

‡ Operated as a continuous-record station.
+ See analysis of samples collected at miscellaneous sites.
a Approximately.

NOTE: Discharge measurements were made at 2 springs in Southeast Alaska and at 15 springs in Arctic Slope Alaska. These data are given on pages 35[illegible]-3[illegible]7. Many of these "springs" actually occur within a stream.

Tsirku River seepage investigation--Klukwan

A series of discharge measurements were made April 6, 1982 on the Tsirku River, which drains into the Chilkat River near Klukwan, Alaska, to study channel gains and losses. The reach was 1.8 mi (2.9 km) in length and extends from the head of the Tsirku Fan, 2 mi southeast of Klukwan, to the toe of the Tsirku River Fan 0.3 mi southeast of Klukwan. The measurements were made during a period of steady flow.

River Miles	Location	Meas. disch. (ft^3/s)	Gain or loss	D.O. (mg/l)	Water temp. (°C)	Ph (units)	Specific conductanc (micromhos
1.8	Lat 59°22'30", long 135°54'59", in SW¼NW¼, sec.12, T.29 S., R.56 E.	139	--	12.6	5.0	7.8	240
1.7	Lat 59°22'31", long 135°54'39", in SE¼NW¼, sec.12.....	122	-17	9.0	5.0	7.8	240
1.4	Lat 59°22'43", long 135°54'38", in NE¼NW¼, sec.12.....	128	+6	10.4	5.0	7.8	240
1.3	Lat 59°22'49", long 135°54'27", in NE¼NW¼, sec.12.....	124	-4	--	5.5	7.8	240
1.2	Lat 59°22'51", long 135°54'15", in SW¼SE¼, sec.1.....	112	-12	10.6	5.5	7.8	240
1.1	Lat 59°22'53", long 135°54'03", in SW¼SE¼, sec.1.....	109	-3	10.9	6.0	7.8	240
0.9	Lat 59°23'03", long 135°54'00", in SW¼SE¼, sec.1.....	91	-18	11.4	6.0	7.8	240
0.8	Lat 59°23'10", long 135°53'52", in NW¼SE¼, sec.[illegible].....	73	-18	12.0	6.0	7.8	240
0.5	Lat 59°23'19", long 135°53'38", in SE¼NE¼, sec.[illegible].....	66	-7	10.8	6.0	7.8	240
0.3	Lat 59°23'28", long 135°53'27", in SE¼NE¼, sec.1.....	61	-5	--	--	--	--
0.1	Lat 59°23'40", long 135°53'13", in NW¼NW¼, sec.6.....	53	-8	12.0	6.0	7.8	240
	Overall net loss.....		-86				

SOUTH-CENTRAL ALASKA

Measurements of lake levels of selected lakes are given in the following table. Data are being collected at these lakes to define lake level changes from seasonal variations, the effects of man, response to droughts and response to changes in the ground-water system. Lake levels are referenced to an arbitrary gage datum and may not be at National Geodetic Vertical Datum.

Lake	Tributary to	Location	Surface area (acres)	Measured previously (water year)	Measurements	
					Date	Lake Level (ft)
		Kenai Peninsula Borough				
Shadura	Closed lake in Beaver Creek basin	Lat 60°42'17", long 151°00'12", in NE¼ sec.15, T.7 N., R.10 W., at north shore, 13 mi northeast of Kenai.	258	1970-71, 1976-81	10- 2-81 6- 9-82	17.46 17.72
Konovalof	Closed lake in Beaver Creek basin	Lat 60°39'49", long 151°09'52", in SW¼ sec.26, T.7 N., R.11 W., at south shore of island near north shore of lake, 8.5 mi northeast of Kenai.	256	1970-71, 1976-81	10- 2-81 6- 9-82	18.19 18.24
Kidney	Closed lake	Lat 60°39'48", long 151°15'35", in SW¼ sec.29, T.7 N., R.11 W., at east shore, 0.2 mi north of Lamplighter Holt Road, and 7.5 mi north of Kenai.	71	p1970-72, p1974-76, 1977-81	10-21-81 6- 7-82	104.74 104.63
Cabin	Closed lake	Lat 60°40'30", long 151°19'15", in NE¼ sec.26, T.7 N., R.12 W., at east shore, 0.2 mi west of Miller Loop Road, and 8.5 mi north of Kenai.	53	p1970-72, p1974-76, 1977-81	10-21-81 6- 8-82	95.79 96.02
Island	Closed lake	Lat 60°42'19", long 151°19'05", in SE¼ sec.11, T.7 N., R.12 W., at west shore, 0.1 mi east of Island Lake Road, and 10.7 mi north of Kenai.	272	p1970-72, p1974-76, 1977-81	10-22-81 6- 7-82	101.71 100.31
Unnamed Lake	Closed lake	Lat 60°40'56", long 151°20'54", in SW¼ sec.23, T.7 N., R.12 W., at south shore, 0.4 mi north of Miller Loop Road, and 9.4 mi north of Kenai.	8.6	p1970-72, p1974-76, 1977-81	10-21-81 6-08-82	96.54 96.51
Bernice	Bernice Creek	Lat 60°41'33", long 151°21'48", in SW¼SE¼ sec.15, T.7 N., R.12 W., at camp-ground on south shore and 10 mi northwest of Kenai. (Station number 15266895.)	150	p1970-72, p1974-76, ‡1977-81	10-22-81 6-08-82	77.04 77.02
Douglas	Closed lake	Lat 60°40'27", long 151°13'20", in NW¼ sec.28, T.7 N., R.11 W., at north shore, 0.8 mi east of Lamplighter Holt Road, and 8.3 mi north of Kenai.	90	p1970-72, p1974-76, 1977-81	10-21-81 6- 7-82	109.32 109.31
Wick	Closed lake	Lat 60°43'06", long 151°14'35", in NE¼ sec.8, T.7 N., R.11 W., at north shore, 0.2 mi south of Lamplighter Holt Road, and 11.4 mi north of Kenai.	173	p1970-72, p1974-76, 1977-81	10-21-81 6- 7-82	108.26 108.01
Laura	Closed lake	Lat 60°43'44", long 151°13'15", in NW¼ sec.4, T.7 N., R.11 W., at northwest shore, 0.3 mi southeast of Halbouty Road, and 12.1 mi north of Kenai.	41	p1970-72, p1974-76, 1977-81	10-21-81 6- 7-82	108.71 108.47
Daniels	Bishop Creek	Lat 60°44'25", long 151°10'27", in SW¼ sec.34, T.8 N., R.11 W., at northwest shore, 1.2 mi east of North Kenai Road, and 13 mi north of Kenai.	602	p1970-72, p1976. 1977-81	10-21-81 6- 7-82	86.24 86.10
		Municipality of Anchorage				
Sand	Closed lake	Lat 61°09'03", long 149°58'25", in NW¼ sec.10, T.12 N., R.4 W., at west shore, and 4.0 mi southwest of Spenard. (Station number 15274700.)	78	*1967-74, 1975-81	10- 2-81 5-21-82 6-21-82 7-26-82 8-23-82 9-24-82	87.09 87.18 87.05 86.97 86.63 87.01
		Matanuska-Susitna Borough				
Finger	Closed lake	Lat 61°36'47", long 149°15'32", in NW¼ sec.34, T.18 N., R.1 E., at northeast shore north of Wasilla Road and 4.5 mi west of Palmer.	--	1978, 1981	10-15-81 5-26-82	13.03 13.23

* Operated as a daily stage station during open water with occasional readings during rest of year.
‡ Operated as a continuous-record stage station.
p Published at different datum. Converted to National Geodetic Vertical Datum.

SOUTH-CENTRAL ALASKA

Lake	Tributary to	Location	Surface area (acres)	Measured Previously (water year)	Measurements Date	Measurements Lake Level (ft)
		Matanuska-Susitna Borough--Continued				
Kings	Closed lake	Lat 61°37'13", long 149°21'35", in SW¼ sec.25, T.18 N., R.1 W., at northwest shore at King's Lake Camp and 4 mi northeast of Wasilla.	--	1978, 1981	10-15-81 5-26-82	19.53 19.10
Memory	Closed lake	Lat 61°37'52", long 149°25'37", in SE¼ sec.22, T.18 N., R.1 W., at northwest shore at the Menard residence (Laze C&L Ranch) and 3.5 mi northeast of Wasilla.	--	1978, 1981	10-15-81 5-26-82	7.71 7.33
Rocky	Closed lake	Lat 61°33'27", long 149°49'49", in SW¼ sec.16, T.17 N., R.3 W., at southwest shore in Rocky Lake Wayside, north of Big Lake, and 5.5 mi south of Houston.	--	1978, 1981	10-15-81 5-26-82	10.75 10.30
Big	Fish Creek	Lat 61°32'04", long 149°49'30", in SE¼ sec.28, T.17 N., R.3 W., head of Fish Creek at lake outlet, on left bank upstream from square notched weir upstream from bridge on Big Lake Road, and 13 mi southwest of Wasilla. (Station number 15287000.)	3,104	1972-81	5-26-82	10.42
Marion	Closed lake	Lat 61°30'42", long 149°55'05", in NW¼ sec.1, T.16 N., R.4 W., at northwest shore, west of Big Lake Road and south of Big Lake, and 7.5 mi northwest of Knik.	--	1978, 1981	10-15-81 5-26-82	7.48 7.10
Lost	Closed lake	Lat 61°20'36", long 149°58'55", in SW¼ sec.34, T.15 N., R.4 W., on north end of lake, 2.5 mi west of Knik Arm of Cook Inlet, and 6 mi north of Point MacKenzie.	--	1981	5-20-82	17.34
Twin Island	Closed lake	Lat 61°19'25", long 150°00'35", in NW¼ sec.9, T.14 N., R.4 W., on northeast shore, 3 mi west of Knik Arm of Cook Inlet, and 5.2 mi north of Point MacKenzie.	--	1981	5-20-82	15.52
/Lorraine	Closed lake	Lat 61°17'43", long 149°56'48", in NW¼ sec.23, T.14 N., R.4 W., on northeast shore, 1 mi west of Knik Arm of Cook Inlet, and 2.5 mi north of Point MacKenzie.	--	1981	5-20-82	3.47
/Horseshoe	Little Susitna River	Lat 61°21'50", long 150°09'20", in NW¼ sec.27, T.15 N., R.5 W., at the northwest shore at Oren Hudson's cabin and 15 mi northwest of Anchorage.	--	1978, 1981	5-20-82	4.22
Lynne	Closed lake	Lat 61°42'41", long 150°01'52", in NE¼ sec.29, T.19 N., R.4 W., at northeast shore, northeast of Nancy Lake, and 2.5 mi southeast of Willow.	--	1978, 1981	10-15-81 5-26-82	11.81 11.20
/Nancy	Lake Creek	Lat 61°42'09", long 150°00'20", in SE¼ sec.28, T.18 N., R.4 W., at northeast shore and 3 mi south of Willow.	--	1978, 1981	8- -81 10-15-81 5-26-82	9.58 7.63 6.90
Twelvemile	Closed lake	Lat 61°46'19", long 149°42'42", in NW¼ sec.6, T.19 N., R.2 W., at northeast shore, south of Willow Creek Road and 11 mi east of Willow.	--	1978, 1981	10-15-81 5-26-82	19.28 19.14
Willow	Closed lake	Lat 61°44'39", long 150°03'08", in NW¼ sec.17, T.19 N., R.4 W., at southeast shore and 0.5 mi west of Willow.	--	1978, 1981	10-15-81 5-26-82	12.90 12.74

/ See analyses of samples collected (at slightly different locations) at miscellaneous lake sites.

Water-quality partial-record stations are particular sites where chemical-quality, biological and or sediment data are collected systematically over a period of years for use in hydrologic analyses. The data are collected usually less than quarterly.

SOUTHEAST ALASKA

15011858 - KETA R BL RED C NR KETCHIKAN AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 31...	1000	610	8	16	6.2	4.5	--	11.3	6	0	2.3	.1
AUG 05...	0730	228	19	19	6.8	8.0	5	11.6	6	0	2.3	.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT 31...	.5	.3	6	<5.0	1.1	.0	2.5	13	.11	.11	.080
AUG 05...	.8	.3	11	<5.0	.3	<.1	2.0	18	<.10	<.10	<.060

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT 31...	.100	.08	.24	<.20	.00	.34	.27	.45	<.010	<.010	--
AUG 05...	.090	--	1.2	1.00	.00	1.3	--	--	.010	.030	1.4

DATE	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
OCT 31...	.6	<1	1	<1	<1	<10	3	--	<1	150	80
AUG 05...	.1	<1	<1	<1	<1	<10	1	0	1	70	40

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 31...	73	3	0	3	<10	--	3	.2	7	1	1.6
AUG 05...	29	5	--	<1	10	0	14	.1	10	--	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTHEAST ALASKA--Continued

15011865 - HILL C AB WHITE C NR KETCHIKAN AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 29...	1330	33	6	14	6.1	5.0	5	10.4	4	1	1.8
AUG 05...	1200	26	11	14	5.4	7.0	5	11.1	4	2	1.5

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT 29...	.0	.6	.2	3	<5.0	.9	.1	2.9	10	.12	.11
AUG 05...	.1	.6	.2	2	<5.0	.3	<.1	2.2	9	<.10	<.10

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT 29...	<.060	<.060	.15	.29	.03	.26	.41	.37	.010	.010
AUG 05...	<.060	.090	.41	.30	.00	50	--	--	<.010	.030

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT 29...	2.3	.1	<1	<1	<1	<1	<10	2	<1	90
AUG 05...	--	--	<1	<1	<1	<1	<10	2	<1	60

DATE	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 29...	50	44	<1	2	<10	1	.2	6	0	.00
AUG 05...	50	12	8	<1	<10	2	.1	25	--	--

SOUTHEAST ALASKA--Continued

15011875 - HILL C NR MOUTH NR KETCHIKAN AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT												
31...	1330	162	9	9	6.3	5.5	--	11.7	7	3	2.8	.2
AUG												
05...	1000	40	27	30	7.1	9.0	<1	11.0	10	5	3.9	.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT											
31...	.7	.2	4	<5.0	1.0	.0	3.4	16	--	.12	.11
AUG											
05...	.8	.2	5	7.0	.4	<.1	3.5	24	19	<.10	<.10

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT											
31...	<.060	.090	.29	<.20	.00	<.20	.37	.49	<.010	<.010	--
AUG											
05...	<.060	.060	.34	.40	.00	.40	--	--	<.010	.030	1.3

DATE	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
OCT											
31...	.2	<1	<1	<1	<1	<10	3	2	1	60	20
AUG											
05...	.1	<1	<1	<1	<1	<10	2	--	<1	60	50

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT											
31...	40	3	0	4	10	7	3	.1	5	0	.00
AUG											
05...	15	<1	--	<1	<10	--	<1	.2	7	--	--

SOUTHEAST ALASKA--Continued

15011890 - BEAVER CREEK NEAR KETCHIKAN AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 29...	1500	16	15	24	6.1	5.0	--	10.8	8	5	3.3
AUG 05...	1430	3.7	31	36	5.7	10.5	5	9.9	12	7	4.6

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 29...	.1	.7	.2	3	<5.0	.7	.1	3.3	19	--	<.09
AUG 05...	.2	.8	.2	5	10	.4	<.1	3.5	24	23	<.10

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT 29...	.09	<.060	.090	.18	<.20	.00	.27	.36	<.010	<.010	2.3
AUG 05...	<.10	<.060	.120	.98	.70	.00	1.1	--	<.010	.020	--

DATE	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 29...	.1	<1	<1	<1	<1	<10	6	<1	290	190	100
AUG 05...	--	<1	<1	<1	<1	<10	2	<1	350	180	170

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 29...	2	0	--	10	6	4	.4	9	0	.00
AUG 05...	1	0	1	<10	--	3	.2	15	--	--

+15020500 - EF BRADFIELD R NR WRANGELL AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
DEC 07...	1300	103	1	.28

+ Discontinued gaging station.

SOUTHEAST ALASKA--Continued

15056500 - CHILKAT R NR KLUKWAN AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TUR-BID-ITY (NTU)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR 06...	1800	300	273	5.7	2.0	109	13	33	6.4	8.3	2.6

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)
APR 06...	95	26	8.3	.1	5.8	149	149	.23	.180	.38	.56

DATE	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
APR 06...	.79	.010	1.2	.1	1	0	3	<100	100	1

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
APR 06...	<1	10	<10	1	<1	4	2	2	1600	1500

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
APR 06...	60	<1	1	150	20	130	.1	10	16	13

15056580 - TSIRKU R AB TSIRKU FAN NR KLUKWAN AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 23...	1600	1300	--	--	--	--	--	--	--	--	--
APR 06...	1430	142	261	7.5	6.0	1.2	12.6	127	41	41	6.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
OCT 23...	--	--	--	--	--	--	--	--	--	--	--
APR 06...	1.6	1.7	86	42	1.2	<.1	4.7	150	151	.24	.080

SOUTHEAST ALASKA--Continued

15056580 - TSIRKU R AB TSIRKU FAN NR KLUKWAN AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)
OCT 23...	--	--	--	--	--	--	--	--	--	--	--
APR 06...	.22	.30	.54	.010	1.4	<.1	1	0	1	100	70

DATE	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
OCT 23...	--	--	--	--	--	--	--	--	--	--	--
APR 06...	28	2	<3	<10	<10	1	<1	3	<1	120	110

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT 23...	--	--	--	--	--	--	--	--	--	8	28
APR 06...	9	2	0	2	20	10	7	<.1	<12	1	.38

+15100510 - STEPHENS C NR ANGOON AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	SPECIFIC CONDUCTANCE LAB (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)
OCT 11...	1230	.08	56	66	6.8	6.0	11.6	24

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 11...	3	8.4	.9	2.9	.2	21	6.0	3.6	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT 11...	3.4	39	.12	.080	<.21	.010	1	.00

+ Discontinued gaging station.

SOUTHEAST ALASKA--Continued

+15107910 - WF INDIAN R NR TENAKEE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 07...	1200	15	156	152	7.4	5.0	11.4	66	8

DATE	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)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 07...	25	.9	1.7	.7	58	<5.0	1.3	.1	6.6

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 07...	.33	.090	.44	.53	.86	.020	1	.04

+Discontinued gaging station.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA

15274550 - L CAMPBELL C AT NATHAN DR NR ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT									
13...	1015	23	.27	.030	.30	.170	.040	66	4.1
13...	1115	22	--	--	--	--	--	60	3.6
13...	1215	22	.28	.030	.31	.170	.040	57	3.4
13...	1415	21	.28	.030	.31	.170	.020	47	2.7
13...	1815	21	.30	.030	.33	.150	.020	74	4.2
13...	2215	20	.28	.040	.32	.210	.050	91	4.9
14...	0215	21	.31	.030	.34	.170	.030	38	2.2
14...	0615	20	.32	.030	.35	.170	.030	25	1.4
23...	0900	22	--	--	--	--	--	671	40
23...	1100	23	--	--	--	--	--	293	18
23...	1300	22	--	--	--	--	--	172	10
23...	1500	20	--	--	--	--	--	99	5.3
23...	1700	18	--	--	--	--	--	67	3.3
23...	1900	18	--	--	--	--	--	57	2.8
23...	2100	18	--	--	--	--	--	48	2.3
23...	2300	17	--	--	--	--	--	37	1.7
24...	0100	17	--	--	--	--	--	30	1.4
24...	0300	17	--	--	--	--	--	28	1.3
24...	0500	16	--	--	--	--	--	30	1.3
24...	0700	16	--	--	--	--	--	26	1.1

NOTE: Suspended-sediment samples were collected automatically with a single-stage sediment sampler.

SOUTH-CENTRAL ALASKA--Continued

15274820 - SB SF CHESTER C TR NR BAXTER RD AT ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)
JUL				AUG				AUG			
29...	0502	.02	105	10...	2058	.07	90	15...	1236	.03	45
29...	0508	.02	95	10...	2108	.07	75	15...	1246	.05	70
29...	0518	.05	95	10...	2118	.08	75	15...	1256	.17	60
29...	0528	.07	70	10...	2128	.08	65	15...	1306	E.20	30
29...	0538	.07	52	10...	2138	.09	70	15...	1316	E.25	30
29...	0548	.05	50	10...	2148	.14	42	15...	1326	E.30	<25
29...	0558	.04	50	10...	2158	.14	40	15...	1336	E.15	<25
29...	0608	.04	49	10...	2208	.11	40	15...	1346	E.10	<25
29...	0618	.03	46	10...	2218	.10	40	15...	1356	E.10	<25
29...	0628	.03	45	10...	2228	.05	40	15...	1406	E.10	<25
29...	0638	.03	45	10...	2238	.05	41	15...	1416	E.08	25
29...	0648	.03	45	10...	2248	.04	45	15...	1426	E.07	30
29...	0728	.02	45	10...	2258	.04	45	15...	1436	E.05	31
29...	0738	.05	52	10...	2308	.04	46	25...	1554	.07	480
29...	0748	.08	42	10...	2318	.04	50	25...	1557	.09	--
29...	0758	.09	36	10...	2328	.04	52	25...	1607	.14	134
29...	0808	.08	35	10...	2338	.04	52	25...	1617	.07	115
29...	0818	.06	35	10...	2348	.04	52	25...	1627	.07	110
29...	0828	.04	35	10...	2358	.02	52	25...	1637	.07	140
29...	0838	.02	35	11...	0008	.02	56	25...	1647	.07	[illegible]
29...	1702	.04	75	11...	0018	.02	60	25...	1657	.06	[illegible]
29...	1708	.24	68	11...	0028	.02	62	25...	1707	.06	100
29...	1718	.30	55	11...	0038	.04	65	25...	1717	.06	105
29...	1728	.18	55	11...	0048	.06	65	25...	1727	.06	100
29...	1738	.11	35	11...	0058	.06	55	25...	1737	.06	105
29...	1748	.10	32	11...	0108	.06	55	25...	1747	.06	190
29...	1758	.08	32	11...	0118	.08	50	25...	1757	.07	105
29...	1808	.07	34	11...	0128	.14	45	25...	1807	.06	100
29...	1818	.04	35	11...	0138	.14	35	SEP			
29...	1828	.03	35	11...	0148	.14	35	03...	1300	1.8	--
30...	0256	.03	65	11...	0158	.14	35	03...	1332	1.6	34
30...	0306	.08	85	11...	0208	.09	30	03...	1342	1.6	27
30...	0316	.09	52	11...	0218	.10	30	03...	1352	.38	26
30...	0326	.08	46	11...	0228	.10	35	03...	1402	.28	23
30...	0336	.06	44	11...	0238	.09	33	03...	1412	.18	24
30...	0346	.04	42	11...	0248	.08	33	03...	1422	.14	26
30...	0356	.02	42	11...	0258	.07	36	03...	1432	.14	28
30...	0406	.02	42	11...	0308	.07	36	03...	1442	.14	29
30...	0456	.02	44	11...	0318	.07	36	03...	1452	.06	31
30...	0506	.08	44	11...	0328	.07	35	03...	1502	.04	31
30...	0516	.10	35	11...	0338	.07	35	03...	1512	.04	35
30...	0526	.07	34	11...	0348	.07	39	03...	1520	.02	30
30...	0536	.05	35	11...	0358	.07	35	05...	0038	.03	145
30...	0546	.04	35	11...	0408	.07	40	05...	0048	.04	115
30...	0556	.03	35	11...	0418	.07	42	05...	0058	.04	85
30...	0606	.02	34	11...	0428	.07	40	05...	0108	.05	65
30...	0620	.02	35	11...	0438	.07	40	05...	0118	.05	60
30...	0630	.08	37	11...	0448	.06	46	05...	0128	.05	60
30...	0640	.14	30	11...	0458	.06	45	05...	0138	.05	55
30...	0650	.17	25	11...	0508	.06	45	05...	1842	.02	110
30...	0700	.12	25	11...	0518	.06	45	05...	1852	.09	125
30...	0710	.09	25	11...	0528	.06	45	05...	1902	.17	41
30...	0720	.05	25	11...	0538	.06	45	05...	1912	.20	37
30...	0730	.03	25	11...	0548	.06	45	05...	1922	.18	29
30...	1034	.02	58	11...	0558	.06	45	05...	1932	.20	24
30...	1044	.04	42	11...	0608	.06	47	05...	1942	.26	23
30...	1054	.05	41	11...	0618	.06	52	05...	1952	.38	21
30...	1104	.04	42	11...	0628	.06	80	05...	2002	.33	18
30...	1114	.02	42	11...	0638	.09	50	05...	2012	.33	19
30...	1124	.02	44	11...	0648	.10	40	05...	2022	.14	19
30...	1134	.05	40	15...	0700	.04	105	05...	2032	.18	21
30...	1144	.08	36	15...	0710	.04	90	05...	2042	.26	18
30...	1154	.09	35	15...	0720	.04	80	05...	2052	.20	19
30...	1204	.09	34	15...	0730	.04	80	05...	2102	.17	20
30...	1214	.07	34	15...	0740	.04	80	05...	2112	.17	20
30...	1224	.05	38	15...	0750	.04	78	05...	2122	.17	20
AUG				15...	0800	.04	78	05...	2132	.15	20
10...	1858	.04	420	15...	0810	.04	78	05...	2142	.15	21
10...	1908	.09	410	15...	0820	.07	75	14...	1328	.07	550
10...	1918	.10	240	15...	0830	.07	50	14...	1338	.17	71
10...	1928	.07	210	15...	0840	.07	45	14...	1348	.20	41
10...	1938	.07	180	15...	0850	.07	45	14...	1358	.24	35
10...	1948	.07	150	15...	0900	.07	41	14...	1408	.20	30
10...	1958	.07	133	15...	0910	.05	36	14...	1418	.20	27
10...	2008	.07	120	15...	0920	.05	36	14...	1428	.17	25
10...	2018	.04	118	15...	0930	.04	35	14...	1438	.17	25
10...	2028	.04	110	15...	0940	.04	37	14...	1448	.14	25
10...	2038	.05	105	15...	0950	.04	36	14...	1458	.12	25
10...	2048	.07	95	15...	1000	.02	37	14...	1508	.11	31

E ESTIMATED

SOUTH-CENTRAL ALASKA--Continued

15274820 - SB SF CHESTER C TR NR BAXTER RD AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)
SEP			
14...	1518	.11	30
14...	1553	.10	33
14...	1608	.10	30
14...	1804	.11	40
14...	1819	.12	30
14...	1834	.15	30
14...	1849	.15	25
14...	1904	.20	26
14...	1919	.17	30
14...	1934	.17	26
14...	1949	.28	26
14...	2004	.20	27
14...	2019	.20	31
14...	2034	.18	35
14...	2049	.17	35
14...	2104	.11	37
14...	2119	.07	44
14...	2224	.09	60
14...	2239	.18	35
14...	2254	.20	30
14...	2309	.22	30
14...	2324	.24	30
14...	2339	.18	34
14...	2354	.15	37
15...	0009	.12	40
15...	0024	.10	45
15...	0400	.10	140
15...	0415	.38	25
15...	0430	.26	27
15...	0445	.41	25
15...	0500	.18	27
15...	0515	.17	36
16...	0210	.10	750
16...	0225	.17	60
16...	0240	.17	45
16...	0255	.24	35
16...	0310	.33	25
16...	0325	.36	25
16...	0340	.36	25
16...	0355	.36	25
16...	0410	E.30	33
16...	0425	E.28	35
16...	0440	E.27	36
16...	0455	E.25	41
16...	0510	E.22	44
SEP			
16...	0525	E.20	50
16...	0540	E.18	52
16...	0555	E.16	55
16...	0610	E.14	60
16...	0625	E.12	60
16...	0640	E.10	62
16...	0655	E.08	65
16...	0710	E.06	70
16...	0725	E.04	72
16...	0740	E.02	75
16...	0755	E.02	80
18...	1920	.08	850
18...	1935	.11	170
18...	1950	.22	47
18...	2005	.28	35
18...	2020	.30	25
18...	2035	.30	25
18...	2050	.30	25
18...	2105	.30	25
18...	2120	.30	25
18...	2135	.30	25
18...	2150	.30	25
18...	2205	.30	25
18...	2220	.14	30
18...	2235	.10	30
19...	1326	.07	210
19...	1341	.08	75
19...	1356	.08	50
19...	1411	.08	50
19...	1426	.08	55
19...	1441	.07	50
19...	1456	.09	37
19...	1511	.09	37
19...	1526	.09	35
19...	1541	.10	34
19...	1556	.10	35
19...	1611	.10	40
19...	1623	.10	42
19...	1641	.14	31
19...	1644	.17	--
19...	1656	.36	25
19...	1711	.36	25
19...	1726	.33	25
19...	1741	.17	30
19...	1756	.09	35

E ESTIMATED

SOUTH-CENTRAL ALASKA--Continued

15274820 - SB SF CHESTER C TR NR BAXTER RD AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH LAB (UNITS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (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)
JUL									
29...	0502	.02	105	--	K9500	--	--	--	--
29...	0508	.02	95	--	K9200	--	--	--	--
29...	0518	.05	95	--	K7900	--	--	--	--
29...	0528	.07	70	--	5800	--	--	--	--
29...	0538	.07	52	6.8	--	20	7.3	.5	5.3
29...	0548	.05	50	--	K7700	--	--	--	--
29...	0558	.04	50	7.1	--	15	5.5	.3	4.8
29...	0618	.03	46	7.0	--	16	5.8	.4	4.1
29...	0628	.03	45	--	K6600	--	--	--	--
29...	0638	.03	45	6.9	--	14	5.1	.3	3.9
29...	0758	.09	36	7.0	--	13	4.5	.4	3.3
29...	0838	.02	35	7.0	--	11	4.2	.2	3.3
29...	1758	.08	32	7.0	--	10	3.9	.1	2.6
30...	0536	.05	35	7.4	11	4.0	.3	3.2	
30...	0546	.04	35	--	--	--	--	--	
30...	0650	.17	25	7.1	8	3.0	.1	2.1	
30...	0730	.03	25	7.1	8	3.0	.1	1.9	
SEP									
05...	0038	.03	145	7.9	--	62	21	2.4	7.3
05...	0048	.04	115	7.8	--	42	14	1.8	5.8
14...	1328	.07	550	7.2	5300	268	86	13	15
14...	1338	.17	71	--	4900	--	--	--	--
14...	1358	.24	35	--	620	--	--	--	--
14...	1418	.20	27	--	730	--	--	--	--
14...	1448	.14	25	--	470	--	--	--	--
15...	0400	.10	140	7.5	440	56	19	2.1	4.2
15...	0415	.38	25	--	K210	--	--	--	--
15...	0430	.26	27	--	K100	--	--	--	--
15...	0445	.41	25	--	K180	--	--	--	--
15...	0515	.17	36	--	490	--	--	--	--
16...	0210	.10	750	7.6	--	374	120	18	19
18...	1920	.08	850	--	K38	--	--	--	--
18...	1935	.11	170	--	K85	--	--	--	--
18...	1950	.22	47	--	1000	--	--	--	--
18...	2005	.28	35	--	560	--	--	--	--
18...	2035	.30	25	--	310	--	--	--	--
18...	2105	.30	25	--	280	--	--	--	--
18...	2135	.30	25	--	K190	--	--	--	--
18...	2205	.30	25	--	K180	--	--	--	--
18...	2220	.14	30	--	230	--	--	--	--
18...	2235	.10	30	--	K44	--	--	--	--
19...	1326	.07	210	7.3	--	93	31	4.0	5.3

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

15274820 - SB SF CHESTER C TR NR BAXTER RD AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)
JUL								
29...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
29...	1.5	26	8.0	2.7	.1	2.5	54	44
29...	--	--	--	--	--	--	--	--
29...	1.4	21	6.0	1.9	.1	2.2	51	35
29...	1.4	24	5.0	1.6	.1	1.9	37	35
29...	--	--	--	--	--	--	--	--
29...	1.1	22	<5.0	1.4	<.1	1.9	30	--
29...	1.4	27	<5.0	1.3	<.1	1.7	29	--
29...	1.2	20	<5.0	1.2	<.1	1.6	27	--
30...	1.0	21	<5.0	1.6	<.1	2.0	30	--
30...	.7	17	<5.0	.8	<.1	1.3	17	--
30...	.8	14	<5.0	.7	<.1	1.2	18	--
SEP								
05...	1.7	39	24	5.8	.1	4.4	148	90
05...	1.6	30	16	4.6	<.1	3.3	75	65
14...	3.0	126	150	15	.2	13	402	371
14...	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--
15...	1.8	41	24	3.9	<.1	3.8	126	83
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
16...	3.1	118	260	21	<.1	15	554	527
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
19...	1.4	47	48	5.2	<.1	5.5	134	129

DATE	TIME	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
JUL								
30...	0346	.15	.14	.290	.320	.91	.98	1.20
30...	0456	.11	.11	.270	.270	.93	.83	1.20
30...	0526	<.10	<.10	.240	.280	1.1	1.2	1.40
30...	0556	<.10	<.10	.240	.230	.86	1.4	1.10
30...	0630	<.10	<.10	.250	.260	1.3	.84	1.60
30...	0700	<.10	<.10	.200	.220	1.0	1.0	1.20
30...	0720	<.10	<.10	.210	.200	.99	2.0	1.20
AUG								
10...	2158	.12	.13	.270	.260	1.4	.94	1.70
10...	2228	.13	.13	.270	.290	.93	1.1	1.20
10...	2258	.22	.14	.290	.280	1.3	1.1	1.60
10...	2328	.13	.13	.250	.280	1.3	1.1	1.60
10...	2358	.14	.14	.300	.310	1.2	1.0	1.50
15...	0710	.27	.28	.130	.140	1.4	1.5	1.60
15...	0750	.25	.25	.110	.200	1.6	1.3	1.80
15...	0830	.13	.13	.170	.200	1.2	1.2	1.40
15...	0910	<.10	<.10	.190	.210	1.0	.89	1.20
15...	0950	<.10	<.10	.180	.190	.82	.91	1.00

15274820 - SB SF CHESTER C TR NR BAXTER RD AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUL							
30...	.00	1.3	1.3	1.4	.400	.170	--
30...	.10	1.1	1.3	1.2	.260	.170	--
30...	.00	1.5	--	--	.280	.180	--
30...	.00	1.7	--	--	.240	.160	--
30...	.50	1.1	--	--	.220	.160	--
30...	.00	1.3	--	--	.320	.120	--
30...	.00	2.2	--	--	.230	.230	--
AUG							
10...	.50	1.2	1.8	1.3	.450	.150	16
10...	.00	1.4	1.3	1.5	.330	.160	12
10...	.20	1.4	1.8	1.5	.260	.160	9.4
10...	.20	1.4	1.7	1.5	.270	.160	9.9
10...	.10	1.4	1.6	1.5	.260	.170	11
15...	.00	1.7	1.8	2.0	.410	.200	25
15...	.50	1.3	2.0	1.6	.360	.200	21
15...	.00	1.4	1.5	1.5	.260	.170	15
15...	.10	1.1	--	--	.450	.160	10
15...	.00	1.1	--	--	.230	.160	9.9

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
JUL										
30...	1144	1600	1500	70	<1	<1	--	1	10	<10
30...	1204	1400	1300	70	1	<1	--	<1	5	<10
30...	1224	1300	1300	40	1	<1	--	<1	9	<10
AUG										
10...	1958	4600	4500	70	1	<1	--	<1	17	<10
10...	2018	3900	3800	80	1	1	0	1	22	<10
10...	2038	2600	2500	110	1	1	0	1	20	<10
10...	2058	2200	2100	130	1	1	--	<1	16	<10
10...	2118	2100	2000	90	1	<1	--	<1	17	<10
10...	2138	2600	2500	110	1	<1	--	<1	17	<10

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
JUL										
30...	1	40	30	10	2500	2300	200	65	--	<1
30...	<1	38	27	11	2200	2100	70	56	--	<1
30...	1	43	34	9	2000	2000	50	52	51	1
AUG										
10...	1	37	23	14	6900	6800	80	90	84	6
10...	1	31	15	16	5800	5700	80	90	85	5
10...	<1	23	6	17	3900	3800	130	76	66	10
10...	5	23	9	14	3400	3300	120	77	--	<1
10...	<1	22	10	12	3100	3000	110	68	--	<1
10...	<1	20	11	9	4000	3900	110	87	85	2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

15274820 - SB SF CHESTER C TR NR BAXTER RD AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
JUL									
30...	70	60	10	4	--	<1	60	30	30
30...	70	--	<10	4	--	<1	60	40	20
30...	50	--	<10	4	--	<1	50	30	20
AUG									
10...	210	180	30	11	--	<1	140	100	40
10...	180	140	40	12	11	1	120	80	40
10...	130	100	30	4	2	2	80	50	30
10...	100	80	20	4	3	1	80	40	40
10...	90	60	30	1	0	1	60	40	20
10...	110	80	30	2	--	<1	90	70	20

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
SOUTH-CENTRAL ALASKA--Continued
15274820 - SB SF CHESTER C TR NR BAXTER RD AT ANCHORAGE AK--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
JUL				
29...	0502	.02	66	.00
29...	0508	.02	70	.00
29...	0518	.05	38	.00
29...	0528	.07	50	.00
29...	0548	.05	59	.00
29...	0608	.04	45	.00
29...	0628	.03	30	.00
29...	0648	.03	23	.00
29...	0748	.08	30	.00
29...	0828	.04	42	.00
29...	1702	.04	28	.00
29...	1708	.24	182	.12
29...	1718	.30	500	.41
29...	1728	.18	231	.11
29...	1738	.11	138	.04
29...	1748	.10	91	.02
29...	1808	.07	71	.01
29...	1828	.03	48	.00
30...	0256	.03	46	.00
30...	0306	.08	68	.01
30...	0316	.09	106	.03
30...	0326	.08	79	.02
30...	0336	.06	63	.01
30...	0406	.02	44	.00
30...	0506	.08	29	.00
30...	0546	.04	26	.00
30...	0620	.02	20	.00
30...	0640	.14	41	.02
30...	0710	.09	59	.01
30...	1034	.02	18	.00
30...	1054	.05	34	.00
30...	1154	.09	47	.01
30...	1214	.07	46	.00
AUG				
10...	1858	.04	38	.00
10...	1908	.09	121	.03
10...	1918	.10	215	.06
10...	1928	.07	219	.04
10...	1938	.07	167	.03
10...	1948	.07	134	.03
10...	2008	.07	142	.03
10...	2028	.04	86	.00
10...	2048	.07	65	.01
10...	2108	.07	62	.01
10...	2128	.08	51	.01
10...	2148	.14	131	.05
10...	2218	.10	84	.02
10...	2248	.04	53	.00
10...	2318	.04	41	.00
10...	2348	.04	36	.00
11...	0048	.06	21	.00
11...	0118	.08	18	.00
11...	0128	.14	40	.02
11...	0138	.14	55	.02
11...	0148	.14	50	.02
11...	0208	.09	34	.00
11...	0238	.09	22	.00
11...	0308	.07	8	.00
11...	0338	.07	13	.00
11...	0408	.07	12	.00
11...	0438	.07	14	.00
11...	0508	.06	10	.00
11...	0538	.06	1	.00
11...	0608	.06	3	.00
11...	0628	.06	20	.00
11...	0648	.10	20	.00
15...	0700	.04	56	.00
15...	0720	.04	56	.00
15...	0740	.04	53	.00
15...	0800	.04	39	.00
15...	0820	.07	31	.00
15...	0840	.07	58	.01
15...	0900	.07	41	.00
15...	0920	.05	34	.00
15...	0940	.04	37	.00
15...	1000	.02	30	.00
15...	1236	.03	22	.00
15...	1246	.05	36	.00
15...	1256	.17	99	.05
AUG				
15...	1306	E.20	220	.12
15...	1316	E.25	205	.14
15...	1326	E.30	128	.10
15...	1336	E.15	92	.04
15...	1346	E.10	63	.02
15...	1356	E.10	65	.02
15...	1406	E.10	52	.01
15...	1416	E.08	48	.01
15...	1426	E.07	50	.01
15...	1436	E.05	45	.01
25...	1554	.07	67	.01
25...	1557	.09	514	.12
25...	1607	.14	414	.16
25...	1617	.07	280	.05
25...	1627	.07	201	.04
25...	1637	.07	190	.04
25...	1647	.07	181	.03
25...	1657	.06	161	.03
SEP				
03...	1332	1.6	78	.34
03...	1342	1.6	52	.22
03...	1352	.38	49	.05
03...	1402	.28	28	.02
03...	1412	.18	18	.00
03...	1432	.14	30	.01
03...	1452	.06	23	.00
03...	1512	.04	8	.00
05...	1842	.02	22	.00
05...	1852	.09	54	.01
05...	1902	.17	89	.04
05...	1912	.20	84	.05
05...	1922	.18	53	.03
05...	1932	.20	45	.02
05...	1942	.26	63	.04
05...	1952	.38	76	.08
05...	2002	.33	53	.05
05...	2022	.14	26	.00
05...	2042	.26	30	.02
05...	2102	.17	18	.00
05...	2122	.17	18	.00
14...	1338	.17	103	.05
14...	1348	.20	102	.06
14...	1358	.24	76	.05
14...	1418	.20	49	.03
14...	1448	.14	25	.00
14...	1518	.11	30	.00
14...	1553	.10	34	.00
14...	1608	.10	34	.00
14...	1804	.11	34	.01
14...	1834	.15	40	.02
14...	1904	.20	31	.02
14...	1934	.17	30	.01
14...	1949	.28	42	.03
14...	2004	.20	30	.02
14...	2034	.18	18	.00
14...	2104	.11	15	.00
14...	2224	.09	14	.00
14...	2239	.18	23	.01
14...	2309	.22	28	.02
14...	2339	.18	12	.00
15...	0009	.12	9	.00
15...	0024	.10	18	.00
15...	0415	.38	82	.08
15...	0430	.26	37	.03
15...	0445	.41	78	.09
15...	0515	.17	19	.00
16...	0225	.17	96	.04
16...	0240	.17	48	.02
16...	0255	.24	51	.03
16...	0340	.36	13	.01
16...	0425	E.28	7	.01
16...	0510	E.22	4	.00
16...	0555	E.16	21	.01
16...	0640	E.10	36	.01
16...	0725	E.04	13	.00
18...	1920	.08	81	.02
18...	1935	.11	70	.02
18...	1950	.22	86	.05
18...	2020	.30	63	.05

E ESTIMATED
NOTE: Suspended-sediment samples were collected automatically with a single-stage sediment sampler.

SOUTH-CENTRAL ALASKA--Continued

15274820 - SB SF CHESTER C TR NR BAXTER RD AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
SEP				
18...	2035	.30	56	.05
18...	2105	.30	15	.01
18...	2150	.30	53	.04
18...	2205	.30	25	.02
18...	2220	.14	15	.00
18...	2235	.10	9	.00
19...	1341	.08	42	.00
19...	1426	.08	28	.00
19...	1511	.09	28	.00
19...	1556	.10	30	.00
19...	1641	.14	28	.01
19...	1656	.36	101	.10
19...	1711	.36	68	.07
19...	1726	.33	23	.02
19...	1741	.17	17	.00
19...	1756	.09	16	.00

NOTE: Suspended-sediment samples were collected automatically with a single-stage sediment sampler.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

15275035 - NF CHESTER C TR NR 20TH AVE AT ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)
JUL				AUG			
23...	0618	.16	60	15...	1316	.06	<25
23...	0623	.18	50	15...	1321	.06	35
23...	0627	.22	50	15...	1326	.06	35
23...	0719	.11	60	15...	1331	.04	51
23...	0729	.16	65	SEP			
23...	0739	.19	70	13...	0204	.04	--
23...	0749	.20	80	13...	0209	.07	--
23...	0759	.18	110	13...	0214	.07	--
23...	0809	.15	130	13...	0219	.07	--
23...	0819	.10	150	19...	1544	.04	62
23...	1623	.22	--	19...	1658	.17	45
AUG				19...	1703	.18	42
10...	1858	.02	95	19...	1708	.20	50
10...	1903	.02	90	19...	1713	.24	47
10...	1908	.02	85	19...	1718	.28	47
10...	1913	.02	85	19...	1723	.32	50
10...	1918	.01	85	19...	1728	.35	45
10...	1923	.01	85	19...	1733	.38	45
10...	1928	.01	90	19...	1738	.40	40
10...	1933	.01	91	19...	1743	.41	50
10...	1938	.01	95	19...	1748	.41	50
10...	1943	.01	100	19...	1753	.41	45
10...	1948	.01	102	19...	1758	.40	45
10...	1953	.01	102	19...	1803	.38	50
10...	1958	.01	95	19...	1808	.35	55
10...	2016	.01	85	19...	1813	.32	62
10...	2021	.02	85	19...	1818	.30	75
10...	2026	.02	95	19...	1823	.26	100
10...	2031	.02	85	19...	1828	.23	115
15...	0900	.02	45	19...	1833	.20	130
15...	0905	.02	44	19...	1838	.16	145
15...	0910	.02	45	19...	1843	.13	165
15...	0930	.01	49	19...	1848	.10	200
15...	0940	.01	52	19...	1853	.06	240
15...	1015	.01	50	19...	1858	.06	280
15...	1025	.01	52	19...	1903	.04	300
15...	1035	.01	55				

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH LAB (UNITS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (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)
JUL									
23...	0719	.11	60	7.2	--	22	7.6	.8	1.8
23...	0729	.16	65	7.3	--	25	8.4	1.1	2.8
23...	0739	.19	70	--	>6000	--	--	--	--
23...	0749	.20	80	7.1	--	32	11	1.1	2.4
23...	0759	.18	110	7.0	--	39	13	1.7	3.1
23...	0809	.15	130	7.2	--	51	17	2.1	4.0
23...	0819	.10	150	--	>6000	--	--	--	--
AUG									
10...	1948	.01	102	6.8	--	44	16	1.1	3.9
10...	2021	.02	85	6.9	--	25	9.3	.6	2.1
10...	2026	.02	95	7.1	--	27	9.9	.6	2.3
15...	0900	.02	45	7.8	--	20	7.5	.5	1.6
15...	0910	.02	45	7.0	--	19	7.1	.3	1.6
15...	0940	.01	52	7.3	--	23	8.7	.4	1.6
15...	1035	.01	55	7.1	--	32	12	.5	1.8
15...	1326	.06	35	7.2	--	15	5.5	.4	.8

SOUTH-CENTRAL ALASKA--Continued

15275035 - NF CHESTER C TR NR 20TH AVE AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
JUL								
23...	1.1	18	11	1.3	.1	2.0	40	37
23...	1.0	20	12	1.7	.1	1.5	45	41
23...	--	--	--	--	--	--	--	--
23...	1.2	20	17	1.9	<.1	1.5	52	48
23...	1.4	27	24	3.2	.1	1.9	71	65
23...	1.7	31	29	4.1	.1	2.2	81	79
23...	--	--	--	--	--	--	--	--
AUG								
10...	1.3	33	10	4.0	<.1	3.4	115	60
10...	.8	23	10	1.6	<.1	2.0	50	40
10...	.9	--	10	1.8	<.1	2.2	72	--
15...	.7	12	10	1.1	<.1	1.9	30	31
15...	.7	18	10	1.1	<.1	1.8	54	33
15...	.7	12	10	1.1	<.1	2.3	64	32
15...	.8	18	10	1.3	<.1	2.5	46	40
15...	.5	12	7.0	.7	<.1	.8	46	23

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
SEP				
13...	0204	.04	--	270
13...	0209	.07	--	330
13...	0214	.07	--	610
13...	0219	.07	--	K11000

DATE	TIME	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
AUG								
10...	1903	.24	.25	.320	.370	2.7	1.6	3.10
10...	1913	.18	.19	.250	.310	2.2	1.4	2.50
10...	1923	--	.20	--	.380	--	1.7	--
10...	1933	.19	.20	.380	.440	2.1	1.9	2.50
10...	1943	.20	.20	.400	.420	2.2	2.3	2.60
10...	1953	.21	.22	.420	.440	1.8	1.8	2.30
10...	2016	.35	.16	.300	.310	1.3	1.3	1.60
15...	0905	.17	< 10	.200	.250	1.2	1.6	1.40
15...	0930	<.10	<.10	.170	.210	1.2	.99	1.40
15...	1015	<.10	<.10	.200	.220	1.2	.78	1.40
15...	1025	<.10	<.10	.180	.190	1.1	1.0	1.30
15...	1321	<.10	<.10	.160	.160	1.0	.54	1.20

DATE	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
AUG							
10...	1.1	2.0	3.3	2.3	.270	.130	40
10...	.70	1.8	2.6	2.0	.070	.120	36
10...	--	2.1	--	2.3	--	.330	--
10...	.10	2.4	2.6	2.6	.210	.160	34
10...	.00	2.8	2.8	3.0	.200	.150	36
10...	.00	2.3	2.5	2.5	.170	.160	36
10...	.00	1.7	1.9	1.9	.200	.120	26
15...	.00	1.9	1.5	--	.160	.120	16
15...	.20	1.2	--	--	.160	.130	15
15...	.40	1.0	--	--	.160	.100	14
15...	.10	1.2	--	--	.140	.100	--
15...	.50	.70	--	--	.270	.070	--

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

15275035 - NF CHESTER C TR NR 20TH AVE AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, SUSPENDED RECOV. (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)
JUL										
23...	1623	7000	6900	120	2	18	17	1	44	34
AUG										
10...	1858	10000	9800	160	1	16	15	1	33	--
10...	1908	3600	3500	100	1	6	5	1	13	3
10...	1918	2400	2300	100	1	3	2	1	19	9
10...	1928	1700	1600	70	1	4	3	1	15	5
10...	1938	1300	1200	80	1	3	2	1	6	--
10...	1958	1300	1200	110	1	1	--	<1	4	--
10...	2031	1800	1700	80	1	<1	--	<1	7	--
15...	1316	7500	7400	60	1	<1	--	<1	22	--

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
JUL										
23...	10	4	75	60	15	9200	9100	140	110	<1
AUG										
10...	<10	4	38	20	18	14000	14000	140	110	<1
10...	10	1	21	3	18	5000	4900	80	55	<1
10...	10	6	17	3	14	3400	3300	100	29	<1
10...	10	<1	16	4	12	2400	2300	70	32	<1
10...	<10	<1	15	3	12	1800	1700	80	20	<1
10...	<10	<1	16	1	15	1800	1700	100	25	<1
10...	<10	1	12	5	7	2500	2500	50	31	<1
15...	<10	2	21	18	3	1000	970	30	100	<1

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
JUL									
23...	280	220	60	21	19	2	200	170	30
AUG									
10...	430	350	80	17	--	<1	210	190	20
10...	190	120	70	6	--	<1	110	80	30
10...	150	80	70	3	2	1	90	50	40
10...	140	60	80	3	--	<1	90	50	40
10...	140	60	80	<1	--	1	90	40	50
10...	130	50	80	3	1	2	80	30	50
10...	110	60	50	8	6	2	70	50	20
15...	270	260	10	12	--	<1	180	170	10

SOUTH-CENTRAL ALASKA--Continued

15275035 - NF CHESTER C TR NR 20TH AVE AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
JUL				
23...	0618	.16	402	.17
23...	0623	.18	361	.18
23...	0627	.22	323	.19
23...	0739	.19	46	.02
23...	0819	.10	27	.00
AUG				
10...	1858	.02	330	.02
10...	1903	.02	141	.00
10...	1908	.02	111	.00
10...	1913	.02	85	.00
10...	1918	.01	64	.00
10...	1923	.01	52	.00
10...	1928	.01	43	.00
10...	1933	.01	38	.00
10...	1938	.01	34	.00
10...	1943	.01	31	.00
10...	1948	.01	31	.00
10...	1958	.01	32	.00
10...	2016	.01	51	.00
10...	2021	.02	51	.00
10...	2026	.02	51	.00
10...	2031	.02	49	.00
15...	0900	.02	51	.00
15...	0905	.02	46	.00
15...	0910	.02	46	.00
15...	0930	.01	29	.00
15...	0940	.01	20	.00
15...	1015	.01	22	.00
15...	1025	.01	14	.00
15...	1316	.06	136	.02
SEP				
13...	0204	.04	232	.03
13...	0209	.07	177	.03
13...	0214	.07	136	.03
13...	0219	.07	50	.00

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

15275055 - CHESTER C TR NR 36TH AVE AT ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)
JUL				JUL				SEP			
08...	1209	.11	--	23...	1609	1.2	45	03...	1446	.16	85
08...	1220	.30	--	23...	1619	1.2	50	03...	1456	.12	85
08...	1230	.62	--	23...	1629	1.4	38	03...	1506	.27	85
08...	1240	.62	--	23...	1639	1.4	35	03...	1519	--	85
08...	1300	.62	--	23...	1649	1.4	35	03...	1529	.10	85
08...	1340	.62	--	23...	1659	1.4	--	03...	1539	.14	85
08...	1410	.62	--	23...	1709	1.4	38	03...	1549	.09	85
08...	1430	.62	--	23...	1719	1.4	40	03...	1611	.10	95
11...	0651	.80	--	23...	1729	1.1	45	03...	1617	.10	85
11...	0656	1.1	--	23...	1739	.85	45	03...	1635	.09	85
11...	0706	1.3	--	23...	1749	.80	55	03...	1641	.12	85
11...	0756	1.3	--	23...	1759	.75	60	03...	1651	.10	85
11...	0846	1.3	--	23...	1809	.85	52	05...	0051	.10	310
15...	2324	.17	128	23...	1819	.96	45	05...	0101	.21	270
15...	2347	.96	76	23...	1829	.96	45	05...	0111	.21	270
15...	2357	1.0	58	23...	1839	.90	45	05...	0121	.17	270
16...	0007	1.0	52	23...	1849	.80	45	05...	0131	.21	135
16...	0017	1.0	50	23...	1859	.66	45	05...	0141	.16	105
16...	0027	1.0	51	23...	1909	.54	45	05...	0151	.17	90
16...	0037	1.0	52	23...	1919	.35	45	05...	0201	.10	90
16...	0047	.38	54	23...	1929	.30	50	05...	0211	.10	90
16...	0057	.38	52	29...	0515	.27	65	05...	0221	.10	85
16...	0107	.38	50	29...	0525	.41	50	05...	0227	.12	85
16...	0117	.47	46	29...	0535	.44	43	05...	0259	.08	85
16...	0127	.66	45	29...	0545	.44	40	05...	0319	.14	85
16...	0137	.70	41	29...	0555	.38	38	05...	1841	.09	115
16...	0147	.70	40	29...	0605	.32	38	05...	1851	.23	220
16...	0157	.70	38	29...	0615	.27	38	05...	1901	.75	125
16...	0207	.70	40	29...	0747	.27	45	05...	1911	1.4	75
16...	0217	.70	41	29...	0757	.47	41	05...	1921	1.4	75
16...	0227	.70	42	29...	0807	.51	35	05...	1931	1.4	75
16...	0237	.66	40	29...	0817	.54	33	05...	1941	1.4	28
16...	0247	.70	38	29...	0827	.44	33	05...	1951	1.4	28
16...	0257	1.1	36	29...	0837	.30	33	05...	2001	1.4	22
16...	0307	1.2	31	29...	1659	.41	70	05...	2011	1.4	20
16...	0317	1.2	30	29...	1704	.85	85	05...	2021	1.4	21
16...	0327	1.2	29	29...	1714	1.1	41	05...	2031	1.4	25
16...	0337	1.2	29	29...	1724	1.2	35	05...	2041	1.4	27
16...	0347	1.2	30	29...	1734	1.2	36	05...	2051	1.4	24
16...	0357	1.2	34	29...	1744	1.2	35	05...	2101	1.4	23
16...	0407	1.2	35	29...	1754	1.2	37	05...	2111	1.4	24
16...	0417	1.2	34	29...	1804	.96	39	05...	2121	1.4	25
16...	0427	1.2	32	29...	1814	.58	40	05...	2131	1.4	26
16...	0437	.75	32	29...	1824	.38	37	05...	2141	1.4	27
16...	0447	.80	32	29...	1834	.27	38	05...	2151	1.4	27
16...	1100	.02	84	30...	0224	.23	75	05...	2201	1.4	27
16...	1725	.27	82	30...	0235	.58	55	05...	2211	1.4	27
16...	1735	.85	70	30...	0245	.62	39	05...	2221	1.4	28
16...	1745	1.1	50	30...	0255	.51	35	05...	2231	1.4	27
16...	1755	1.1	48	30...	0305	.38	35	05...	2241	1.4	28
16...	1805	1.1	45	30...	0315	.32	37	05...	2251	1.4	26
16...	1815	.66	50	30...	0325	.27	37	05...	2301	1.4	26
16...	1825	.32	52	30...	0601	.25	36	05...	2311	1.4	27
16...	1835	.32	55	30...	0611	.47	30	05...	2331	1.4	--
23...	0603	.27	160	30...	0621	.85	25	19...	1619	1.5	-
23...	0613	.66	90	30...	0631	1.1	25	26...	0848	.17	240
23...	0623	1.0	61	30...	0641	1.1	25	26...	0854	.27	290
23...	0633	1.1	42	30...	0651	1.1	25	26..	0909	.54	220
23...	0643	1.1	35	30...	0701	.85	25	26...	0924	.44	155
23...	0653	1.1	30	30...	0711	.62	29	26...	0939	.35	95
23...	0703	1.1	30	30...	0721	.47	30	26...	1320	.30	95
23...	0713	1.1	30	30...	0921	.27	50	26...	1335	1.1	90
23...	0723	1.1	29	30...	0931	.30	41	26...	1350	1.1	42
23...	0733	1.1	26	30...	0941	.25	39	26..	1358	2.9	32
23...	0743	1.1	27	30...	1155	.25	52	26...	1413	1.5	30
23...	0753	.70	30	30...	1205	.27	50	26...	1428	1.4	30
23...	0803	.44	31	30...	1215	.30	45	26...	1443	1.4	32
23...	0813	.27	35	30...	1225	.30	45	26...	1458	--	30
23...	1519	.27	72	SEP				26...	1513	.75	32
23...	1529	.70	55	03...	1421	.35	100	26...	1528	.58	35
23...	1539	1.1	50	03...	1423	.27	100	26...	1543	.38	37
23...	1549	1.2	45	03...	1426	.35	90	26...	1558	.30	41
23...	1559	1.2	45	03...	1436	.16	85	28...	1536	.96	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

15275055 - CHESTER C TR NR 36TH AVE AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	PH LAB (UNITS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JUL									
15...	2324	.17	128	6.4	--	566	--	--	--
15...	2347	.96	76	6.4	--	178	--	--	--
15...	2357	1.0	58	6.4	--	244	--	--	--
16...	0007	1.0	52	6.5	--	--	--	--	--
16...	0017	1.0	50	--	6.1	--	16	5.9	.4
16...	0047	.38	54	6.7	--	--	--	--	--
16...	0107	.38	50	6.8	--	--	--	--	--
16...	0117	.47	46	--	7.0	--	10	3.4	.4
16...	0127	.66	45	6.7	--	--	--	--	--
16...	0147	.70	40	6.7	--	--	--	--	--
16...	0217	.70	41	--	6.5	--	9	3.0	.4
16...	0247	.70	38	6.8	--	133	--	--	--
16...	0307	1.2	31	--	6.5	--	16	6.4	.2
16...	0327	1.2	29	6.7	--	230	--	--	--
16...	0357	1.2	34	--	6.6	--	8	2.8	.3
16...	1100	.02	84	6.8	6.7	--	--	--	--
23...	0603	.27	160	--	6.4	--	44	14	2.4
23...	0623	1.0	61	--	6.0	--	12	4.3	.5
23...	0643	1.1	35	--	6.1	--	7	2.5	.2
23...	0703	1.1	30	--	6.2	--	6	2.2	.1
23...	0723	1.1	29	--	6.4	--	5	1.9	.2
23...	0743	1.1	27	--	6.2	--	--	--	--
23...	0753	.70	30	--	8.3	--	--	--	--
23...	0803	.44	31	--	6.2	--	--	--	--
23...	0813	.27	35	--	6.2	--	--	--	--
30...	0651	1.1	25	--	6.9	--	7	2.5	.1

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JUL									
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	4.1	1.1	13	5.0	3.8	<.1	1.4	52	30
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	4.1	1.0	14	<5.0	3.2	<.1	1.6	32	--
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	3.4	1.0	13	<5.0	2.8	<.1	1.4	36	--
16...	--	--	--	--	--	--	--	--	--
16...	2.4	.8	12	<5.0	1.8	<.1	1.1	27	--
16...	--	--	--	--	--	--	--	--	--
16...	2.3	.9	12	<5.0	1.7	<.1	1.3	32	--
16...	--	--	--	--	--	--	--	65	--
23...	19	2.3	21	30	23	.1	3.7	163	93
23...	6.8	1.2	11	10	5.6	<.1	1.6	53	37
23...	3.8	.8	10	9.0	2.6	<.1	1.1	38	26
23...	3.4	.7	10	7.0	2.7	<.1	.9	32	23
23...	2.5	.6	9.0	6.0	2.6	<.1	1.0	26	20
23...	--	--	--	--	--	--	--	33	--
23...	--	--	--	--	--	--	--	29	--
23...	--	--	--	--	--	--	--	32	--
23...	--	--	--	--	--	--	--	29	--
30...	2.5	.7	15	§5.0	1.8	<.1	1.4	26	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

15275055 - CHESTER C TR NR 36TH AVE AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)
JUL								
16...	0007	.27	.30	.570	.600	1.5	.90	2.10
16...	0107	.19	.21	410	.460	1.4	.74	1.90
16...	0207	.15	.17	.240	.300	1.1	.80	1.40
16...	0257	.12	.14	.170	.230	1.5	1.1	1.70
16...	0347	.10	.11	.150	.190	1.0	.81	1.20
23...	0613	.33	.33	1.10	1.00	2.3	1.8	3.40
23...	0633	13	.15	.490	.470	1.6	1.2	2.10
23...	0653	.10	.10	.340	.350	1.1	.95	1.50
23...	0713	.10	.12	.300	.300	1.4	1.0	1.70
23...	0733	.10	.10	.300	.280	.90	1.0	1.20

DATE	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUL							
16...	.60	1.5	2.3	1.8	.230	.180	22
16...	.70	1.2	2.0	1.4	.210	.150	22
16...	.30	1.1	1.5	--	.130	.080	17
16...	.30	1.4	1.8	1.5	.220	.060	19
16...	.20	1.0	1.3	1.1	.100	.060	10
23...	.60	2.8	3.7	3.1	.510	.180	69
23...	.40	1.7	2.2	1.9	.500	.110	40
23...	.20	1.3	1.6	1.4	.380	.080	25
23...	.40	1.3	1.8	1.4	.310	.090	44
23...	.00	1.3	1.3	1.4	.220	.080	1.4

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)
JUL										
16...	0037	3500	--	--	--	3	--	--	12	--
16...	0137	3700	--	--	--	4	--	--	13	--
16...	0227	2900	--	--	--	2	--	--	12	--
16...	0317	4900	--	--	--	12	--	--	18	--
16...	0407	3700	--	--	--	3	--	--	14	--
16...	1725	23000	23000	180	1	1	0	1	94	--
16...	1735	25000	25000	140	1	<1	--	<1	110	--
16...	1745	20000	20000	140	1	1	--	<1	86	--
16...	1755	15000	15000	290	1	4	--	<1	64	--
16...	1805	13000	13000	140	1	2	--	<1	52	--
16...	1815	11000	11000	120	1	1	--	<1	52	--
16...	1825	9500	9300	180	1	<1	--	<1	54	44
16...	1835	8800	8700	150	1	<1	--	<1	37	--
23...	1519	18000	18000	200	1	2	1	1	96	--
23...	1529	16000	16000	210	1	1	0	1	72	--
23...	1539	15000	15000	130	1	<1	--	1	84	--
23...	1719	6900	6700	180	1	3	2	1	36	--
23...	1929	4500	4300	160	1	<1	--	1	72	--

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

15275055 - CHESTER C TR NR 36TH AVE AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)
JUL										
16...	--	1	20	--	--	1400	--	--	140	--
16...	--	2	34	--	--	1100	--	--	120	--
16...	--	1	21	--	--	1600	--	--	96	--
16...	--	2	23	--	--	2400	--	--	160	--
16...	--	1	18	--	--	1100	--	--	120	--
16...	<10	15	100	84	16	34000	34000	150	1000	980
16...	<10	16	100	89	11	40000	40000	160	1300	1300
16...	<10	10	90	79	11	31000	31000	150	880	870
16...	<10	9	70	60	10	23000	23000	390	650	650
16...	<10	6	70	59	11	19000	19000	160	440	430
16...	<10	6	90	77	13	16000	16000	110	530	520
16...	10	5	42	34	8	15000	15000	200	480	470
16...	<10	4	80	67	13	13000	13000	160	470	460
23...	<10	23	80	65	15	27000	27000	270	680	650
23...	<10	7	70	59	11	23000	23000	220	500	470
23...	<10	10	58	46	12	21000	21000	110	480	460
23...	<10	3	33	25	8	9900	9800	150	290	280
23...	<10	3	34	21	13	6100	5900	190	190	170

DATE	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
JUL										
16...	--	120	--	--	15	--	--	190	--	--
16...	--	190	--	--	11	--	--	290	--	--
16...	--	90	--	--	92	--	--	160	--	--
16...	--	120	--	--	15	--	--	160	--	--
16...	--	90	--	--	9	--	--	120	--	--
16...	19	810	700	110	54	49	5	680	590	90
16...	16	890	780	110	66	63	3	720	660	60
16...	13	700	630	70	47	41	6	660	570	90
16...	14	540	480	60	41	37	4	500	420	80
16...	11	410	370	40	26	22	4	350	280	70
16...	11	370	340	30	25	22	3	310	250	60
16...	13	330	300	30	20	17	3	340	280	60
16...	13	310	280	30	16	14	2	280	220	60
23...	32	720	510	210	64	60	4	590	440	150
23...	27	590	450	140	27	23	4	460	340	120
23...	20	540	410	130	33	30	3	430	320	110
23...	13	260	200	60	11	8	3	210	150	60
23...	17	190	130	60	12	11	1	170	100	70

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

15275055 - CHESTER C TR NR 36TH AVE AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
JUL				
08...	1209	.11	849	.25
08...	1220	.30	802	.65
08...	1230	.62	594	.99
08...	1240	.62	335	.56
08...	1300	.62	221	.37
08...	1340	.62	311	.52
08...	1410	.62	192	.32
08...	1430	.62	172	.29
11...	0651	.80	348	.75
11...	0656	1.1	530	1.6
11...	0706	1.3	351	1.2
11...	0756	1.3	30	.11
11...	0846	1.3	20	.07
15...	2324	.17	312	.14
15...	2347	.96	219	.57
15...	2357	1.0	133	.36
16...	0027	1.0	67	.18
16...	0057	.38	78	.08
16...	0127	.66	100	.18
16...	0157	.70	46	.09
16...	0247	.70	104	.20
16...	0327	1.2	92	.30
16...	0427	1.2	68	.22
29...	0515	.27	123	.09
29...	0525	.41	112	.12
29...	0535	.44	107	.13
29...	0545	.44	74	.09
29...	0555	.38	53	.05
29...	0605	.32	49	.04
29...	0615	.27	41	.03
29...	0747	.27	236	.17
29...	0757	.47	214	.27
29...	0807	.51	176	.24
29...	0817	.54	139	.20
29...	0827	.44	140	.17
29...	1659	.41	82	.09
29...	1704	.85	1560	3.6
29...	1714	1.1	772	2.3
29...	1734	1.2	330	1.1
29...	1754	1.2	283	.92
30...	0224	.23	398	.25
30...	0235	.58	247	.39
30...	0245	.62	165	.28
30...	0315	.32	87	.08
30...	0921	.27	303	.22
30...	0931	.30	207	.17
30...	0941	.25	183	.12
30...	1155	.25	404	.27
30...	1205	.27	370	.27
30...	1215	.30	332	.27
30...	1225	.30	290	.23
SEP				
03...	1421	.35	1235	1.2
03...	1423	.27	747	.54
03...	1426	.35	411	.39
03...	1436	.16	592	.26
03...	1456	.12	819	.27
03...	1519	--	559	--
03...	1539	.14	465	.18
03...	1611	.10	420	.11
03...	1635	.09	337	.08
03...	1651	.10	307	.08
05...	0051	.10	285	.08
05...	0101	.21	408	.23
05...	0111	.21	618	.35
05...	0121	.17	261	.12
05...	0131	.21	164	.09
05...	0151	.17	124	.06
05...	0221	.10	104	.03
05...	0227	.12	98	.03
05...	0319	.14	93	.04
05...	1841	.09	70	.02
05...	1851	.23	495	.31
05...	1901	.75	247	.50
05...	1911	1.4	5160	20
05...	1931	1.4	6530	25
05...	1951	1.4	1700	6.4
05...	2011	1.4	216	.82
05...	2031	1.4	199	.75
05...	2051	1.4	158	.60
05...	2111	1.4	99	.37
05...	2131	1.4	110	.42
05...	2151	1.4	87	.33
05...	2211	1.4	85	.32
05...	2231	1.4	103	.39
05...	2251	1.4	75	.28
05...	2311	1.4	76	.29
05...	2331	1.4	68	.26
19...	1619	1.5	272	1.1
26...	0848	.17	545	.25
26...	0854	.27	242	.18
26...	0909	.54	386	.56
26...	0924	.44	335	.40
26...	0939	.35	275	.26
26...	1320	.30	755	.61
26...	1335	1.1	982	2.9
26...	1350	1.1	816	2.4
26...	1358	2.9	521	4.1
26...	1413	1.5	362	1.5
26...	1458	--	205	--
26...	1528	.58	170	.27
26...	1558	.30	148	.12
28...	1536	.96	392	1.0

NOTE: Suspended-sediment samples were collected automatically with a single-stage sediment sampler.

SOUTH-CENTRAL ALASKA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	ALKA-LINITY FIELD (MG/L AS CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CAR-BONATE IT-FLD (MG/L AS CO3)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
15280998 - PALMER C NR PALMER AK (LAT 61 31 57 LONG 149 01 33)												
AUG , 1982												
03...	1015	42	260	7.8	4.5	767	12.3	94	--	116	.00	14
15285000 - WASILLA C NR PALMER AK (LAT 61 38 47 LONG 149 11 45)												
MAR , 1982												
10...	1600	5.8	144	7.6	1.0	742	14.4	104	--	97	.00	--
AUG												
06...	0915	41	105	7.8	7.5	759	12.5	105	--	62	.00	30
15285200 - WASILLA C NR WASILLA AK (LAT 61 34 09 LONG 149 18 50)												
MAR , 1982												
09...	0935	5.2	--	7.7	1.0	746	14.2	102	--	123	.00	--
AUG												
06...	1315	44	140	7.6	9.5	768	11.3	98	--	81	.00	34
15286000 - COTTONWOOD C NR WASILLA AK (LAT 61 34 30 LONG 149 24 35)												
MAR , 1982												
09...	1500	17	--	7.9	1.5	740	13.6	99	--	161	.00	--
AUG												
06...	1050	23	175	8.3	18.0	763	9.9	104	--	108	.00	K3
15286500 - LUCILE C NR WASILLA AK (LAT 61 33 44 LONG 149 46 31)												
MAR , 1982												
10...	1215	.76	126	7.0	.5	751	7.4	52	--	88	--	--
15286550 - L MEADOW C AT BIG LK JUNCTION NR WASILLA AK (LAT 61 34 38 LONG 149 43 33)												
MAR , 1982												
10...	1400	8.4	153	7.3	.5	750	13.8	97	--	106	--	--
15287000 - FISH C AT BIG LK OUTLET NR WASILLA AK (LAT 61 32 03 LONG 149 49 30)												
MAR , 1982												
10...	1000	25	100	7.4	1.0	752	13.4	95	59	--	--	--

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

15292100 - SUSITNA R NR TALKEETNA AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
JUN							
03...	1300	35800	769	74300	8	10	--
09...	0945	46600	548	68900	11	14	--
15...	1800	24200	181	11800	--	--	--
22...	1745	37000	438	43800	13	16	--
30...	1315	30200	438	35700	22	34	--
JUL							
08...	0955	20700	145	8100	--	--	--
14...	1220	30800	768	63900	30	42	50
21...	1305	24900	383	25700	29	35	--
28...	1500	30800	461	38300	21	27	32
AUG							
04...	1320	22700	341	20900	30	39	--
10...	1305	20000	289	15600	30	43	--
18...	1105	17700	285	13600	43	51	54
25...	1115	16800	219	9930	32	44	--
31...	1125	19300	251	13100	23	29	--
SEP							
19...	1525	28700	442	34300	33	41	47

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
JUN							
03...	16	--	31	48	78	100	--
09...	24	--	46	59	82	100	--
15...	--	--	40	47	75	100	--
22...	27	--	46	59	82	100	--
30...	52	--	73	79	90	100	--
JUL							
08...	--	--	76	80	92	100	--
14...	59	71	80	87	94	100	--
21...	56	--	72	78	86	97	100
28...	44	58	68	75	88	99	100
AUG							
04...	63	--	77	82	90	100	--
10...	71	--	87	90	96	100	--
18...	77	88	92	93	97	100	--
25...	68	--	89	92	97	100	--
31...	48	--	72	80	94	100	--
SEP							
19...	53	60	67	74	88	99	100

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 128 MM
JUL					
28...	1615	--	--	--	100
28...	1620	--	100	--	--
AUG					
04...	1510	--	7	53	100
04...	1515	1	6	42	100
SEP					
19...	1615	--	--	18	100
19...	1620	--	--	--	100
19...	1625	--	4	30	100
19...	1630	--	2	19	100
19...	1635	--	--	5	100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	ALKA-LINITY FIELD (MG/L AS CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CAR-BONATE IT-FLD (MG/L AS CO3)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
15292800 - MONTANA C NR MONTANA AK (LAT 62 06 32 LONG 150 03 12)												
MAR , 1982												
11...	1448	28	46	--	.5	739	13.9	99	--	--	--	--
15294003 - PETERS C AB PURCHES C NR WILLOW AK (LAT 61 49 08 LONG 149 38 20)												
MAR , 1982												
23...	1000	18	40	7.1	.0	721	13.5	97	--	27	.00	--
AUG												
20...	0945	99	35	7.4	6.5	732	11.4	96	--	20	.00	K3
15294004 - PURCHES C AT MOUTH NR WILLOW AK (LAT 61 49 05 LONG 149 38 17)												
MAR , 1982												
23...	0850	11	33	7.2	.0	721	14.2	103	--	23	.00	--
AUG												
20...	1012	78	34	7.3	7.5	732	10.5	91	--	18	.00	K2
15294007 - DECEPTION C AB TR NR HOUSTON AK (LAT 61 41 48 LONG 149 46 19)												
MAR , 1982												
23...	1220	4.2	272	7.4	.0	742	13.8	97	--	84	.00	--
AUG												
20...	1115	20	107	7.6	8.0	749	10.8	92	--	36	.00	16
15294008 - DECEPTION C TR NR HOUSTON AK (LAT 61 41 40 LONG 149 46 21)												
MAR , 1982												
23...	1310	.07	216	7.5	1.5	--	12.7	--	--	70	.00	--
AUG												
20...	1200	9.3	115	7.5	7.0	749	11.2	93	--	42	.00	23
15294012 - WILLOW C AT PARKS HWY NR WILLOW AK (LAT 61 46 03 LONG 150 03 48)												
MAR , 1982												
12...	1145	88	112	7.2	.5	738	13.2	93	30	--	--	--
15294020 - KROTO C (HEAD OF DESHKA R) NR PETERS CREEK AK (LAT 62 20 55 LONG 150 37 13)												
MAR , 1982												
15...	1300	9.4	44	7.2	.5	738	13.8	98	34	--	--	--
15294416 - JUDY C NR TYONEK AK (LAT 61 17 58 LONG 151 26 00)												
JUL , 1982												
20...	1630	5.5	39	--	16.5	--	--	--	--	--	--	--
15294418 - SCARP C NR TYONEK AK (LAT 61 15 59 LONG 151 19 14)												
JUL , 1982												
20...	1730	9.0	43	--	17.0	--	--	--	--	--	--	--
15294430 - THREEMILE C NR TYONEK AK (LAT 61 08 51 LONG 151 07 09)												
JUL , 1982												
19...	1805	14	41	6.8	20.0	764	8.7	95	--	20	.00	K4
AUG												
27...	1630	5.4	45	6.8	18.5	758	8.5	91	--	23	.00	K1
15294435 - EF CHUIT C NR TYONEK AK (LAT 61 10 48 LONG 151 30 39)												
JUL , 1982												
20...	1510	10	38	--	17.0	--	--	--	--	--	--	--

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTH-CENTRAL ALASKA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	ALKA-LINITY FIELD (MG/L AS CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CAR-BONATE IT-FLD (MG/L AS CO3)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
15294436 - CAMP C AT MOUTH NR TYONEK AK (LAT 61 10 47 LONG 151 30 54)												
JUL , 1982 20...	1425	3.0	35	--	14.0	--	--	--	--	--	--	--
15294438 - COLE C AT MOUTH NR TYONEK AK (LAT 61 08 52 LONG 151 28 38)												
JUL , 1982 20...	1225	7.8	45	--	13.5	--	--	--	--	--	--	--
15294439 - BASS C NR TYONEK AK (LAT 61 12 03 LONG 151 25 42)												
JUL , 1982 20...	1320	5.5	45	--	16.0	--	--	--	--	--	--	--
15294441 - BASS C AT MOUTH NR TYONEK AK (LAT 61 08 56 LONG 151 26 45)												
JUL , 1982 20...	1130	16	55	--	12.5	--	--	--	--	--	--	--
15294443 - MIDDLE C AT MOUTH NR TYONEK AK (LAT 61 07 08 LONG 151 19 42)												
JUL , 1982 20...	1035	14	75	--	11.0	--	--	--	--	--	--	--
15294445 - UPPER LONE C NR TYONEK AK (LAT 61 10 50 LONG 151 17 53)												
JUL , 1982 20...	0947	9.4	85	--	11.0	--	--	--	--	--	--	--
15294448 - LONE C NR TYONEK AK (LAT 61 07 51 LONG 151 18 06)												
MAR , 1982 22...	1500	20	--	6.9	.0	761	13.8	94	--	46	--	--
15294452 - TYONEK C NR TYONEK AK (LAT 61 03 45 LONG 151 13 03)												
JUL , 1982 19...	1710	14	63	7.5	15.0	763	8.9	88	--	39	.00	K7
AUG 27...	1515	7.0	92	7.4	12.0	758	10.4	97	--	55	.00	K3
15294454 - OLD TYONEK C NR TYONEK AK (LAT 61 02 45 LONG 151 20 25)												
JUL , 1982 19...	1545	19	35	7.1	13.5	763	9.1	87	--	21	.00	K5
AUG 27...	1530	5.0	68	6.8	11.0	758	10.0	91	--	40	.00	K8
15294458 - NIKOLAI C NR TYONEK AK (LAT 61 05 02 LONG 151 35 19)												
MAR , 1982 22...	1130	105	56	7.2	.0	765	12.8		--	--	--	--
JUL 19...	1440	146	76	7.1	11.5	766	10.6	96	--	28	.00	K2
AUG 27...	1420	82	118	7.1	10.0	760	12.6	112	--	40	.00	K16

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

YUKON ALASKA

15511500 - STEELE C NR FAIRBANKS AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV 06...	1430	.55	259	7.0	.0	130	30	34

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV 06...	11	6.6	1.5	100	6.0	3.2	.3	18	168

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV 06...	151	.52	.030	8	470	260	210	29

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

YUKON ALASKA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
644132147270800 - TANANA R AB CHENA FLOODWAY NR NORTH POLE AK (LAT 64 41 32 LONG 147 17 08)							
OCT , 1981							
15...	1425	12200	3.0	211	6950	--	--
JUN , 1982							
08...	1330	42600	12.5	1450	167000	15	18
JUL							
09...	1345	37800	18.0	3310	338000	23	27
22...	1445	59300	14.5	2420	387000	19	23
AUG							
12...	1415	45000	13.0	1330	162000	25	35
SEP							
09...	1600	24600	10.0	399	26500	--	--
30...	1530	20300	4.0	420	23000	--	--
644322147192900 - TANANA R NR N POLE AK (LAT 64 43 22 LONG 147 19 29)							
OCT , 1981							
15...	1255	12200	2.5	160	5270	--	--
JUN , 1982							
07...	1300	37300	11.0	1230	124000	15	20
30...	1400	46100	16.0	2630	327000	15	24
JUL							
22...	1300	59300	14.0	2290	367000	19	23
AUG							
11...	1320	45600	12.0	1320	163000	28	34
SEP							
09...	1240	24600	9.0	489	32500	--	--
30...	1300	20300	5.0	593	32500	--	--
644650147423600 - TANANA R AT UPPER END GOOSE IS NR FAIRBANKS AK (LAT 64 46 50 LONG 147 42 36)							
OCT , 1981							
07...	1730	12500	1.0	166	5600	--	--
JUN , 1982							
03...	1420	39400	9.0	839	89300	--	--
29...	1500	46300	17.5	2600	325000	20	28
JUL							
21...	1510	62100	15.0	2620	439000	15	19
AUG							
10...	1615	45100	14.0	1440	175000	21	30
SEP							
10...	1100	24800	9.0	490	32800	--	--
29...	1250	21500	5.0	540	31300	38	43
644704147443100 - TANANA R AT LOWER END GOOSE IS NR FAIRBANKS AK (LAT 64 47 04 LONG 147 44 31)							
OCT , 1981							
07...	1710	12500	1.0	601	20300	--	--
JUN , 1982							
03...	1200	39400	9.0	1070	114000	12	15
29...	1310	46300	17.5	4260	533000	17	20
JUL							
21...	1300	62100	15.0	2570	431000	15	19
AUG							
10...	1400	45100	14.0	1430	174000	28	33
SEP							
10...	1245	24800	9.0	455	30500	--	--
29...	1510	21500	5.0	659	38300	--	--
644757147564800 - TANANA R AT BYERS ISLAND NR FAIRBANKS AK (LAT 64 47 52 LONG 147 56 48)							
OCT , 1981							
07...	1210	12500	1.0	162	5470	--	--
JUN , 1982							
04...	1515	46400	9.0	1750	219000	9	11
28...	1655	42700	17.5	2330	269000	13	21
JUL							
26...	1225	60100	13.0	2580	419000	19	27
AUG							
09...	1700	45500	13.5	1490	183000	22	31
SEP							
08...	1440	24100	10.0	454	29500	--	--

YUKON ALASKA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
644132147270800 - TANANA R AB CHENA FLOODWAY NR NORTH POLE AK (LAT 64 41 32 LONG 147 17 08)							
OCT , 1981							
15...	--	--	--	--	--	--	--
JUN , 1982							
08...	20	31	43	60	79	96	100
JUL							
09...	35	47	63	70	87	100	--
22...	28	3[illegible]	47	62	80	99	100
AUG							
12...	41	60	60	70	81	97	100
SEP							
09...	--	--	--	58	73	100	--
30...	--	--	--	62	74	98	100
644322147192900 - TANANA R NR N POLE AK (LAT 64 43 22 LONG 147 19 29)							
OCT , 1981							
15...	--	--	--	--	--	--	--
JUN , 1982							
07...	--	34	--	61	78	98	100
30...	32	47	56	75	86	99	100
JUL							
22...	27	36	48	60	79	99	100
AUG							
11...	41	49	59	[illegible]	78	97	100
SEP							
09...	--	--	--	59	75	99	100
30...	--	--	--	53	63	94	100
644650147423600 - TANANA R AT UPPER END GOOSE IS NR FAIRBANKS AK (LAT 64 46 50 LONG 147 42 36)							
OCT , 1981							
07...	--	--	--	--	--	--	--
JUN , 1982							
03...	--	--	--	54	76	100	--
29...	36	50	67	81	95	100	--
JUL							
21...	24	31	44	62	83	100	--
AUG							
10...	37	46	55	66	80	96	100
SEP							
10...	--	--	--	45	60	94	100
29...	--	55	--	71	80	99	100
644704147443100 - TANANA R AT LOWER END GOOSE IS NR FAIRBANKS AK (LAT 64 47 04 LONG 147 44 31)							
OCT , 1981							
07...	--	--	--	--	--	--	--
JUN , 1982							
03...	--	25	--	42	59	97	100
29...	27	37	47	61	78	99	100
JUL							
21...	24	31	46	64	88	98	100
AUG							
10...	37	45	56	68	81	99	100
SEP							
10...	--	--	--	45	58	99	100
29...	--	--	--	52	64	98	100
644752147564800 - TANANA R AT BYERS ISLAND NR FAIRBANKS AK (LAT 64 47 52 LONG 147 56 48)							
OCT , 1981							
07...	--	--	--	--	--	--	--
JUN , 1982							
04...	--	22	--	64	85	100	--
28...	30	48	56	76	92	100	--
JUL							
26...	33	49	62	76	88	98	100
AUG							
09...	38	46	57	67	88	100	--
SEP							
08...	--	--	--	49	64	99	100

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

SOUTHEAST ALASKA

592546136074700 - LITTLE BOULDER C NR KLUKWAN AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	HARD-NESS (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)	ALKA-LINITY LAB (MG/L AS CACO3)
APR 09...	1200	21	281	8.3	3.0	.20	133	42	6.8	1.9	2.8	99

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MC/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
APR 09...	39	.8	<.1	4.7	154	160	.51	.080	.57	.65	1.2	.050

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)
APR 09...	.5	.1	<1	1	<100	37	<1	<3	<10	<10	<1	<1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
APR 09...	2	0	2	20	<9	<1	3	<10	<3	<.1	<.1

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 09...	3	0	4	1	0	1	<1	<1	10	0	13

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTHEAST ALASKA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
592436135545000 - UNNAMED C S OF WELLS NR KLUKWAN AK (LAT 59 24 36 LONG 135 54 50)						
MAY , 1982 26...	1206	--	330	7.5	6.0	11.5
592400135594000 - L SALMON R AT RELIGIOUS CAMP NR KLUKWAN AK (LAT 59 24 00 LONG 135 59 40)						
JUN , 1982 12...	1400	--	185	6.9	8.5	8.9
592302135590200 - L SALMON R NR KLUKWAN AK (LAT 59 23 02 LONG 135 59 02)						
APR , 1982 06...	1650	79	250	7.9	6.0	--

592147135562700 - CHILKAT LK OUTLET NR KLUKWAN AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (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)
APR 06...	1200	27	190	7.1	4.0	.60	10.6	84	30	2.4	2.0	1.3

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)
APR 06...	27	20	30	<.1	4.3	153	107	.26	.110	.43	.54	.80

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
APR 06...	.010	1.2	.1	<1	1	<100	20	1	<3	<1[illegible]	<10	1

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)
APR 06...	<1	5	3	2	160	100	59	6	3	3	10	0

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 06...	11	<.1	<.1	4	0	4	<1	1	1	<1	20	<12

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTHEAST ALASKA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
592230135545900 - TSIRKU R 1.8 MI AB CHILKAT R NR KLUKWAN AK (LAT 59 22 30 LONG 135 54 59)						
APR , 1982						
06...	1601	139	240	7.8	5.0	12.6
592231135543900 - TSIRKU R 1.7 MI AB CHILKAT R NR KLUKWAN AK (LAT 59 22 31 LONG 135 54 39)						
APR , 1982						
06...	1540	122	240	7.8	5.0	9.0
JUN						
08...	1430	--	190	7.1	6.5	11.7
592243135543800 - TSIRKU R 1.4 MI AB CHILKAT R NR KLUKWAN AK (LAT 59 22 43 LONG 135 54 38)						
APR , 1982						
06...	1520	128	240	7.8	5.0	10.4
JUN						
08...	1420	--	190	7.5	6.5	11.7
592249135542700 - TSIRKU R 1.3 MI AB CHILKAT R NR KLUKWAN AK (LAT 59 22 49 LONG 135 54 27)						
APR , 1982						
06...	1458	124	240	7.8	5.5	--
JUN						
08...	1403	--	190	7.4	7.0	11.6
592251135541500 - TSIRKU R 1.2 MI AB CHILKAT R NR KLUKWAN AK (LAT 59 22 51 LONG 135 54 15)						
APR , 1982						
06...	1435	112	240	7.8	5.5	10.6
JUN						
08...	1343	--	190	7.7	7.0	11.7
592253135540300 - TSIRKU R 1.1 MI AB CHILKAT R NR KLUKWAN AK (LAT 59 22 53 LONG 135 54 03)						
APR , 1982						
06...	1410	109	240	7.8	6.0	10.9
JUN						
08...	1315	--	190	7.5	7.5	11.5
592303135540000 - TSIRKU R 0.9 MI AB CHILKAT R NR KLUKWAN AK (LAT 59 23 03 LONG 135 54 00)						
APR , 1982						
06...	1330	91	240	7.8	6.0	11.4
JUN						
08...	1250	--	190	7.6	8.0	11.5
592310135535200 - TSIRKU R 0.8 MI AB CHILKAT R NR KLUKWAN AK (LAT 59 23 10 LONG 135 53 52)						
APR , 1982						
06...	1305	73	240	7.8	6.0	12.0
592319135533800 - TSIRKU R 0.5 MI AB CHILKAT R NR KLUKWAN AK (LAT 59 23 19 LONG 135 53 38)						
APR , 1982						
06...	1230	66	240	7.8	6.0	10.8
JUN						
08...	1320	--	190	7.7	8.0	11.5
592340135531300 - TSIRKU R 0.1 MI AB CHILKAT R NR KLUKWAN AK (LAT 59 23 40 LONG 135 53 13)						
APR , 1982						
06...	1200	53	240	7.8	6.0	12.0
JUN						
08...	1305	--	190	7.7	9.0	11.5
592226135500800 - CHILKAT R AT 19 MILE SLIDE NR KLUKWAN AK (LAT 59 22 26 LONG 135 50 08)						
MAY , 1982						
26...	1146	--	260	7.3	9.5	8.0
592227135495700 - UNNAMED C AT 19 MILE SLIDE NR KLUKWAN AK (LAT 59 22 27 LONG 135 49 57)						
MAY , 1982						
26...	1100	--	290	7.5	7.5	10.8

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
622552144575600 - TULSONA C NR GAKONA AK (LAT 62 25 52 LONG 144 57 56)					
MAR , 1982					
30...	0930	38	260	--	.0
JUL					
28...	1400	38	250	--	16.5
623419145533800 - FISH C AT LK OUTLET NR SOURDOUGH AK (LAT 62 34 19 LONG 145 53 38)					
MAR , 1982					
30...	1730	.70	170	-10.0	.0
15200270 - SOURDOUGH C AT SOURDOUGH AK (LAT 62 31 46 LONG 145 30 52)					
MAR , 1982					
29...	1600	.01	260	--	.0
JUL					
28...	1200	17	165	--	15.0
15201000 - DRY C NR GLENNALLEN AK (LAT 62 08 49 LONG 145 28 31)					
JUL , 1982					
28...	0900	4.4	200	--	15.5
15201100 - L NELCHINA R TR NR EUREKA LD AK (LAT 61 59 17 LONG 147 00 34)					
JUL , 1982					
27...	1445	.50	175	--	13.0
SEP					
23...	1345	E.50	155	--	2.5
620300146322500 - MENDELTNA C NR GLENNALLEN AK (LAT 62 03 00 LONG 146 32 25)					
MAR , 1982					
29...	1930	77	300	-10.0	.0
JUL					
28...	1800	133	180	--	18.0
SEP					
23...	1230	106	190	7.0	6.0
620600145574500 - TOLSONA C NR GLENNALLEN AK (LAT 62 06 00 LONG 145 57 45)					
MAR , 1982					
30...	1300	<.1	500	--	.0
JUL					
28...	0810	66	170	--	12.5
15207800 - LITTLE TONSINA RIVER NEAR TONSINA AK (LAT 61 28 49 LONG 145 09 05)					
JUL , 1982					
29...	1120	60	75	--	7.5
15208100 - SQUIRREL C AT TONSINA AK (LAT 61 40 05 LONG 145 10 26)					
MAR , 1982					
31...	1730	32	177	-10.0	.0
APR					
01...	0630	E25	195	--	--
JUL					
29...	1300	25	180	--	7.5
15208200 - ROCK C NR TONSINA AK (LAT 61 45 32 LONG 145 09 14)					
JUL , 1982					
29...	0930	.50	350	--	7.0

E ESTIMATED

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
15209000 - CHITITU C NR MAY CREEK AK (LAT 61 22 12 LONG 142 40 50)					
JUL , 1982					
29...	1130	101	360	--	8.0
SEP					
21...	1630	54	270	--	6.0
15209100 - MAY CREEK NR MAY CREEK AK (LAT 61 20 42 LONG 142 41 49)					
JUL , 1982					
29...	1000	1.9	350	--	7.5
SEP					
21...	1500	1.6	418	--	4.0
15211700 - STRELNA C NR CHITINA AK (LAT 61 30 40 LONG 144 04 00)					
JUL , 1982					
29...	2200	29	400	--	9.0
SEP					
22...	0830	29	425	--	4.5
15211900 - O'BRIEN C NR CHITINA AK (LAT 61 28 59 LONG 144 27 23)					
APR , 1982					
01...	1715	5.8	258	-5.0	.0
JUL					
30...	0745	101	105	--	9.0
SEP					
22...	1400	100	115	--	5.5

15274970 - SF CHESTER C AT NO LIGHTS BLVD NR ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH LAB (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
FEB										
04...	1330	32	405	6.6	.5	12.6	86	770	120	2600
05...	0945	18	275	7.5	.5	--	--	--	25	400
05...	1630	18	320	7.2	1.0	14.0	96	777	29	1300
06...	1030	13	230	7.4	1.0	13.4	92	782	16	210
06...	1630	14	290	7.4	1.0	14.0	--	--	19	160
JUN										
06...	1815	34	158	6.8	12.0	--	--	--	88	K500
06...	2230	32	171	7.0	10.0	--	--	--	58	1300
07...	1000	35	152	7.1	10.0	--	--	--	52	3200

DATE	HARD-NESS (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)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB									
04...	--	--	2.6	51	--	40	6.0	95	.0
05...	--	--	4.3	20	--	60	9.0	45	.1
05...	--	--	4.8	28	--	63	10	50	.0
06...	--	--	5.3	13	--	69	14	17	.0
06...	--	--	5.4	22	--	70	14	37	.0
JUN									
06...	53	16	3.2	12	1.5	37	15	14	.1
06...	52	16	3.0	8.2	1.3	39	17	12	.1
07...	59	18	3.3	7.3	1.1	42	15	10	.1

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

15274970 - SF CHESTER C AT NO LIGHTS BLVD NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)
FEB									
04...	5.4	--	.38	.120	.50	4.20	4.7	.450	.390
05...	.4	--	.52	.020	.54	1.40	1.9	.070	.060
05...	10	--	.54	.040	.58	1.80	2.4	.070	.060
06...	11	--	--	<.020	.60	.46	1.1	.020	.030
06...	11	--	.62	.030	.65	.73	1.4	.020	.030
JUN									
06...	5.6	90	.45	.050	.50	2.00	2.5	.280	.110
06...	5.8	87	.36	.040	.40	.20	.60	.190	.100
07...	7.0	87	.28	.020	.30	1.60	1.9	.140	.050

DATE	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
FEB									
04...	19	7200	<30	27	9900	220	--	202	17
05...	5.5	1000	<30	9	1500	16	--	11	.53
05...	5.7	1400	<30	7	1700	25	--	23	1.1
06...	3.3	600	<30	5	740	8	--	7	.25
06...	3.5	600	<30	6	630	8	40	2	.08
JUN									
06...	19	5600	<30	9	8600	140	180	301	28
06...	14	4300	<30	11	6200	68	120	149	13
07...	13	3600	<30	12	5700	51	80	150	14

611207149483600 - MF CHESTER C AT NICHOLS ST AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH LAB (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
FEB										
04...	1245	8.6	580	6.8	2.5	12.1	88	770	180	850
05...	0900	4.1	390	7.2	1.5	--	--	--	34	K65
05...	1530	3.9	590	7.0	4.0	12.7	95	777	50	140
06...	0930	3.3	324	7.2	3.0	13.0	94	782	16	K22
06...	1545	3.3	335	7.2	3.5	13.5	99	782	19	K18
JUN										
06...	1730	10	171	6.9	10.0	--	--	--	110	380
06...	2150	8.4	202	6.9	9.0	--	--	--	99	380
07...	0930	18	145	6.8	9.0	--	--	--	110	3600

DATE	HARD-NESS (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)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB									
04...	--	--	4.4	82	--	96	12	140	.0
05...	--	--	8.5	26	--	97	31	46	.0
05...	--	--	8.2	62	--	94	29	110	.0
06...	--	--	9.1	12	--	100	33	18	.0
06...	--	--	9.0	14	--	100	38	24	.0
JUN									
06...	60	18	3.6	7.9	1.3	46	16	11	<.1
06...	78	23	4.9	7	1.4	57	21	11	.1
07...	49	15	2.9	6	1.5	39	16	9.2	.2

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

611207149483600 - MF CHESTER C AT NICHOLS ST AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)
FEB									
04...	6.7	--	.50	.220	.72	3.40	4.1	.370	.090
05...	13	--	.89	.040	.93	1.00	1.9	.050	.030
06...	14	--	--	<.020	.95	.56	1.5	.010	<.010
06...	14	--	--	<.020	.94	.58	1.5	.020	<.010
JUN									
06...	4.7	90	.34	.060	.40	1.80	2.2	.400	.120
06...	6.5	110	.25	.050	.30	1.90	2.2	.410	.120
07...	4.1	79	.23	.070	.30	2.10	2.4	.610	.160

DATE	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
FEB									
04...	36	9000	<30	37	22000	520	470	322	7.5
05...	6.6	1400	<30	10	4300	30	90	5	.06
05...	11	2400	<30	16	6200	77	120	47	.49
06...	4.0	600	<30	5	3100	10	60	2	.02
06...	5.1	1000	<30	6	3400	14	80	3	.03
JUN									
06...	21	11000	<30	20	25000	250	310	423	11
06...	19	7300	<30	25	17000	220	250	388	8.8
07...	21	14000	<30	23	31000	280	310	663	32

15275000 - CHESTER CREEK AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH LAB (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
FEB										
04...	1430	38	455	6.7	.0	13.0	88	771	110	2400
05...	1030	20	290	7.3	.5	--	--	--	33	480
05...	1715	21	368	7.2	1.0	14.0	96	778	35	1400
06...	1145	17	270	7.5	1.0	13.4	92	782	16	K170
06...	1730	E17	305	7.6	1.5	13.7	--	--	17	85
JUN										
06...	1430	35	229	7.0	--	--	--	--	--	--
06...	1530	38	--	--	--	--	--	--	79	2100
06...	1630	42	186	7.1	--	--	--	--	--	--
06...	1730	42	--	--	--	--	--	--	120	2600
06...	1830	44	152	7.1	--	--	--	--	--	--
06...	1930	44	--	--	--	--	--	--	98	1900
06...	2030	42	160	7.1	--	--	--	--	--	--
06...	2130	41	--	--	--	--	--	--	79	1500
06...	2230	40	171	7.0	--	--	--	--	--	--
06...	2330	40	--	--	--	--	--	--	65	900
07...	0030	41	179	7.1	--	--	--	--	--	--
07...	0130	42	--	--	--	--	--	--	61	1200
JUL										
16...	1135	19	--	--	--	--	--	--	--	--
16...	1205	19	--	--	--	--	--	--	--	--

E ESTIMATED
K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

15275000 - CHESTER CREEK AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB									
04...	--	--	3.3	58	--	42	7.0	110	.0
05...	--	--	5.1	22	--	66	13	38	.0
05...	--	--	5.4	33	--	68	14	59	.0
06...	--	--	6.0	14	--	76	19	18	.0
06...	--	--	6.2	20	--	75	20	34	.0
JUN									
06...	82	24	5.4	12	1.4	64	23	13	.1
06...	--	--	--	--	--	--	--	13	--
06...	64	19	4.1	10	1.5	51	19	11	.1
06...	--	--	--	--	--	--	--	12	--
06...	53	16	3.1	9.0	1.4	39	16	11	.1
06...	--	--	--	--	--	--	--	13	--
06...	53	16	3.1	9.3	1.4	40	16	12	.1
06...	--	--	--	--	--	--	--	10	--
06...	57	17	3.6	10	1.5	43	20	12	.1
06...	--	--	--	--	--	--	--	18	--
07...	60	18	3.6	8.8	1.3	44	16	12	.1
07...	--	--	--	--	--	--	--	13	--
JUL									
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)
FEB									
04...	5.7	--	.40	.150	.55	4.40	5.0	.320	.160
05...	10	--	.59	.030	.62	1.30	1.9	.070	.080
05...	10	--	.60	.040	.64	1.50	2.1	.060	.050
06...	12	--	--	<.020	.66	.54	1.2	.020	.030
06...	12	--	.69	.030	.72	.62	1.3	.020	.030
JUN									
06...	8.2	126	.45	.050	.50	2.60	3.1	.360	.090
06...	--	--	--	--	--	--	--	--	--
06...	6.8	102	.46	.040	.50	3.00	3.5	.470	.100
06...	--	--	--	--	--	--	--	--	--
06...	5.6	86	.47	.030	.50	2.50	3.0	.420	.040
06...	--	--	--	--	--	--	--	--	--
06...	5.4	87	.56	.040	.60	2.20	2.8	.490	.060
06...	--	--	--	--	--	--	--	--	--
06...	5.9	96	.36	.040	.40	1.80	2.2	.260	.080
06...	--	--	--	--	--	--	--	--	--
07...	6.4	93	.36	.040	.40	.30	.70	.190	.110
07...	--	--	--	--	--	--	--	--	--
JUL									
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

15275000 - CHESTER CREEK AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CARBON, ORGANIC TOTAL (MG/L AS C)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
FEB									
04...	26	7200	<30	33	12000	280	170	157	16
05...	5.8	1000	<30	6	2100	19	100	16	.82
05...	5.6	1400	<30	10	2500	38	70	17	.96
06...	4.0	600	<30	3	1200	7	60	2	.09
06...	3.3	1000	<30	6	1400	8	100	4	.18
JUN									
06...	--	8500	<30	19	19000	150	320	--	--
06...	23	--	--	--	--	--	--	331	34
06...	--	9300	<30	20	20000	160	250	--	--
06...	29	--	--	--	--	--	--	482	55
06...	--	9400	<30	23	18000	160	250	--	--
06...	21	--	--	--	--	--	--	342	41
06...	--	6100	<30	18	11000	100	150	--	--
06...	19	--	--	--	--	--	--	215	24
06...	--	5500	<30	14	9200	91	130	--	--
06...	17	--	--	--	--	--	--	193	21
07...	--	5200	<30	12	8000	80	120	--	--
07...	14	--	--	--	--	--	--	142	16
JUL									
16...	--	--	--	--	--	--	--	68	3.5
16...	--	--	--	--	--	--	--	51	2.6

612335149251900 - PETERS C (UPPER) NR PETERS CREEK AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT									
06...	1200	101	195	7.8	1.5	15.6	114	746	K1

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT									
06...	95	29	5.4	3.2	.3	72	28	.6	<.0

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT									
06...	6.5	118	118	.29	.010	15	3	0	.00

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

624844149344300 - SUSITNA R SL FG21 4.5 MI AB GOLD CREEK AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	HARD-NESS (MG/L AS CACO3)
JAN 20...	1230	<.05	221	6.7	--	1.5	.50	9.0	65	753	87
MAR 30...	0900	<.05	196	7.4	-11.0	1.5	.10	9.8	72	739	82

DATE	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)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JAN 20...	29	3.5	12	2.0	62	12	20	.1	11	114	130
MAR 30...	27	3.6	11	2.1	61	13	17	.1	12	124	127

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)
JAN 20...	.64	.63	<.070	.080	--	.20	.31	.03	.28	.95	.91
MAR 30...	.60	.58	.060	<.060	.30	--	.36	.14	.22	.96	.80

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)
JAN 20...	.010	.040	.5	.0	2	1	1	100	0	100
MAR 30...	.010	<.010	1.1	.1	2	1	1	<100	--	47

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
JAN 20...	<1	<1	<10	<10	<1	2	1	0	1	10
MAR 30...	<1	<3	<10	<10	1	<1	6	5	1	10

DATE	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
JAN 20...	0	20	<1	1	20	10	10	.1	<.1	<1
MAR 30...	0	11	9	<1	<10	--	3	.1	<.1	1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

624844149344300 - SUSITNA R SL FG21 4.5 MI AB GOLD CREEK AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)
JAN 20...	--	<1	1	<1	<1	<1	10	0	10	0
MAR 30...	0	1	<1	1	<1	<1	20	--	<12	6

624723149370000 - SUSITNA R SL FG19 2.5 MI AB GOLD CREEK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN 20...	1200	<.05	148	6.0	2.0	.30	7.7	57	752	67	22
MAR 30...	1000	<.05	129	6.5	1.0	.10	9.6	70	740	58	19

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
JAN 20...	3.0	4.3	1.2	39	11	3.5	.1	10	78	92	1.0
MAR 30...	2.6	2.2	1.1	46	13	1.1	.1	10	80	85	1.2

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
JAN 20...	1.0	.090	.080	.50	.14	.59	.37	.22	1.6	1.2	.020
MAR 30...	1.2	.080	.080	.43	.22	.51	.21	.30	1.7	1.5	.010

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
JAN 20...	.020	--	.7	.0	2	1	1	100	<100	<1
MAR 30...	<.010	.010	1.4	.1	1	0	1	<100	29	<1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

624723149370000 - SUSITNA R SL FG19 2.5 MI AB GOLD CREEK AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
JAN 20...	1	<10	<10	1	<1	2	0	2	10	0
MAR 30...	<3	10	<10	2	<1	8	7	1	30	20

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
JAN 20...	30	1	0	1	10	0	10	<.1	<.1	<1
MAR 30...	15	6	--	<1	10	6	4	.1	<.1	2

DATE	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)
JAN 20...	--	<1	1	<1	<1	1	10	0	10	1
MAR 30...	1	1	<1	1	<1	<1	30	20	12	1

624655149403500 - SUSITNA R SL FG16B BL INDIAN C NR GOLD CREEK AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
JAN 20...	1115	<.50	59	6.0	1.5	.50	6.6	47	754	34	4
MAR 30...	1645	<.50	59	6.4	2.0	.10	7.3	59	742	26	--

DATE	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)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JAN 20...	11	1.6	2.9	.8	24	<5.0	1.1	.1	11	38	--
MAR 30...	8.0	1.5	2.1	.8	23	.0	1.2	.1	11	42	43

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

624655149403500 - SUSITNA R SL FG16B BL INDIAN C NR GOLD CREEK AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)
JAN 20...	.36	.35	.120	.090	.18	.15	.30	.06	.24	.66	.59
MAR 30...	.36	.36	<.060	<.060	--	--	.38	.14	.24	.74	.60

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
JAN 20...	<.010	<.010	.5	.0	1	0	1	<100	<100	<1
MAR 30...	.010	<.010	.7	.0	2	1	1	<100	14	<1

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
JAN 20...	1	10	<10	1	0	1	1	0	2	20
MAR 30...	<3	10	<10	2	--	<1	2	1	1	40

DATE	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
JAN 20...	0	20	<1	--	1	10	<10	<.1	<.1	<1
MAR 30...	30	9	5	4	1	<10	3	.1	<.1	2

DATE	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)
JAN 20...	--	<1	<1	<1	<1	<1	20	10	10	0
MAR 30...	1	1	<1	<1	<1	1	40	--	<12	6

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

624129149505800 SUSITNA R SL RG9 NR SHERMAN AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN 20...	1040	<2.0	121	6.6	.5	.50	11.7	82	757	47	15
MAR 31...	0900	< 2.0	143	7.0	.5	.10	10.9	77	744	52	17

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
JAN 20...	2.3	5.7	1.0	34	5.0	9.6	.1	11	73	76	1.1
MAR 31...	2.4	7.2	1.1	39	6.0	13	.1	11	93	83	.95

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
JAN 20...	1.1	< .070	.080	--	.39	.68	.21	.47	1.8	1.6	<.010
MAR 31...	.96	.080	.070	.41	.16	.49	.26	.23	1.4	1.2	.010

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
JAN 20...	<.010	1.3	.0	2	1	1	100	<100	<1	1
MAR 31...	<.010	.7	.0	1	0	1	<100	27	<1	<3

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
JAN 20...	10	<10	1	0	2	2	0	2	140	80
MAR 31...	10	<10	1	--	<1	1	0	1	30	20

624129149505800 SUSITNA R SL RG9 NR SHERMAN AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
JAN 20...	60	1	0	2	20	10	10	<.1	<.1	2
MAR 31...	14	1	--	<1	10	5	5	.1	<.1	<1

DATE	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)
JAN 20...	1	1	<1	<1	<1	<1	10	0	20	2
MAR 31...	--	<1	<1	<1	<1	<1	10	--	<12	3

623948149543400 - SUSITNA R SL FG8A NR CURRY AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN 20...	1000	<3.0	193	6.5	.5	.40	7.0	49	758	79	26
MAR 31...	1015	<3.0	142	6.6	.5	.10	10.2	72	745	60	19

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
JAN 20...	3.4	11	2.1	62	11	14	.1	10	111	120	.88
MAR 31...	3.1	6.2	1.3	43	8.0	10	.1	11	92	86	.92

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
JAN 20...	.89	<.070	.150	--	.22	.42	.05	.37	1.3	1.3	<.010
MAR 31...	.90	.120	.070	.24	.20	.36	.09	.27	1.3	1.2	.010

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

623948149543400 SUSITNA R SL FG8A NR CURRY AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
JAN 20...	<.010	1.4	.0	2	1	1	100	0	100	<1	<1
MAR 31...	<.010	1.4	.0	1	--	<1	<100	--	29	<1	<3

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
JAN 20...	10	<10	2	0	2	4	3	1	20	0
MAR 31...	10	<10	1	--	<1	2	1	1	10	0

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
JAN 20...	40	2	1	1	10	0	10	<.1	<.1	1
MAR 31...	12	<1	--	1	10	6	4	.1	<.1	1

DATE	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)
JAN 20...	--	<1	<1	<1	<1	<1	20	10	10	E1
MAR 31...	0	2	1	<1	<1	<1	10	0	<12	7

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ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTHWEST ALASKA

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	ALKA-LINITY FIELD (MG/L AS CACO3)
595208159261200 - IZAVIEKNIK R INLET UPPER TOGIAK LK NR TOGIAK AK (LAT 59 52 08 LONG 159 26 12)									
MAR , 1982 20...	1100	13	85	7.0	2.0	11.9	88	751	30
594822159293000 - IZAVIEKNIK R OUTLET UPPER TOGIAK LK NR TOGIAK AK (LAT 59 48 22 LONG 159 29 30)									
MAR , 1982 20...	1130	62	75	7.1	2.5	13.5	101	750	26
594727159303000 - TRAIL C AB MOUTH NR TOGIAK AK (LAT 59 47 27 LONG 159 30 30)									
MAR , 1982 20...	1330	91	90	7.1	.0	13.5	94	750	30
594301059324200 - IZAVIEKNIK R AT INLET TOGIAK LK NR TOGIAK AK (LAT 59 43 10 LONG 159 32 42)									
MAR , 1982 23...	1000	363	73	7.2	.0	13.4	91	769	30
593721159383000 - WEST C NR TOGIAK AK (LAT 59 37 21 LONG 159 38 30)									
MAR , 1982 19...	1430	20	42	6.2	1.0	13.2	95	746	8
593524159364900 - BRUIN C NR TOGIAK AK (LAT 59 35 24 LONG 159 36 49)									
MAR , 1982 19...	1330	6.6	70	7.1	.0	13.8	96	746	22
593157159413900 - TOGIAK R AT TOGIAK LK OUTLET NR TOGIAK AK									
MAR , 1982 19...	1130	571	63	7.4	2.0	13.1	96	746	22
592324159441200 - ONGIVINUCK R AB MOUTH NR TOGIAK AK (LAT 59 23 24 LONG 159 44 12)									
MAR , 1982 19...	1030	321	54	6.9	.0	12.6	88	747	19
592348159504200 - TOGIAK R BL ONGIVINUCK R NR TOGIAK AK (LAT 59 23 48 LONG 159 50 42)									
MAR , 1982 23...	1230	1140	68	7.1	.0	13.8	93	772	23
592236160002400 - NAROGURUM R NR TOGIAK AK (LAT 59 22 36 LONG 160 00 24)									
MAR , 1982 18...	1400	282	65	7.2	.0	13.0	90	750	24
591644160114800 - TOGIAK R AB PUNGOKEPUK C NR TOGIAK AK (LAT 59 16 44 LONG 160 11 48)									
MAR , 1982 18...	1230	1620	62	7.5	.0	12.2	85	751	23
591533160112400 - PUNGOKEPUK C AB TOGIAK R NR TOGIAK AK (LAT 59 15 33 LONG 160 11 24)									
MAR , 1982 18...	1030	81	60	7.3	.0	13.1	91	752	25

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

NORTHWEST ALASKA

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	ALKA-LINITY FIELD (MG/L AS CACO3)
640140159493800 - UNALAKLEET R AB OLD WOMAN R NR UNALAKLEET AK (LAT 64 01 40 LONG 159 49 38)									
AUG , 1982 25...	1000	595	115	7.3	7.0	11.1	90	766	51
640137159494000 - OLD WOMAN R AT MOUTH NR UNALAKLEET AK (LAT 64 01 37 LONG 159 49 40)									
AUG , 1982 24...	1600	500	115	6.8	9.0	11.0	94	766	46
640111159524800 - UNALAKLEET R BL OLD WOMAN R NR UNALAKLEET AK (LAT 64 01 11 LONG 159 52 48)									
AUG , 1982 25...	1400	1070	105	7.4	8.0	11.6	97	766	48
635856159581600 - NORTH FORK UNALAKLEET R NR UNALAKLEET AK (LAT 63 58 56 LONG 159 58 16)									
AUG , 1982 26...	1130	637	120	7.5	7.0	11.2	91	766	53
635538160202200 - UNALAKLEET R AB CHIROSKEY R NR UNALAKLEET AK (LAT 63 55 38 LONG 160 20 22)									
AUG , 1982 27...	1630	1990	118	6.7	10.0	10.8	96	764	48
635514160192900 - CHIROSKEY R AB MOUTH NR UNALAKLEET AK (LAT 63 55 14 LONG 160 19 29)									
AUG , 1982 28...	1530	367	155	7.3	8.0	11.1	94	763	57
635235160364300 - UNALAKLEET R AB NORTH R NR UNALAKLEET AK (LAT 63 52 35 LONG 160 36 43)									
AUG , 1982 29...	1530	2170	125	7.5	9.0	11.3	98	757	52
635240160385000 - NORTH R AT MOUTH NR UNALAKLEET AK (LAT 63 52 40 LONG 160 38 50)									
AUG , 1982 29...	1930	1050	205	8.4	9.0	12.6	110	756	91
635140160392000 - SOUTH R NR MOUTH NR UNALAKLEET AK (LAT 63 51 40 LONG 160 39 20)									
AUG , 1982 30...	1100	137	210	7.8	9.0	10.8	94	755	94

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA

614359145475200 - KLUTINA LAKE NR COPPER CENTER AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
JUN 15...	1312	3.00	.90	100	6.0
15...	1313	30.0	9.1	99	6.0
15...	1314	65.0	19.8	98	5.0

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUN 15...	1315	3	>65.0	100	7.8	10	44	15	1.5	1.7

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)
JUN 15...	.6	37	8.0	.9	<.1	3.3	53	<.10	.030	1

DATE	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 15...	20	<1	<10	4	31	7	5	<.1	<1	7

615354145395000 - HUDSON LAKE NR COPPER CENTER AK

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	TEMPERATURE (DEG C)
JUN 15...	1240	3.00	.90	8.5
15...	1241	20.0	6.1	8.5
15...	1242	39.0	11.9	8.0

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
JUN 15...	1245	3	40.0	8.2	5	160	43	13	8.0	2.3

DATE	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)
JUN 15...	144	20	3.3	.1	4.8	181	<.10	.030	2	180

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

61535414539500 - HUDSON LAKE NEAR COPPER CENTER AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 15...	<1	<10	1	<3	<1	4	<.1	<1	8

620127146215700 - SUCKER LAKE NEAR GLENNALLEN AK

DATE	TIME	SAM-PLING DEPTH (FEET)	SAM-PLING DEPTH (M)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
JUN 15...	1026	3.00	.90	200	11.0
15...	1027	10.0	3.0	199	11.0
15...	1028	21.0	6.4	199	10.0

DATE	TIME	NUMBER OF SAM-PLING POINTS	DEPTH AT SAMPLE LOC-ATION, TOTAL (FEET)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (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)
JUN 15...	1030	3	23.0	200	7.7	10	92	23	8.4	5.7

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)
JUN 15...	1.8	87	8.0	2.1	.1	1.4	103	<.10	.040	1

DATE	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 15...	90	<1	<10	2	16	<1	4	<.1	<1	39

620725146031500 - TOLSONA LK NR GLENNALLEN AK

DATE	TIME	SAM-PLING DEPTH (FEET)	SAM-PLING DEPTH (M)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
JUN 15...	1435	3.00	.90	300	10.5
15...	1436	5.00	1.5	298	10.5
15...	1437	10.0	3.0	298	10.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

620725146031500 - TOLSONA LK NR GLENNALLEN AK

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUN 15...	1440	3	11.0	300	8.2	10	130	37	9.4	8.3

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)
JUN 15...	1.3	108	7.0	24	.1	1.7	154	<.10	.020	1

DATE	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 15...	40	<1	<10	2	<3	<1	5	<.1	<1	<3

620805146383000 - OLD MAN LAKE NR GLENNALLEN AK

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
JUN 15...	0944	3.00	.90	195	10.0
15...	0945	6.0	1.8	195	10.0
15...	0946	10.0	3.0	195	10.0

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUN 15...	0950	3	11.0	195	8.0	30	81	27	3.4	4.9

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)
JUN 15...	1.0	74	18	1.4	<.1	4.6	105	<.10	.050	1

DATE	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 15...	40	<1	<10	2	82	<1	6	<.1	<1	5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

622046146112600 - SECOND HILL LAKE NR GULKANA AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
JUN 14...	1110	3.00	.90	115	8.0
14...	1111	7.00	2.1	113	8.0
14...	1112	14.0	4.3	113	8.0

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUN 14...	1115	3	15.0	114	8.0	50	49	13	3.9	3.9

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)
JUN 14...	1.2	52	<5.0	1.5	<.1	1.4	<.10	.020	1	<10

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 14...	<1	<10	3	320	2	3	<.1	<1	4

622339146000900 - CROSSWIND LAKE NR GULKANA AK

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
JUN 15...	0735	3.00	.90	110	7.0
15...	0736	20.0	6.1	110	7.0
15...	0737	36.0	11.0	112	6.0

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUN 15...	0740	3	37.0	110	8.0	15	58	15	4.9	4.2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

622339146000900 - CROSSWIND LAKE NR GULKANA AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPETEMBER 1982

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)
JUN 15...	1.4	56	<5.0	1.1	.1	.7	<.10	.020	2	10

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 15...	<1	<10	4	12	4	6	.2	<1	57

622616145443600 - EWAN LK NR GULKANA AK

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
JUN 15...	0805	3.00	.90	150	8.0
15...	0806	8.00	2.4	150	8.0
15...	0807	16.0	4.9	148	7.5

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUN 15...	0810	3	18.0	150	8.2	5	64	16	5.8	4.5

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)
JUN 15...	1.6	66	<5.0	1.5	<.1	.1	<.10	.020	1	<10

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 15...	<1	<10	4	9	4	3	<.1	<1	15

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

622840146000000 - DEEP LAKE NR GULKANA AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
JUN 14...	0935	3.00	.90	91	8.0
14...	0936	9.00	2.7	90	8.0
14...	0937	18.0	5.5	90	7.5

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUN 14...	0940	3	20.0	90	7.9	15	54	14	4.6	3.9

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)
JUN 14...	1.4	53	<5.0	1.9	<.1	3.1	<.10	.020	1	<10

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 14...	<1	<10	4	47	<1	2	.3	<1	18

623353145521300 - FISH LAKE NR GULKANA AK

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
JUN 15...	0850	3.00	.90	135	7.0
15...	0851	6.00	1.8	135	7.0
15...	0852	11.0	3.4	135	7.0

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
JUN 15...	0855	3	12.0	135	7.8	15	57	14	5.3	4.4

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

623353145521300 - FISH LAKE NR GULKANA AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)
JUN 15...	1.4	58	<5.0	1.6	<.1	.9	<.10	.020	1	<10

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 15...	<1	<10	2	61	<1	6	<.1	<1	<3

611731149565900 - LAKE LORRAINE POINT MACKENZIE NR ANCHORAGE AK

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAR 10...	1501	6.00	1.8	6.5	4.5	6.7	52
10...	1502	8.00	2.4	6.5	4.4	6.5	51
10...	1503	10.0	3.0	6.5	4.3	6.3	49
10...	1504	12.0	3.6	6.5	4.3	6.0	47
10...	1505	15.0	4.6	6.5	4.3	5.8	45
10...	1506	18.0	5.5	6.5	4.3	5.9	46
10...	1507	21.0	6.4	6.5	4.8	5.7	45
10...	1508	24.0	7.3	6.5	4.6	5.7	45
10...	1509	26.0	7.9	6.5	4.6	5.7	45

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	COLOR (PLATINUM-COBALT UNITS)	BAROMETRIC PRESSURE (MM OF HG)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAR 10...	1515	6.00	1.8	26.5	0	752	41	10	4.0	3.0	.9
10...	1520	24.0	7.3	--	0	--	43	12	3.1	3.9	1.0

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
MAR 10...	<5.0	2.9	.1	.9	.09	.08	.352	.333	.45	.45	.80
10...	<5.0	2.9	.1	.7	.07	.07	.405	.435	.59	.56	1.00

DATE	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAR 10...	.02	.78	.89	.013	.010	.000	.000	0	30	10
10...	.00	1.0	1.1	.011	.012	<.001	<.001	0	30	30

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

612147150091400 - HORSESHOE LK W ARM PT MACKENZIE NR ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAR								
10...	0930	4.00	1.2	149	7.0	1.5	11.2	80
10...	0931	6.00	1.8	149	6.9	2.9	10.3	77
10...	0932	8.00	2.4	149	7.0	3.3	10.1	76
10...	0933	10.0	3.0	149	6.9	3.4	9.6	73
10...	0934	12.0	3.7	151	6.9	3.5	7.9	60
10...	0935	14.0	4.3	150	6.8	3.5	7.6	58
10...	0936	16.0	4.9	152	6.8	3.6	6.4	48
10...	0937	18.0	5.5	165	6.7	4.1	3.7	28
10...	0938	20.0	6.1	171	6.7	5.0	2.9	23
10...	0940	22.0	6.7	175	6.6	5.0	2.9	23
10...	0941	23.5	7.0	186	6.7	5.1	2.1	16

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	COLOR (PLATINUM-COBALT UNITS)	BAROMETRIC PRESSURE (MM OF HG)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)
MAR												
10...	0945	6.00	1.8	25.0	30	754	76	26	2.6	5.6	.7	75
10...	0950	21.0	6.4	--	120	--	82	28	3.0	6.3	.7	77

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)
MAR											
10...	<5.0	6.7	.1	[illegible]	--	.11	.11	.102	.089	.61	.54
10...	7.0	8.7	.1	[illegible]	124	.06	.03	.274	.322	.61	.52

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAR											
10...	.71	.08	.63	.82	.008	.002	.009	<.001	10	560	90
10...	.88	.04	.84	.94	.002	<.001	.004	.000	10	2300	1400

612158150081600 - HORSESHOE LK E ARM PT MACKENZIE NR ANCHORAGE AK

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAR								
10...	1240	4.00	1.2	187	7.5	1.8	8.5	62
10...	1242	6.00	1.8	204	7.4	4.0	5.1	39
10...	1243	8.00	2.4	218	7.5	4.1	4.8	[illegible]
10...	1244	10.0	3.0	228	7.5	4.6	3.2	[illegible]
10...	1245	12.0	3.7	247	7.5	4.9	2.3	[illegible]
10...	1246	14.0	4.3	267	7.4	5.0	1.5	12
10...	1247	16.0	4.9	311	7.2	5.5	1.2	10
10...	1248	17.4	5.2	351	7.1	5.6	1.1	9

SOUTH-CENTRAL ALASKA--Continued

612158150081600 - HORSESHOE LK E ARM PT MACKENZIE NR ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	COLOR (PLATINUM-COBALT UNITS)	BAROMETRIC PRESSURE (MM OF HG)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
MAR											
10...	1250	5.00	1.5	19.0	5	754	110	40	3.1	4.8	.7
10...	1255	16.0	4.9	--	5	--	160	57	4.3	9.9	1.5

DATE	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)
MAR											
10...	103	< 5.0	4.4	.1	12	.03	.02	.144	.113	.25	.32
10...	151	< 5.0	12	.1	18	< .01	< .01	1.50	1.30	.50	.40

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAR											
10...	.39	.00	.43	.42	.012	.007	.002	.000	0	20	10
10...	2.00	.30	1.7	--	.008	.006	.007	< .001	10	240	250

612739149433600 - KNIK LK (MAX DEPTH) NR KNIK AK

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN								
15...	1601	1.60	.50	159	8.5	15.6	10.6	106
15...	1602	3.30	1.0	158	8.5	15.6	10.5	105
15...	1603	4.90	1.5	158	8.5	15.6	10.7	107
15...	1604	6.60	2.0	158	8.6	15.5	10.7	107
15...	1605	8.20	2.5	158	8.5	15.4	10.8	108
15...	1606	9.80	3.0	158	8.5	14.8	11.0	109
15...	1607	11.5	3.5	159	8.5	13.2	13.8	131
15...	1608	13.1	4.0	162	8.6	11.0	15.2	138
15...	1609	14.8	4.5	165	8.6	10.0	15.5	137
15...	1610	16.4	5.0	169	8.6	9.0	15.5	134
15...	1611	18.0	5.5	177	8.4	8.3	14.6	124
15...	1612	19.7	6.0	182	8.0	7.6	13.4	112
15...	1613	21.3	6.5	184	7.9	7.3	12.5	104
15...	1614	23.0	7.0	185	7.8	7.0	10.8	89
15...	1615	24.6	7.5	186	7.6	6.5	7.5	61
15...	1616	26.2	8.0	187	7.5	6.4	5.0	40
15...	1617	27.9	8.5	188	7.4	6.2	1.6	13
15...	1618	29.5	9.0	192	7.3	5.8	.0	0
15...	1619	31.2	9.5	193	7.3	5.8	.0	0
15...	1620	32.8	10.0	193	7.3	5.8	.0	0
15...	1622	36.1	11.0	196	7.3	5.7	.0	0
27...	1431	1.60	.50	154	8.5	18.5	10.4	112
27...	1432	3.30	1.0	155	8.5	18.5	10.2	110
27...	1433	4.90	1.5	155	8.5	18.4	10.1	109
27...	1434	6.60	2.0	155	8.5	18.3	10.1	109
27...	1435	8.20	2.5	155	8.5	18.1	10.2	109
27...	1436	9.80	3.0	154	8.4	16.7	10.4	108
27...	1437	11.5	3.5	155	8.4	15.5	12.3	125
27...	1438	13.1	4.0	155	8.6	13.9	15.2	149
27...	1439	14.8	4.5	160	8.6	11.9	15.6	146
27...	1440	16.4	5.0	166	8.6	10.7	15.7	143
27...	1441	18.0	5.5	169	8.5	9.5	15.1	134
27...	1442	19.7	6.0	173	8.2	9.0	13.9	122
27...	1443	21.3	6.5	174	8.1	8.6	13.5	117
27...	1444	23.0	7.0	175	8.1	8.1	12.6	108
27...	1445	26.2	8.0	177	7.8	7.3	5.4	45
27...	1446	29.5	9.0	180	7.5	6.6	.0	0
27...	1447	32.8	10.0	186	7.5	6.2	.0	0
27...	1448	36.1	11.0	197	7.4	6.0	.0	0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

612739149433600 - KNIK LK (MAX DEPTH) NR KNIK AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
SEP								
03...	0920	.30	.10	188	8.2	16.3	10.9	111
03...	0925	3.30	1.0	188	8.2	16.3	10.7	109
03...	0930	6.60	2.0	188	8.1	16.3	10.6	108
03...	0935	9.80	3.0	188	8.1	16.3	10.4	106
03...	0942	13.1	4.0	188	8.1	16.3	10.3	105
03...	0944	16.4	5.0	191	8.0	16.1	10.1	103
03...	0946	19.7	6.0	221	7.6	14.9	12.5	124
03...	0950	23.0	7.0	228	7.3	12.5	9.8	92
03...	0952	26.2	8.0	222	7.1	10.2	2.4	21
03...	0954	29.5	9.0	217	6.9	9.0	1.3	11
03...	1000	32.8	10.0	236	6.7	7.6	1.1	9
03...	1002	36.1	11.0	333	6.4	7.2	1.1	9

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	CLOUD COVER (PERCENT)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)
JUN									
15...	1625	4	37.4	--	--	99	--	7.4	14.5
27...	1450	4	36.1	--	--	95	180	--	17.0
SEP									
03...	1005	--	37.0	11.5	3.5	100	--	--	13.5
03...	1007	--	--	23.0	7.0	--	--	--	--
03...	1009	--	--	32.8	10.0	--	--	--	--

DATE	TRANSPARENCY (SECCHI DISK) (M)	BAROMETRIC PRESSURE (MM OF HG)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
JUN									
15...	2.80	767	118	<.01	--	1.00	.026	--	--
27...	5.4	757	110	<.01	--	1.40	.043	6.20	.200
SEP									
03...	5.8	766	120	--	<.01	.90	.022	.900	.200
03...	--	--	125	--	<.01	1.00	.022	1.60	.300
03...	--	--	148	--	<.01	3.40	.134	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

613318149134400 - MATANUSKA LK (MAX DEPTH) NR PALMER AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN								
16...	0801	1.60	.50	231	8.3	13.2	10.9	103
16...	0802	3.30	1.0	231	8.3	13.2	10.9	103
16...	0803	4.90	1.5	231	8.3	13.2	10.9	103
16...	0804	6.60	2.0	231	8.3	13.2	10.9	103
16...	0805	8.20	2.5	232	8.3	13.1	10.8	102
16...	0806	9.80	3.0	234	8.3	12.8	10.5	99
16...	0807	11.5	3.5	234	8.3	12.6	10.5	98
16...	0808	13.1	4.0	234	8.3	12.5	10.4	97
16...	0809	14.8	4.5	234	8.3	12.4	10.4	97
16...	0810	16.4	5.0	234	8.3	12.3	10.3	96
16...	0811	18.0	5.5	234	8.3	12.2	10.2	95
16...	0812	19.7	6.0	238	8.2	12.0	9.8	91
16...	0813	21.3	6.5	245	8.2	10.7	9.1	82
16...	0814	23.0	7.0	251	8.3	9.3	8.8	76
16...	0815	24.6	7.5	263	8.2	7.5	7.4	61
16...	0816	26.2	8.0	263	8.2	6.8	6.7	55
16...	0817	27.9	8.5	263	8.2	6.8	6.7	55
16...	0818	29.5	9.0	264	8.1	6.0	4.3	34
16...	0819	31.2	9.5	[illegible]	7.9	5.6	1.3	10
16...	0820	32.8	10.0	273	7.8	5.4	.0	0
16...	0821	36.1	11.0	270	7.7	5.2	.0	0
16...	0822	39.4	12.0	268	7.7	5.1	.0	0
16...	0823	42.7	13.0	266	7.7	5.4	.0	0
16...	0824	45.9	14.0	265	7.6	5.4	.0	0
16...	0825	49.2	15.0	264	7.6	5.2	.0	0
16...	0826	55.8	17.0	266	7.6	5.0	.0	0
16...	0827	62.3	19.0	268	7.6	5.0	.0	0
16...	0828	68.9	21.0	271	7.6	4.9	.0	0
16...	0829	72.2	22.0	274	7.5	4.9	.0	0
29...	0946	1.60	.50	233	8.4	16.4	11.1	116
29...	0947	3.30	1.0	233	8.4	16.3	11.0	115
29...	0948	4.90	1.5	233	8.4	16.3	10.9	114
29...	0949	6.60	2.0	233	8.4	16.2	10.8	113
29...	0950	8.20	2.5	233	8.4	16.2	10.7	112
29...	0951	9.80	3.0	233	8.4	16.2	10.7	112
29...	0952	11.5	3.5	233	8.4	16.2	10.7	112
29...	0953	13.1	4.0	232	8.4	16.1	10.8	113
29...	0954	14.8	4.5	236	8.4	15.9	10.8	112
29...	0955	16.4	5.0	241	8.4	14.7	10.8	109

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

613318149134400 - MATANUSKA LK (MAX DEPTH) NR PALMER AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN								
29...	0956	18.0	5.5	241	8.5	13.9	10.8	107
29...	0957	19.7	6.0	245	8.5	13.0	10.1	98
29...	0958	21.3	6.5	247	8.4	11.8	9.6	91
29...	0959	23.0	7.0	253	8.5	10.5	9.1	88
29...	1000	26.2	8.0	265	8.6	7.8	8.3	72
29...	1001	29.5	9.0	259	9.2	6.6	10.3	86
29...	1002	32.8	10.0	263	8.1	5.3	1.1	9
29...	1003	36.1	11.0	262	8.0	4.9	.0	0
29...	1004	39.4	12.0	261	7.9	4.6	.0	0
29...	1005	45.9	14.0	260	7.9	4.3	.0	0
29...	1006	52.5	16.0	261	7.9	4.2	.0	0
29...	1007	59.0	18.0	264	7.9	4.1	.0	0
29...	1008	65.6	20.0	266	7.9	4.1	.0	0
29...	1009	70.5	21.5	268	7.9	4.0	.0	0
29...	1010	75.5	23.0	274	7.7	4.0	.0	0
SEP								
01...	1350	.30	.01	246	8.2	17.0	10.2	106
01...	1355	3.30	1.0	247	8.2	16.6	9.9	102
01...	1400	6.60	2.0	248	8.2	16.4	9.7	100
01...	1405	9.80	3.0	248	8.2	16.4	9.6	99
01...	1415	13.1	4.0	248	8.2	16.3	9.4	97
01...	1417	16.4	5.0	248	8.2	16.3	9.3	96
01...	1420	19.7	6.0	249	8.2	16.3	9.2	94
01...	1425	23.0	7.0	284	8.1	15.4	8.8	89
01...	1430	26.2	8.0	250	8.5	12.3	10.7	101
01...	1432	29.5	9.0	268	9.0	10.4	18.0	162
01...	1434	32.8	10.0	294	8.6	8.7	5.6	48
01...	1436	36.1	11.0	286	7.4	6.0	1.4	11
01...	1438	39.4	12.0	277	7.3	5.3	.0	0
01...	1440	42.7	13.0	275	7.2	5.0	.0	0
01...	1442	45.9	14.0	274	7.2	4.9	.0	0
01...	1445	49.2	15.0	273	7.1	4.8	.0	0
01...	1447	52.5	16.0	271	7.2	4.7	.0	0
01...	1449	55.8	17.0	274	7.1	4.6	.0	0
01...	1451	59.0	18.0	276	7.1	4.6	.0	0
01...	1453	62.3	19.0	274	7.1	4.7	.0	0
01...	1455	65.6	20.0	273	7.1	4.7	.0	0
01...	1457	68.9	21.0	273	7.2	4.7	.0	0

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	CLOUD COVER (PERCENT)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)
JUN									
16...	0830	8	77.1	--	--	100	--	8.1	12.0
29...	1015	8	75.5	--	--	10	260	7.5	19.5
SEP									
01...	1500	--	--	13.1	4.0	25	--	--	18.0
01...	1505	--	--	26.2	8.0	--	--	--	--
01...	1510	--	--	49.2	15.0	--	--	--	--

DATE	TRANSPARENCY (SECCHI DISK) (M)	BAROMETRIC PRESSURE (MM OF HG)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
JUN									
16...	4.4	770	145	<.01	--	1.30	.043	--	--
29...	6.7	747	150	<.01	--	1.60	.044	6.00	<.100
SEP									
01...	7.5	761	171	--	<.01	1.20	.031	.600	.100
01...	--	--	207	--	<.01	.90	.034	1.40	<.100
01...	--	--	169	--	<.01	1.60	.049	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

613326149130700 - SLIVER LK (MAX DEPTH) NR PALMER AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN								
16...	1301	1.60	.50	249	8.0	14.1	10.8	105
16...	1302	3.30	1.0	250	8.0	13.9	10.8	104
16...	1303	4.90	1.5	249	8.0	13.7	10.7	103
16...	1304	6.60	2.0	250	8.0	13.5	10.6	101
16...	1305	8.20	2.5	252	8.0	13.4	10.4	99
16...	1306	9.80	3.0	253	8.0	13.3	10.1	96
16...	1307	11.5	3.5	253	7.9	13.1	9.9	94
16...	1308	13.1	4.0	268	7.7	12.3	7.4	69
16...	1309	14.8	4.5	293	7.6	10.9	5.0	45
16...	1310	16.4	5.0	337	7.6	8.5	.0	0
16...	1311	18.0	5.5	341	7.6	7.6	.0	0
16...	1312	19.7	6.0	342	7.7	7.0	.0	0
16...	1313	21.3	6.5	342	7.7	6.8	.0	0
25...	1501	1.60	.50	237	8.2	19.1	11.7	127
25...	1502	3.30	1.0	233	8.3	18.1	12.7	136
25...	1503	4.90	1.5	237	8.1	17.2	11.8	124
25...	1504	6.60	2.0	237	8.1	16.5	11.3	117
25...	1505	8.20	2.5	240	8.0	15.9	11.0	112
25...	1506	9.80	3.0	243	7.9	15.2	9.9	99
25...	1507	11.5	3.5	249	7.8	14.4	8.8	87
25...	1508	13.1	4.0	264	7.7	13.1	6.3	60
25...	1509	14.8	4.5	283	7.6	11.7	4.5	42
25...	1510	16.4	5.0	316	7.6	10.2	.9	7
25...	1511	18.0	5.5	328	7.7	8.7	.0	0
25...	1512	19.7	6.0	329	7.7	7.9	.0	0
SEP								
02...	1340	.32	.10	259	7.9	16.6	9.4	97
02...	1400	3.30	1.0	259	7.9	15.7	9.3	94
02...	1405	6.60	2.0	258	7.8	15.5	9.1	92
02...	1410	9.80	3.0	259	7.8	15.4	9.0	90
02...	1413	13.1	4.0	264	7.7	15.2	8.1	81
02...	1416	16.4	5.0	298	7.4	14.5	2.0	20
02...	1420	18.0	5.5	360	7.2	13.2	.9	9
02...	1424	19.7	6.0	361	7.2	12.3	.8	8
02...	1428	20.3	6.2	361	7.6	11.3	.8	7

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	CLOUD COVER (PERCENT)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)
JUN									
16...	1315	3	21.3	--	--	100	--	7.9	12.5
25...	1515	3	20.0	--	--	5	270	7.6	22.5
SEP									
02...	1430	--	20.3	3.30	1.0	20	--	--	22.0
02...	1432	--	--	9.80	3.0	--	--	--	--
02...	1434	--	--	18.0	5.5	--	--	--	--

DATE	TRANSPARENCY (SECCHI DISK) (M)	BAROMETRIC PRESSURE (MM OF HG)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
JUN									
16...	4.7	769	173	<.01	--	.80	.009	--	--
25...	6.1	760	150	<.01	--	1.60	.009	.800	.200
SEP									
02...	4.8	763	170	--	<.01	2.00	.028	.600	.200
02...	--	--	133	--	<.01	1.00	.036	1.20	.600
02...	--	--	218	--	<.01	1.00	.036	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

613335149152500 - JUNCTION LK (MAX DEPTH) NR PALMER AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN								
16...	1501	1.60	.50	268	8.4	14.3	12.1	118
16...	1502	3.30	1.0	268	8.3	14.3	11.9	116
16...	1503	4.90	1.5	268	8.3	14.2	11.9	116
16...	1504	6.60	2.0	267	8.3	14.1	11.9	115
16...	1505	8.20	2.5	273	8.4	13.8	11.5	111
16...	1506	9.80	3.0	273	8.3	13.4	11.4	109
16...	1507	11.5	3.5	274	8.3	13.2	11.2	107
16...	1508	13.1	4.0	274	8.3	13.1	11.1	105
16...	1509	14.8	4.5	274	8.2	13.0	10.7	101
16...	1510	16.4	5.0	278	8.2	12.4	10.1	94
16...	1511	18.0	5.5	310	8.1	10.5	10.0	89
16...	1512	19.7	6.0	336	8.3	8.4	10.9	93
16...	1513	21.3	6.5	339	8.3	6.7	9.2	75
16...	1514	23.0	7.0	340	8.0	5.7	4.1	33
16...	1515	24.6	7.5	343	7.8	5.0	.0	0
16...	1516	26.2	8.0	343	7.8	4.9	.0	0
16...	1517	27.9	8.5	342	7.7	4.9	.0	0
16...	1518	29.5	9.0	345	7.7	4.7	.0	0
16...	1519	31.2	9.5	348	7.7	4.6	.0	0
16...	1520	34.4	10.5	361	7.7	4 2	.0	0
16...	1521	37.7	11.5	373	7.6	4.0	.0	0
16...	1522	41.0	12.5	379	7.6	3.9	.0	0
16...	1523	42.7	13.0	381	7.6	3.9	.0	0
16...	1524	44.3	13.5	383	7.6	3.9	.0	0
28...	1431	1.60	.50	256	8.3	17.3	10.3	108
28...	1432	3.20	1 0	258	8.3	17.2	10.1	106
28...	1433	4.90	1.5	257	8.3	17.1	10.2	107
28...	1434	6.60	2.0	257	8.3	17.0	10.2	107
28...	1435	8.20	2.5	258	8.3	17.0	10.2	107
28...	1436	9.80	3.0	258	8.3	16.9	10.1	105
28...	1437	11.5	3.5	260	8.3	16.6	10.1	105
28...	1438	13.1	4.0	262	8.3	15.8	10.1	103
28...	1439	14.8	4.5	283	8.0	14.5	8.9	88
28...	1440	16.4	5.0	281	8.2	12.5	8.9	84
28...	1441	18.0	5.5	306	8.2	11.0	9.0	83
28...	1442	19.7	6.0	325	8.7	8.7	11.4	99
28...	1443	21.3	6.5	330	8.3	6.9	8.2	68
28...	1444	23.0	7.0	335	8.0	6.1	1.1	9
28...	1445	26.2	8.0	335	7.9	5.3	.0	0
28...	1446	29.5	9.0	337	7.9	5.0	.0	0
28...	1447	32.8	10.0	343	7.9	4.7	.0	0
28...	1448	36.1	11.0	351	7.8	4.4	.0	0
28...	1449	39.4	12.0	360	7.8	4.2	.0	0
28...	1450	42.7	13.0	370	7.7	4.1	.0	0
SEP								
02...	1500	.30	.10	267	8.1	17.2	10.0	104
02...	1510	3.30	1.0	268	8.0	16.5	9.7	100
02...	1520	6.60	2.0	268	8.0	16.3	9.6	98
02...	1530	9.80	3.0	266	8.0	16.1	9.5	97
02...	1532	13.1	4.0	271	7.9	15.9	8.8	89
02...	1534	16.4	5.0	274	7.8	15.8	8.5	86
02...	1536	19.7	6.0	368	7.7	13.7	8.2	79
02...	1540	23.0	7.0	360	7.5	9.8	3.1	27
02...	1542	26.2	8.0	348	7.3	7.9	1.3	11
02...	1544	29.5	9.0	344	7.2	6.4	1.2	10
02...	1546	32.8	10.0	346	7.2	5.5	1.1	9
02...	1548	36.1	11.0	356	7.0	4.8	.0	0
02...	1550	39.4	12.0	362	7.0	4.6	.0	0
02...	1552	42.7	13.0	373	6.9	4.5	.0	0
02...	1554	45.9	14.0	371	6.9	4.4	.0	0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

613335149152500 - JUNCTION LK (MAX DEPTH) NR PALMER AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	CLOUD COVER (PERCENT)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)
JUN									
16...	1526	5	44.3	--	--	--	--	7.7	17.5
28...	1455	5	42.7	--	--	25	320	7.5	17.5
SEP									
02...	1556	--	46.0	9.80	3.0	25	--	--	20.0
02...	1558	--	--	23.0	7.0	--	--	--	--
02...	1600	--	--	39.4	12.0	--	--	--	--

DATE	TRANSPARENCY (SECCHI DISK) (M)	BAROMETRIC PRESSURE (MM OF HG)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
JUN									
16...	2.80	768	200	<.01	--	1.00	.032	--	--
28...	5.9	758	182	<.01	--	4.20	.027	1.60	<.100
SEP									
02...	6.0	763	204	--	<.01	1.50	.020	.600	<.100
02...	--	--	242	--	.01	1.20	.000	5.10	2.40
02...	--	--	281	--	<.01	2.70	.058	--	--

613359149135100 - JOHNSON LK (MAX DEPTH) NR PALMER AK

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN								
16...	1101	1.60	.50	137	8.0	14.0	11.2	108
16...	1102	3.30	1.0	136	8.0	14.0	10.9	106
16...	1103	4.90	1.5	136	8.0	13.9	10.9	105
16...	1104	6.60	2.0	136	8.0	13.9	10.9	105
16...	1105	8.20	2.5	136	8.0	13.8	10.9	105
16...	1106	9.80	3.0	136	8.0	13.5	10.8	103
16...	1107	11.5	3.5	135	8.0	13.3	10.7	102
16...	1108	13.1	4.0	135	7.9	13.0	10.5	99
16...	1109	14.8	4.5	140	7.6	12.6	9.6	89
16...	1110	16.4	5.0	156	7.5	10.0	8.2	72
16...	1111	18.0	5.5	163	7.4	8.7	7.6	65
16...	1112	19.7	6.0	163	7.4	7.8	6.7	56
16...	1113	21.3	6.5	163	7.4	7.0	5.7	47
16...	1114	23.0	7.0	162	7.4	6.1	3.6	29
16...	1115	24.6	7.5	162	7.4	5.8	2.1	17
16...	1116	26.2	8.0	161	7.3	5.6	1.3	10
16...	1117	27.9	8.5	160	7.3	5.2	.0	0
16...	1118	29.5	9.0	160	7.3	5.0	.0	0
16...	1119	31.2	9.5	162	7.3	4.9	.0	0
16...	1120	34.4	10.5	165	7.3	4.6	.0	0
16...	1121	39.4	12.0	172	7.3	4.4	.0	0
16...	1122	45.9	14.0	202	7.3	4.3	.0	0
16...	1123	47.6	14.5	214	7.4	4.2	.0	0
29...	1146	1.60	.50	145	8.2	17.7	10.4	111
29...	1147	3.30	1.0	145	8.2	17.4	10.0	107
29...	1148	4.90	1.5	145	8.2	17.3	9.9	104
29...	1150	8.20	2.5	146	8.1	17.1	9.6	101
29...	1151	9.80	3.0	145	8.2	17.0	10.1	106
29...	1152	11.5	3.5	144	8.4	16.2	10.8	111
29...	1153	13.1	4.0	143	8.4	15.0	11.1	111
29...	1154	14.8	4.5	146	8.1	12.9	11.1	106
29...	1155	16.4	5.0	161	7.8	11.2	10.6	98
29...	1156	18.0	5.5	166	7.8	9.9	10.4	93
29...	1157	19.7	6.0	167	7.8	8.7	9.0	78
29...	1158	21.3	6.5	164	7.7	7.7	8.3	70
29...	1159	23.0	7.0	162	7.7	7.4	7.0	59
29...	1200	24.6	7.5	163	7.6	6.5	4.4	36
29...	1201	26.2	8.0	162	7.6	6.1	2.0	16

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

613359149135100 - JOHNSON LK (MAX DEPTH) NR PALMER AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN								
29...	1202	29.5	9.0	162	7.5	5.4	.6	5
29...	1203	32.8	10.0	163	7.6	5.1	.0	0
29...	1204	36.1	11.0	163	7.6	4.9	.0	0
29...	1205	39.4	12.0	166	7.6	4.7	.0	0
29...	1206	42.7	13.0	180	7.6	4.5	.0	0
29...	1207	45.9	14.0	195	7.6	4.4	.0	0
SEP								
03...	1130	.30	.10	164	7.7	16.1	9.7	99
03...	1135	3.20	1.0	163	7.7	16.1	9.6	98
03...	1140	6.60	2.0	163	7.6	16.1	9.5	97
03...	1145	9.80	3.0	163	7.6	16.1	9.4	96
03...	1150	13.1	4.0	163	7.6	16.1	9.3	95
03...	1155	16.4	5.0	164	7.5	16.0	9.0	91
03...	1200	19.7	6.0	198	7.4	12.6	10.7	101
03...	1202	23.0	7.0	195	7.3	10.4	9.4	84
03...	1204	26.2	8.0	186	7.2	8.4	4.3	37
03...	1206	29.5	9.0	178	7.1	6.8	1.6	13
03...	1208	32.8	10.0	174	7.0	5.8	1.2	10
03...	1210	36.1	11.0	175	7.0	5.5	1.1	9
03...	1212	39.4	12.0	187	6.9	5.2	1.1	9
03...	1214	42.7	13.0	201	6.8	5.1	1.1	9
03...	1215	45.9	14.0	213	6.8	4.9	1.1	9
03...	1216	46.9	14.3	254	6.7	4.7	.0	0

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	CLOUD COVER (PERCENT)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TRANSPARENCY (SECCHI DISK) (M)
JUN										
16...	1130	6	47.6	--	--	100	--	7.1	15.0	5.0
29...	1210	5	46.3	--	--	30	160	--	16.0	5.5
SEP										
03...	1218	--	46.3	9.80	3.0	100	--	--	14.0	5.6
03...	1220	--	--	19.7	6.0	--	--	--	--	--
03...	1222	--	--	45.9	14.0	--	--	--	--	--

DATE	BAROMETRIC PRESSURE (MM OF HG)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
JUN									
16...	768	104	.01	--	1.40	1.4	.028	--	--
29...	757	92	<.01	--	2.10	--	.031	2.20	.300
SEP									
03...	764	114	--	<.01	1.60	--	.038	.900	<.100
03...	--	100	--	<.01	1.00	--	.024	.800	<.100
03...	--	125	--	<.01	3.30	--	.054	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

613706149123800 - WALBY LK (MAX DEPTH) NR PALMER AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN								
15...	0801	1.60	.50	164	8.1	13.6	9.8	95
15...	0802	3.30	1.0	164	8.1	13.6	9.8	95
15...	0803	4.90	1.5	164	8.1	13.6	9.8	95
15...	0804	6.60	2.0	163	8.0	13.6	9.8	95
15...	0805	8.20	2.5	163	8.0	13.4	9.7	94
15...	0806	9.80	3.0	163	8.0	13.0	9.4	90
15...	0807	11.5	3.5	164	7.9	12.7	9.2	88
15...	0808	13.1	4.0	167	7.5	12.2	7.6	72
15...	0809	14.8	4.5	197	7.1	11.2	2.8	26
15...	0810	16.4	5.0	228	6.9	9.7	.0	0
28...	1031	1.60	.50	175	8.3	17.1	9.4	100
28...	1032	3.30	1.0	175	8.3	17.1	9.3	99
28...	1033	4.90	1.5	177	8.3	17.1	9.1	97
28...	1034	6.60	2.0	177	8.3	17.1	9.1	97
28...	1035	8.20	2.5	176	8.3	17.1	9.1	97
28...	1036	9.80	3.0	176	8.3	17.0	9.2	97
28...	1037	11.5	3.5	178	8.0	16.0	8.7	90
28...	1038	13.1	4.0	176	7.8	14.0	7.8	77
SEP								
01...	1100	.30	.10	202	7.6	14.7	8.8	89
01...	1115	3.30	1.0	204	7.6	14.7	8.5	86
01...	1120	4.90	1.5	203	7.6	14.6	8.3	84
01...	1125	6.60	2.0	203	7.5	14.6	8.2	83
01...	1128	8.20	2.5	203	7.5	14.6	8.2	83
01...	1130	9.80	3.0	203	7.5	14.5	8.1	81
01...	1135	11.5	3.5	204	7.5	14.5	7.9	79
01...	1140	13.1	4.0	204	7.5	14.3	7.6	76
01...	1145	14.8	4.5	205	7.4	14.3	7.3	73
01...	1150	16.4	5.0	230	7.0	14.1	3.9	39
01...	1155	17.7	5.4	351	6.7	13.[illegible]	.9	9

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	CLOUD COVER (PERCENT)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TRANSPARENCY (SECCHI DISK) (M)
JUN										
15...	0812	3	17.1	--	--	100	--	7.5	14.0	2.60
28...	1040	3	15.7	--	--	5	175	7.7	18.0	3.0
SEP										
01...	1200	--	18.0	3.30	1.0	20	--	--	16.5	2.40
01...	1205	--	--	9.80	3.0	--	--	--	--	--
01...	1210	--	--	14.8	4.5	--	--	--	--	--

DATE	BAROMETRIC PRESSURE (MM OF HG)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
JUN									
15...	758	108	< .01	--	.80	.80	.017	--	--
28...	749	101	.01	--	3.30	3.3	.015	1.30	<.100
SEP									
01...	753	126	--	<.01	1.00	--	.024	2.60	.300
01...	--	153	--	<.01	1.20	--	.024	2.10	.300
01...	--	156	--	<.01	1.00	--	.024	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

613949149185500 - REED LK (MAX DEPTH) NR WASILLA AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN								
15...	1001	1.60	.50	70	7.7	13.4	10.5	102
15...	1002	3.30	1.0	70	7.7	13.4	10.4	101
15...	1003	4.90	1.5	70	7.7	13.4	10.3	100
15...	1004	6.60	2.0	69	7.7	13.4	10.4	101
15...	1005	8.20	2.5	69	7.6	13.4	10.3	100
15...	1006	9.80	3.0	69	7.6	13.2	10.3	100
15...	1007	11.5	3.5	68	7.6	13.1	10.4	101
15...	1008	13.1	4.0	69	7.5	12.8	10.1	97
15...	1009	14.8	4.5	70	7.4	12.6	9.7	93
15...	1010	16.4	5.0	70	7.3	12.6	9.4	90
28...	1216	1.60	.50	66	7.7	17.1	9.9	106
28...	1217	3.20	1.0	66	7.7	17.1	9.6	103
28...	1218	4.90	1.5	66	7.7	17.1	9.5	102
28...	1219	6.60	2.0	66	7.7	17.0	9.6	102
28...	1220	8.20	2.5	66	7.7	17.0	9.5	101
28...	1221	9.80	3.0	66	7.6	17.0	9.6	102
28...	1222	11.5	3.5	66	7.6	17.0	9.4	100
28...	1223	13.1	4.0	63	7.4	15.5	10.0	103
28...	1224	14.8	4.5	63	7.3	14.8	9.9	101
28...	1225	16.4	5.0	65	7.1	14.3	8.5	86
SEP								
01...	0857	.30	.10	88	7.2	15.5	9.2	95
01...	0900	3.30	1.0	89	7.1	15.5	8.9	86
01...	0903	4.90	1.5	89	7.1	15.5	8.7	89
01...	0906	6.60	2.0	89	7.0	15.5	8.5	87
01...	0909	8.20	2.5	89	6.9	15.5	8.4	86
01...	0912	9.80	3.0	89	6.9	15.5	8.3	85
01...	0915	11.5	3.5	90	6.9	15.5	8.2	84
01...	0918	13.1	4.0	90	6.9	15.5	8.1	83
01...	0921	14.8	4.5	90	6.9	15.5	8.0	82
01...	0924	16.4	5.0	95	6.7	15.5	6.8	70
01...	0927	18.0	5.5	202	6.3	15.3	1.0	10
01...	0930	19.7	6.0	300	6.8	14.2	.6	6

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	CLOUD COVER (PERCENT)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TRANSPARENCY (SECCHI DISK) (M)
JUN										
15...	1015	3	16.4	--	--	100	--	7.8	13.0	4.5
28...	1230	3	16.7	--	--	15	60	7.5	18.0	4.6
SEP										
01...	0935	--	20.0	3.30	1.0	80	--	--	13.5	2.30
01...	0940	--	--	9.80	3.0	--	--	--	--	--
01...	0945	--	--	16.4	5.0	--	--	--	--	--

DATE	BAROMETRIC PRESSURE (MM OF HG)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
JUN									
15...	753	46	.01	--	1.00	1.0	.011	<.100	<.100
28...	743	36	.01	--	3.20	3.2	.009	<.100	<.100
SEP									
01...	748	69	--	<.01	1.00	--	.064	2.60	.300
01...	--	35	--	<.01	1.00	--	.031	3.00	.400
01...	--	47	--	<.01	1.10	--	.060	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

614812148172500 - RAVINE LK (MAX DEPTH) NR SUTTON AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN								
14...	1131	1.60	.50	296	7.8	10.4	10.0	95
14...	1132	3.30	1.0	296	8.0	10.4	9.8	94
14...	1133	4.90	1.5	298	8.0	10.5	9.8	94
14...	1134	6.60	2.0	297	8.0	10.4	9.8	94
14...	1135	8.20	2.5	299	8.0	10.3	9.7	92
14...	1136	9.80	3.0	299	8.0	10.1	9.6	91
14...	1137	11.5	3.5	301	7.9	10.0	9.5	90
14...	1138	13.1	4.0	305	7.9	9.6	9.2	86
14...	1139	14.8	4.5	310	7.8	9.2	8.5	79
14...	1140	16.4	5.0	334	7.7	8.1	7.0	63
14...	1141	18.0	5.5	364	7.6	6.5	4.5	39
14...	1142	19.7	6.0	379	7.6	5.7	2.2	19
14...	1143	21.3	6.5	382	7.6	5.4	1.9	16
14...	1144	23.0	7.0	385	7.6	5.2	1.4	12
14...	1145	24.6	7.5	387	7.6	5.1	1.2	10
27...	1001	1.60	.50	311	8.3	16.8	9.8	109
27...	1002	3.30	1.0	312	8.3	16.8	9.5	105
27...	1003	4.90	1.5	312	8.3	16.8	9.3	103
27...	1004	6.60	2.0	313	8.3	16.7	9.3	103
27...	1005	8.20	2.5	314	8.3	16.7	9.2	102
27...	1006	9.80	3.0	308	8.4	15.6	9.7	105
27...	1007	11.5	3.5	306	8.4	12.8	9.7	99
27...	1008	13.1	4.0	306	8.4	11.7	9.5	94
27...	1009	14.8	4.5	310	8.2	10.7	9.0	86
27...	1010	16.4	5.0	318	8.1	10.0	8.0	76
27...	1011	18.0	5.5	335	8.0	9.1	6.4	60
27...	1012	19.7	6.0	362	7.9	7.7	3.2	29
27...	1013	21.3	6.5	373	7.9	6.8	1.7	15
27...	1014	23.0	7.0	381	7.9	6.4	.7	6
27...	1015	24.6	7.5	381	7.9	6.3	.0	0
27...	1016	26.2	8.0	384	7.9	6.1	.0	0
SEP								
03...	1415	.30	.10	349	8.2	13.6	9.8	100
03...	1420	3.20	1.0	349	8.1	13.6	9.5	97
03...	1430	6.60	2.0	349	8.1	13.6	9.4	96
03...	1435	9.80	3.0	349	8.1	13.5	9.3	95
03...	1440	13.1	4.0	349	8.1	13.5	9.2	94
03...	1445	16.4	5.0	357	7.8	13.2	8.4	85
03...	1450	19.7	6.0	395	7.4	11.3	2.2	21
03...	1455	23.0	7.0	402	7.4	10.6	1.3	12

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	CLOUD COVER (PERCENT)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE, AIR (DEG C)	TRANSPARENCY (SECCHI DISK) (M)
JUN									
14...	1150	3	26.9	--	--	100	--	9.0	2.80
27...	1020	3	26.7	--	--	60	335	21.0	3.2
SEP									
03...	1500	--	26.0	6.60	2.0	100	--	15.5	5.1
03...	1505	--	--	13.1	4.0	--	--	--	--
03...	1510	--	--	19.7	6.0	--	--	--	--

DATE	BAROMETRIC PRESSURE (MM OF HG)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
JUN								
14...	718	217	<.01	--	.90	.015	--	--
27...	713	213	.01	--	1.10	.019	.800	<.100
SEP								
03...	723	248	--	<.01	1.10	.030	.700	.100
03...	--	207	--	<.01	1.10	.034	.800	.200
03...	--	247	--	<.01	1.30	.000	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

621658150034100 - TIGGER LK (MAX DEPTH) NR TALKEETNA AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
JUN								
15...	1301	1.60	.50	37	7.2	14.2	10.1	100
15...	1302	3.30	1.0	36	7.1	14.2	9.9	98
15...	1303	4.90	1.5	36	7.1	14.2	9.9	98
15...	1304	6.60	2.0	36	7.1	14.2	9.9	98
15...	1305	8.20	2.5	36	7.1	14.2	9.9	98
15...	1306	9.80	3.0	36	7.1	14.1	9.8	96
15...	1307	11.5	3.5	37	7.0	13.1	10.1	97
15...	1308	13.1	4.0	36	6.9	11.1	10.1	93
15...	1309	14.8	4.5	35	6.8	9.4	9.7	86
15...	1310	16.4	5.0	35	6.8	9.1	9.6	84
15...	1311	18.0	5.5	34	6.8	8.8	9.3	81
15...	1312	19.7	6.0	34	6.8	8.2	9.3	80
15...	1313	21.3	6.5	34	6.8	8.0	9.1	78
15...	1314	23.0	7.0	34	6.8	7.6	9.0	76
15...	1315	24.6	7.5	33	6.8	7.4	9.4	79
15...	1316	26.2	8.0	33	6.7	7.4	9.2	77
15...	1317	27.9	8.5	33	6.7	7.3	9.0	76
15...	1318	29.5	9.0	34	6.7	7.2	8.9	75
15...	1319	31.2	9.5	34	6.7	7.2	8.7	73
25...	1116	1.60	.50	35	6.9	18.5	10.0	108
25...	1117	3.30	1.0	35	7.0	17.8	10.2	109
25...	1118	4.90	1.5	35	7.0	17.4	10.3	109
25...	1119	6.60	2.0	35	7.0	17.2	10.3	109
25...	1120	8.20	2.5	34	7.1	16.7	10.5	110
25...	1121	9.80	3.0	34	7.1	16.1	10.2	105
25...	1122	11.5	3.5	34	7.0	15.4	10.3	105
25...	1123	13.1	4.0	33	6.9	14.0	11.0	108
25...	1124	14.8	4.5	32	6.8	12.6	11.1	106
25...	1125	16.4	5.0	31	6.8	11.1	10.9	101
25...	1126	18.0	5.5	31	6.7	10.3	10.5	95
25...	1127	19.7	6.0	30	6.7	9.7	10.6	95
25...	1128	21.3	6.5	30	6.7	9.0	10.7	94
25..	1129	23.0	7.0	29	6.7	8.9	10.6	93
25...	1130	24.6	7.5	29	6.6	8.8	10.6	93
25...	1131	26.2	8.0	29	6.6	8.6	10.6	92
25...	1132	27.9	8.5	29	6.6	8.5	10.5	91
SEP								
02...	0958	.32	.10	42	7.2	15.9	9.8	100
02...	1000	3.30	1.0	43	7.1	15.9	9.7	99
02...	1015	6.60	2.0	43	6.9	15.9	9.7	99
02...	1020	9.80	3.0	43	6.8	15.9	9.7	99
02...	1025	13.1	4.0	43	6.8	15.9	9.6	98
02...	1030	16.4	5.0	43	6.8	15.8	9.5	97
02...	1033	19.7	6.0	43	6.8	15.7	9.4	96
02...	1036	23.0	7.0	43	6.7	15.6	8.7	89
02...	1043	26.2	8.0	46	6.5	14.5	5.6	56
02...	1044	27.9	8.5	46	6.1	13.3	3.2	31

DATE	TIME	NUMBER OF SAMPLING POINTS	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SAMPLING DEPTH (FEET)	SAMPLING DEPTH (M)	CLOUD COVER (PERCENT)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TRANSPARENCY (SECCHI DISK) (M)
JUN										
15...	1325	3	31.5	--	--	100	--	7.2	10.0	5.8
25...	1135	3	28.9	--	--	0	35	6.6	25.0	6.8
SEP										
02...	1046	--	27.9	6.60	2.0	95	--	--	16.0	8.0
02...	1048	--	--	16.4	5.0	--	--	--	--	--
02...	1050	--	--	24.6	7.5	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

621658150034100 - TIGGER LK (MAX DEPTH) NR TALKEETNA AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	BAROMETRIC PRESSURE (MM OF HG)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
JUN									
15...	758	27	.04	--	.70	.74	<.005	--	--
25...	754	25	.03	--	.90	.93	.007	.400	.200
SEP									
02...	756	32	--	<.01	.80	--	.030	.600	.100
02...	--	35	--	<.01	.70	--	.021	.800	.100
02...	--	36	--	<.01	1.30	--	.023	--	--

614113150001400 - NANCY LK CENTRAL BASIN NR WILLOW AK

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JUL										
29...	1050	60.0	E5700	6.9	14.0	4.5	.0	0	760	190

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
JUL									
29...	70	650	6.3	10	1400	<.1	24	270000	21000

E ESTIMATED

JUNEAU

582422134342001. Local number, CD04006618ABDB1003 85177.
LOCATION.--Lat 58°24'24", long 134°34'23", Hydrologic Unit 19060000, Mendenhall Loop Road, near Juneau.
Owner: U.S. Forest Service.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored unused water-table well, diameter 6 in (0.15 m), depth 100 ft (30.5 m), screened 90 to 100 ft (27.4 to 30.5 m).
DATUM.--Altitude of land-surface datum is 69 ft (21.0 m). Measuring point: Base of recorder shelter 5.00 ft (1.52 m) above land-surface datum.
REMARKS.--Water level-fluctuates with seasonal changes in flow of the Mendenhall River, 500 ft (150 m) southwest of the well. Water level data for periods Oct. 2 to Dec. 7 and Jan. 3 to Apr. 22 were lost due to vandalism. Prior to Oct. 1, 1980, water levels published were mean values for the day.
PERIOD OF RECORD.--June 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.48 ft (1.37 m) above land-surface datum, Sept. 13, 1981; lowest, 10.26 ft (3.13 m) below land-surface datum, Mar. 23, 1969.

WATER LEVEL, IN FEET ABOVE OR BELOW (-) LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	---			---	-3.96	-1.24	-2.02	-0.08	-2.73
10			-4.75	---			---	-2.19	-1.66	-1.45	-0.17	-3.30
15			-5.54	---			---	-1.71	-1.66	-1.08	-0.09	-2.92
20			-5.70	---			---	-1.39	-1.17	-0.88	.11	-3.02
25			-5.97	---			-5.97	-1.30	-3.18	-0.64	.05	-3.70
EOM			-6.37	---			-4.70	-1.10	-2.63	-0.42	-1.25	-4.05

WTR YEAR 1982 HWL RECORDED 0.19 AUG 21 LWL RECORDED -7.25 JAN 2

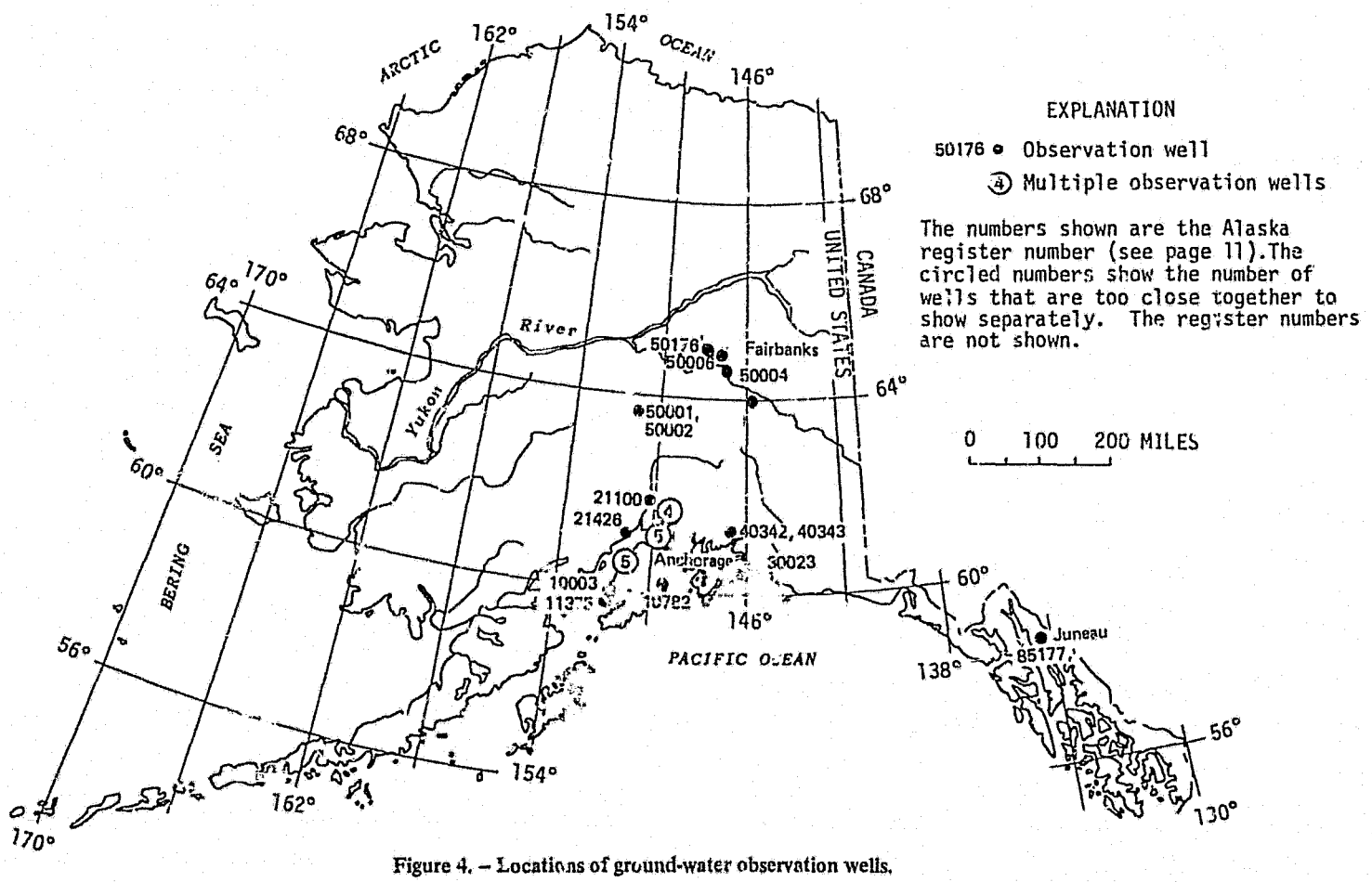


Figure 4. – Locations of ground-water observation wells.

CORDOVA

603228145442601. Local number, CC01500327BDCB1004 30023.
LOCATION.--Lat 60°32'28", long 145°44'26", Hydrologic Unit 19050003, Lefevre Street near west end of Eyak Lake, Cordova. Owner: City of Cordova.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled public-supply (unused) artesian well, diameter 10 in (0.25 m), depth 82 ft (25.0 m), backfilled to 71 ft (21.6 m), screened 48.5 to 71 ft (14.8 to 21.6 m).
DATUM.--Altitude of land surface is 32 ft (10 m). Measuring point: Top of shelter floor 4.00 ft (1.22 m) above land surface.
REMARKS.--Major water-level fluctuations caused by variable pumping of nearby production wells. Feb. 20, 1982 - Mar. 4, 1982 recorder malfunctioned. Water level is estimated to nearest foot during this period.
PERIOD OF RECORD.--February 1973 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.60 ft (1.71 m) below land-surface datum, Aug. 15 & 16, 1981; lowest, 46.88 ft (14.29 m) below land-surface datum, Dec. 28, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.61	13.88	13.58	11.68	17.11	---	23.50	20.55	10.72	9.49	10.46	10.07
10	14.16	12.90	14.48	12.11	22.24	---	22.28	11.09	9.57	9.94	9.81	9.74
15	11.92	13.44	10.82	12.14	23.61	30.34	22.89	10.62	9.09	10.60	10.46	7.78
20	13.30	14.43	9.27	16.42	40.00	23.14	21.54	10.31	9.78	10.26	36.18	6.88
25	12.73	14.71	10.02	23.74	40.00	25.18	20.50	10.28	10.13	10.57	37.26	8.56
EOM	14.11	13.83	11.11	38.41	40.00	38.55	20.00	10.40	9.35	10.00	11.11	8.72

WATER YEAR 1982 HWL RECORDED 6.88 SEP 20 LWL RECORDED 41.09 MAR 15

VALDEZ

610745146105001. Local number, CC00800531DACC1001 40342.
LOCATION.--Lat 61°07'45", long 146°10'50", Hydrologic Unit 19050003, 2 mi (3 km) east of Valdez airport. Owner: The Alpetco Company.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused water-table test well, diameter 6 in (0.15 m), depth 76 ft (23.2 m), cased to 76 ft (23.2 m), grouted to about 30 ft (9.1 m), sediment in well to about 75 ft (23 m).
DATUM.--Altitude of land surface is 154.8 ft (47.18 m) National Geodetic Vertical Datum. Measuring point: Top of casing 4.00 ft (1.22 m) above land surface.
REMARKS.--Missing record due to equipment malfunction.
PERIOD OF RECORD.--October 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.07 ft (12.82 m) below land-surface datum, Aug. 17, 1981; dry at about 75 ft (23 m) Mar. 12 to May 7, 1981 and Mar. 31, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.80							---	59.57	49.87	47.03	51.34
10	50.74							---	57.02	48.70	47.59	51.67
15	49.83							---	55.19	47.91	48.33	51.45
20	---							---	54.09	47.62	49.07	46.27
25	---							---	53.09	47.29	49.69	46.02
EOM	---							63.28	52.01	46.94	50.52	47.31

WTR YEAR 1982 HWL RECORDED 45.76 SEP 22 LWL MEASURED 74.64 MAR 31

610645146105701. Local number, CC00900506CADA1001 40343.
LOCATION.--Lat 61°06'45", long 146°10'57", Hydrologic Unit 19050003, 2.2 mi (3.5 km) southeast of Valdez airport. Owner: The Alpetco Company.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused water-table test well, diamter 6 in (0.15 m), depth 85 ft (25.9 m), cased to 56 ft (17.1 m), grouted to about 30 ft (9.1 m). Well has caved below bottom of casing at 56 ft (17.1 m).
DATUM.--Altitude of land surface is 84.6 ft (25.79 m) National Geodetic Vertical Datum. Measuring point: Top of casing 4.5 ft (1.37 m) above land surface.
PERIOD OF RECORD.--October 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.27 ft (0.08 m) above land-surface datum, Aug. 7, 1981; lowest recorded, 23.61 ft (7.20 m) below land-surface datum, Apr. 21-28, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.82	4.76	5.32	9.85	15.72		22.35	21.20	6.03	4.44	3.87	4.25
10	4.98	4.46	6.14	10.85	16.38		22.80	14.63	5.25	4.26	3.94	4.27
15	3.76	4.69	6.83	11.80	---		23.20	12.73	5.02	4.06	4.07	3.00
20	4.39	4.82	7.15	12.81	---		23.52	11.09	4.82	3.89	4.23	2.48
25	3.75	4.87	7.91	13.78	---		23.61	10.15	4.62	3.75	4.29	4.07
EOM	4.51	4.97	8.92	14.88	---		23.24	7.28	4.45	3.61	4.35	4.40

WTR YEAR 1982 HWL RECORDED 2.23 SEP 16 LWL RECORDED 23.61 APR 21-28

SOUTH-CENTRAL ALASKA

SEWARD

600808149254802. Local number, SB00100134CADC2003 10782.
LOCATION.--Lat 60°07'52", long 149°25'56", Hydrologic Unit 1905003, at Fort Raymond Army recreation camp, near Seward. Owner: City of Seward.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused artesian test well, diameter 8 in (0.20 m), depth 141 ft (43.0 m), screen reportedly installed at bottom of well.
DATUM.--Altitude of land surface is 46 ft (14 m). Measuring point: Top of casing at land surface.
REMARKS.--Levels sometimes drawn down as much as 1.5 ft (0.5 m) by nearby pumping. Highest water level for the year occurred during recorder malfunction between Sep. 20 and Sep. 30, when water level was an unknown distance above 15.5 ft (4.73 m).
PERIOD OF RECORD.--July-August 1964, October 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.07 ft (3.98 m) below land-surface datum, Dec. 1, 1976; lowest, 27.72 ft (8.44 m) below land-surface datum, Apr. 14, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.02	21.11	21.67	22.03	23.05	23.90	24.62	24.86	24.06	22.39	25.00	24.79
10	21.60	21.14	22.12	22.94	23.87	24.54	24.39	24.27	23.63	23.90	24.93	24.09
15	21.68	19.45	22.26	22.47	24.41	24.63	24.83	24.50	22.70	23.84	25.45	22.01
20	21.63	20.02	20.13	23.02	24.46	23.31	25.41	24.31	22.56	23.92	25.44	---
25	20.13	20.59	21.09	23.14	24.17	23.75	24.82	24.14	22.73	24.72	25.05	---
EOM	20.38	21.21	21.47	23.97	24.25	24.46	24 79	23.69	22.76	23.94	25.20	---

WTR YEAR 1982 HWL RECORDED 16.74 SEP 20 LWL RECORDED 25.97 JUL 31 & AUG 2-19

KENAI PENINSULA BOROUGH

594019151351201. Local number, SC00601412CAAB1001 11375.
LOCATION.--Lat 59°40'19", long 151°35'12", Hydrologic Unit 19050002, Pitzman Avenue on Diamond Ridge, Homer. Owner: Becky Fox-Krogstad.
AQUIFER.--Sandstone and conglomerate of the Tertiary System.
WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 in (0.15 m), depth 56 ft (15.8 m), cased to 47.5 ft (14.5 m), backfilled with gravel to 49 ft (14.9 m).
DATUM.--Altitude of land surface is 1,150 ft (350 m). Measuring point: Top of casing 2.00 ft (0.61 m) above land surface.
PERIOD OF RECORD.--June 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.57 ft (2.00 m) below land-surface datum, May 8, 1979; lowest measured, 11.68 ft (3.56 m) below land-surface datum, Mar. 20, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 13	11.07	MAR 17	11.55	MAY 11	7.88	JUL 8	10.57

594515151492201. Local number, SC00501510CCAC1001 10003.
LOCATION.--Lat 59°45'15", long 151°49'22", Hydrologic Unit 19050002, mile 161, Old Sterling Highway near Anchor Point. Owner: Raymond Williams.
AQUIFER.--Sand and gravel of the Quaternary or Tertiary System.
WELL CHARACTERISTICS.--Drilled domestic artesian well, diameter 6 in (0.15 m), depth 100 ft (30.5 m), perforated liner 91 to 100 ft (27.7 to 30.5 m).
DATUM.--Altitude of land surface is 240 ft (73 m). Measuring point: Top of casing plate 4.80 ft (1.46 m) below land surface.
PERIOD OF RECORD.--May 1962 to September 1970, May 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.85 ft (10.93 m) below land-surface datum, May 31, 1963; lowest measured, 47.89 ft (14.60 m) below land-surface datum, June 20, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 4	36.11	JAN 13	37.00	MAR 19	38.06	MAY 5	37.89	JUL 8	37.38	AUG 19	38.27

602926151042201. Local number, SB00501029CDAC1001 10001.
LOCATION.--Lat 60°29'26", long 151°04'22", Hydrologic Unit 19050002, Mt. Redoubt Way, Soldotna.
Owner: Charles S. Parker.
AQUIFER.--Gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.20 m), depth 100 ft (30.5 m), cased to 100 ft (30.5 m), perforated 81 to 97 ft (24.7 to 29.6 m).
DATUM.--Altitude of land surface is 94 ft (29 m). Measuring point: Shelter floor at top of casing 3.00 ft (0.91 m) above land surface.
PERIOD OF RECORD.--March 1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.38 ft (0.73 m) below land-surface datum, June 28, 1963; lowest, 13.11 ft (4.00 m) below land-surface datum; occurred sometime between Feb. 15 and Apr. 15, 1976.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.34	4.16	4.35		---	6.31	4.94	6.67	8.85	4.78	9.93	8.19
10	4.54	4.15	4.83		---	6.34	6.39	6.14	8.07	9.06	9.07	8.69
15	4.34	4.15	4.98		---	5.60	6.51	6.42	6.99	9.65	8.82	4.99
20	4.52	4.59	4.62		4.88	6.61	6.06	6.22	5.34	9.65	9.92	4.13
25	3.99	4.70	4.78		5.52	6.13	5.06	6.01	6.99	8.97	8.99	5.10
EOM	4.17	4.24	6.21		5.23	7.81	5.71	9.18	5.17	8.82	9.15	7.00

WTR YEAR 1982 HWL RECORDED 3.95 OCT 26 & 28 LWL RECORDED 12.63 AUG 25

603846151002701. Local number, SB00601003ABAC1001 10646.
LOCATION.--Lat 60°38'46", long 151°00'27", Hydrologic Unit 19050002, Marathon Oil Well Road in Beaver Creek basin, Kenai area. Owner: Marathon Oil.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 65 ft (19.8 m), cased to 65 ft (19.8 m).
DATUM.--Altitude of land surface is 150 ft (46 m). Measuring point: Top of casing, 1.30 ft (0.40 m) above land surface.
REMARKS.--Levels unaffected by distant pumping.
PERIOD OF RECORD.--August 1968 to November 1973, April 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.66 ft (2.64 m) below land-surface datum, Nov. 15 and 16, 1979; lowest, 14.26 ft (4.35 m) below land-surface datum, Apr. 4, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	9.44	9.70	10.14	10.15	10.43	10.43	10.32	10.47	10.52	10.71	10.52
10	---	9.23	9.82	10.16	10.04	10.38	10.16	10.22	10.18	10.58	10.77	10.53
15	---	9.40	9.87	10.14	10.02	10.42	10.28	10.22	10.23	10.60	10.83	9.97
20	9.63	9.53	9.92	10.18	10.25	10.39	10.29	10.26	10.28	10.61	10.90	9.85
25	---	9.66	10.01	10.19	10.35	10.06	10.17	10.38	10.37	10.63	10.90	9.83
EOM	9.33	9.53	10.08	10.24	10.38	10.25	10.23	10.43	10.42	10.58	10.59	9.61

WTR YEAR 1982 HWL RECORDED 9.22 NOV 11 LWL RECORDED 10.95 AUG 24

604038151204303. Local number, SB00701223CCDB3008 10004.
LOCATION.--Lat 60°40'38", long 151°20'43", Hydrologic Unit 19050002, mile 1, Miller Loop Road, North Kenai.
Owner: Union Chemical Company.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 112 ft (34.1 m), screened 106 to 110 ft (32.3 to 33.5 m).
DATUM.--Land surface is 129.7 ft (39.5 m) National Geodetic Vertical Datum. Measuring point: Top of casing 2.00 ft (0.61 m) above land surface.
REMARKS.--Large water-level fluctuations caused by nearby pumping. Well also known as Union Chemical 5B.
PERIOD OF RECORD.--December 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 46.52 ft (14.81 m) below land-surface datum, Feb. 7, 1968; lowest, 65.94 ft (20.10 m) below land-surface datum, June 16, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.30	56.80	57.21	56.23	55.82	56.26	56.82	56.64	55.83	56.70	56.52	56.74
10	57.58	57.25	55.97	55.88	56.04	55.75	55.79	56.10	55.93	56.48	56.76	56.85
15	57.25	56.50	55.97	56.10	56.41	55.82	56.07	56.17	56.24	56.52	56.72	56.99
20	56.98	56.89	55.91	55.70	55.95	56.01	56.20	56.33	56.17	56.27	57.29	57.36
25	57.30	57.18	56.02	55.99	56.06	56.52	56.82	56.21	56.20	56.55	57.08	57.24
EOM	56.60	56.46	55.44	56.04	56.46	56.41	56.05	56.10	56.51	56.78	57.05	57.02

WTR YEAR 1982 HWL RECORDED 55.44 DEC 30 & 31 LWL RECORDED 58.86 AUG 13

KENAI PENINSULA BOROUGH--Continued

604133151214803. Local number, SB00701215DCBC3004 11216.
LOCATION.--Lat 60°41'33", long 151°21'48", Hydrologic Unit 19050002, Bernice Lake campground, North Kenai.
Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled water-table test well, diameter 6 in (0.15 m), depth 52.4 ft (16.0 m), cased to 52.4 ft (16.0 m).
DATUM.--Land surface is 84.6 ft (25.8 m) National Geodetic Vertical Datum. Measuring point: Top of plate 2.02 ft (0.62 m) above land surface.
REMARKS.--Well is 4 ft (1.2 m) east of well 10941.
PERIOD OF RECORD.--June 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.74 ft (2.36 m) below land-surface datum, Dec. 2; 1980; lowest, 13.38 ft (4.08 m) below land-surface datum, Oct. 7, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	9.19	MAR 23	10.14	JUN 8	8.98	AUG 18	10.42
DEC 15	8.99	MAY 18	9.16	JUL 13	9.67		

604133151214802. Local number, SB00701215DCBC2004 10941.
LOCATION.--Lat 60°41'33", long 151°21'48", Hydrologic Unit 19050002, Bernice Lake campground, North Kenai.
Owner: State of Alaska.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled artesian test well, diameter 6 in (0.15 m), depth 202 ft (61.6 m), cased to 191 ft (58.2 m), screened 191 to 196 ft (58.2 to 59.7 m).
DATUM.--Land surface is 84.6 ft (25.8 m) National Geodetic Vertical Datum. Measuring point: Top of casing 2.00 ft (0.61 m) above land surface.
PERIOD OF RECORD.--June 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.23 ft (2.51 m) below land-surface datum, Nov. 3, 1980; lowest, 14.08 ft (4.29 m) below land-surface datum, Sept. 10, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.25	9.54	9.57	9.79	10.14	10.56	10.94	10.53	9.67	---	10.78	11.50
10	10.34	9.46	9.60	9.83	10.16	10.55	10.83	10.22	9.57	---	10.87	11.59
15	10.08	9.43	9.64	9.82	10.15	10.65	10.96	9.95	9.77	10.50	11.00	10.98
20	10.15	9.49	9.65	9.92	10.29	10.80	10.90	9.84	9.82	10.47	11.14	10.82
25	9.66	9.62	9.67	9.98	10.42	10.80	10.79	9.71	9.94	10.57	11.32	10.75
EOM	9.55	9.47	9.72	10.05	10.45	10.91	10.66	9.72	9.96	10.75	11.40	10.51

WTR YEAR 1982 HWL RECORDED 9.42 NOV 11 LWL RECORDED 11.99 AUG 14

610647151153001. Local number, SB01201120DBDD1001 21426.
LOCATION.--Lat 61°06'47", long 151°15'30", Hydrologic Unit 19050002, 4 mi (6 km) northwest of Tyonek.
Owner: U.S. Geological Survey.
AQUIFER.--Claystone and coal of the Tertiary System.
WELL CHARACTERISTICS.--Drilled artesian observation well, hole diameter 6 in (0.15 m) to 83 ft (25.3 m) and 4 in (0.10 m) diameter to 320 ft (97.5 m); 6 in (0.15 m) steel casing to 43 ft (13.1 m), 4 in (0.10 m) plastic pipe to 206 ft (62.8 m), pre-perforated 106 to 206 ft (32.3 m to 62.8 m), clay plug in pipe 194 to 206 ft (59.2 m to 62.8 m).
DATUM.--Altitude of land surface is 210 ft (64 m). Measuring point: Top of 4 in (0.10 m) plastic pipe 2.50 ft (0.76 m) above land surface.
PERIOD OF RECORD.--December 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.06 (6.11 m) below land-surface datum, Apr. 27, 1978; lowest, 32.44 ft (9.89 m) below land-surface datum, July 30 and 31, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.01	25.78	27.01	---	29.59	29.93	28.64	24.33	24.17	---	25.22	24.00
10	25.39	25.49	27.36	---	28.16	29.93	27.56	25.07	26.00	---	24.98	24.23
15	25.77	25.66	26.78	---	27.82	30.14	27.07	26.17	26.43	---	25.46	20.30
20	26.08	26.47	27.76	---	28.51	30.43	26.87	28.09	25.18	27.34	24.55	---
25	22.44	26.43	27.90	---	29.16	29.36	27.41	28.93	26.68	25.55	24.74	22.31
EOM	25.44	27.41	29.10	29.76	29.67	28.51	26.73	30.65	---	25.25	24.60	23.41

WTR YEAR 1982 HWL RECORDED 20.25 SEP 16 LWL RECORDED 30.49 MAR 20

611049149545101. Local number, SB01300436BAAC1041 02368.
LOCATION.--Lat 61°10'49", long 149°54'51", Hydrologic Unit 19050002, Harding Drive and 45th Street, Anchorage. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in (0.15 m), depth 18.5 ft (5.6 m), screened 13.5 to 18.5 ft (4.1 to 5.6 m).
DATUM.--Altitude of land surface is 88 ft (26.8 m). Measuring point: Top of casing cap 2.50 ft (0.76 m) above land surface.
PERIOD OF RECORD.--June 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.50 ft (3.51 m) below land-surface datum, Oct. 21, 1980; lowest measured, 13.52 ft (4.12 m) below land-surface datum, Sept. 23, 1974.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	11.68	DEC 21	11.99	FEB 22	12.44	APR 22	12.83	JUN 21	12.42	AUG 23	12.[illegible]
NOV 20	11.60	JAN 21	12.32	MAR 22	12.62	MAY 21	12.58	JUL 26	12.59	SEP 24	12.04

611149149553901. Local number, SB01300423DDDB1002 00280.
LOCATION.--Lat 61°11'49", long 149°55'39", Hydrologic Unit 19050002, West Northern Lights Boulevard and Lahonda Drive, Anchorage. Owner: Municipality of Anchorage.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 283 ft (86.3 m), screened 278 to 283 ft (84.7 to 86.3 m).
DATUM.--Altitude of land surface is 47 ft (14 m). Measuring point: Top of casing 2.80 ft (0.85 m) above land surface.
REMARKS.--Water level affected by pumping in the Anchorage area. Tide effect in well is about 0.2 ft (0.06 m).
PERIOD OF RECORD.--September 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, flowing over top of casing, 1962 to 1963; lowest, 13.02 ft (3.97 m) below land-surface datum, Apr. 2, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.86	4.65	4.41	3.44	3.36	3.36	4.83	7.33	9.00	10.80	10.22	8.52
10	4.09	4.54	4.23	3.33	3.23	3.35	4.64	7.67	9.34	11.30	9.96	8.62
15	3.87	4.97	3.85	3.26	3.00	3.86	5.03	8.03	10.08	11.25	9.90	8.40
20	4.52	5.13	3.87	3.50	3.12	3.86	5.70	8.01	10.25	11.27	9.61	8.42
25	4.32	4.86	3.56	3.14	3.15	3.98	6.39	8.55	10.18	---	9.37	8.60
EOM	4.34	4.18	3.40	3.49	3.01	4.30	6.77	8.79	10.59	10.78	8.91	8.27

WTR YEAR 1982 HWL RECORDED 3.00 FEB 15 & MAR 1 LWL RECORDED 12.00 JUL 13

611311149510401. Local number, SB01300317BDAD1003 00114.
LOCATION.--Lat 61°13'11", long 149°51'04", Hydrologic Unit 19050002, 3rd and Concrete Avenues, Anchorage. Owner: Municipality of Anchorage.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled artesian test well, diameter 8 in (0.20 m), depth 230 ft (70.1 m), slotted 162 to 182 ft (49.4 to 55.5 m) and 190 to 201 ft (57.9 to 61.3 m).
DATUM.--Land surface is 129.3 ft (39.4 m) National Geodetic Vertical Datum. Measuring point: Top of coupling on casing cap 2.66 ft (0.81 m) above land surface.
REMARKS.--Water-level fluctuation caused mainly by pumping of local municipal wells. Datum was established prior to the 1964 earthquake; no adjustments have been determined.
PERIOD OF RECORD.--October 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.88 ft (8.80 m) below land-surface datum, Nov. 29, 1957; lowest measured, 128.17 (39.07 m) below land-surface datum, Apr. 19, 1976.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	49.49	DEC 21	52.82	FEB 22	46.43	APR 22	59.93	JUN 21	58.65	AUG 23	58.11
NOV 20	107.47	JAN 21	47.32	MAR 22	46.08	MAY 21	54.26	JUL 26	63.50	SEP 24	52.01

MUNICIPALITY OF ANCHORAGE--Continued

611336149454401. Local number, SB01300311CDAD1003 00067.
LOCATION.--Lat 61°13'36", long 149°45'44", Hydrologic Unit 19050002, near Glenn Highway and Boniface Parkway, Anchorage. Owner: U.S. Air Force.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 187 ft (57.0 m), cased to 187 ft (57.0 m).
DATUM.--Altitude of land surface is 210 ft (64 m). Measuring point: Top of casing 3.90 ft (1.19 m) above land surface.
REMARKS.--Water levels affected by pumping in the Anchorage area.
PERIOD OF RECORD.--September 1959 to October 1962, September 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.88 ft (4.54 m) below land-surface datum, Oct. 28, 1960; lowest, 34.77 ft (10.60 m) below land-surface datum, May 14 and 18, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5						---	25.08	25.07	25.25	24.24	23.37	22.37
10						---	24.38	25.37	24.47	25.23	23.05	22.50
15						---	24.47	25.05	24.38	25.01	22.77	23.30
20						---	24.64	24.58	23.90	24.56	22.79	23.54
25						24.02	25.10	25.21	24.82	---	22.75	22.21
EOM						---	25.09	24.70	24.95	23.27	22.55	21.36

WTR YEAR 1982 HWL RECORDED 21.36 SEP 30 LWL RECORDED 27.14 MAR 4

611444149415401. Local number, SB01300206DBBA1004 00017.
LOCATION.--Lat 61°14'44", long 149°41'54", Hydrologic Unit 19050002, Arctic Valley Road, Fort Richardson. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled artesian test well, diameter 6 in (0.15 m), depth 670 ft (204 m), cased to 134 ft (40.8 m), backfilled with gravel to 134 ft (40.8 m) and plugged, perforated 90 to 120 ft (27.4 to 36.6 m) and 130 to 134 ft (39.6 to 40.8 m).
DATUM.--Altitude of land surface is 294 ft (90 m). Measuring point: Top of shelter floor 1.95 ft (0.59 m) above land surface.
REMARKS.--Water levels affected by pumping in the Anchorage area.
PERIOD OF RECORD.--August 1954 to June 1962, September 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.15 ft (12.85 m) below land-surface datum, Oct. 28, 1960; lowest, 66.49 ft (20.27 m) below land-surface datum, May 15, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.43	49.88	48.35		---	49.96	52.60	54.18	53.92	53.40	52.28	51.26
10	50.37	49.23	48.49		---	49.59	52.14	54.52	53.33	53.46	52.15	51.60
15	50.35	49.78	48.17		---	50.38	52.59	54.61	53.38	53.21	52.20	51.85
20	50.37	49.55	48.04		---	51.27	52.85	54.22	53.07	52.99	52.01	52.26
25	50.04	49.12	47.93		50.16	51.43	53.45	54.51	53.42	---	51.77	51.16
EOM	49.87	47.86	---		50.12	51.67	53.76	53.84	53.58	52.48	51.60	50.31

WTR YEAR 1982 HWL RECORDED 47.49 DEC 17 & 18 LWL RECORDED 55.19 MAY 15

MATANUSKA-SUSITNA BOROUGH

613417149065401. Local number, SA01700209CCCB1009 20004.
LOCATION.--Lat 61°34'20", long 149°06'50", Hydrologic Unit 19050002, Springer Road, 2 mi (3 km) south of Palmer. Owner: Glenn Woods.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in (0.10 m), depth 83 ft (25.3 m), cased to 82 ft (25.0 m), slotted at bottom.
DATUM.--Altitude of land surface is 170 ft (52 m). Measuring point: Top of casing 0.50 ft (0.15 m) above land surface.
PERIOD OF RECORD.--July 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.58 ft (21.21 m) below land-surface datum, July 29, 1964; lowest measured, 77.36 ft (23.58 m) below land-surface datum, Mar. 26, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 25	71.93	FEB 24	71.80	APR 26	72.43	MAY 24	72.52	JUN 25	71.88	SEP 24	70.93
JAN 26	71.71	MAR 25	72.10								

MATANUSKA-SUSITNA BOROUGH--Continued

613403149151001. Local number, SA01700115BDAB1003 20011.
LOCATION.--Lat 61°34'03", long 149°15'10", Hydrologic Unit 19050002, University of Alaska Agricultural Experiment Station, 5 mi (8 km) southwest of Palmer. Owner: University of Alaska.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Dug unused water-table well, depth 40 ft (12.2 m), diameter unknown.
DATUM.--Altitude of land surface is 173 ft (52.7 m). Measuring point: Top or wooden well cover 1.00 ft (0.30 m) above land surface.
REMARKS.--Water-level records prior to 1980 water year are available in files of Anchorage subdistrict office and from Ground Water Site Inventory computer file.
PERIOD OF RECORD.--December 1955 to August 1974, March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.61 ft (7.81 m) below land-surface datum, July 10, 1956; lowest measured, 29.75 ft (9.07 m) below land-surface datum, Feb. 5, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	26.29	FEB 24	26.29	APR 26	26.23	JUN 25	26.53	AUG 19	26.24	SEP 24	26.24
JAN 26	26.21	MAR 25	26.23	MAY 24	26.14						

613406149152103. Local number, SA01700115BACD3004 20013.
LOCATION.--Lat 61°34'06", long 149°15'21", Hydrologic Unit 19050002, University of Alaska Agricultural Experiment station, 5 mi (8 km) southwest of Palmer. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (0.15 m), depth 313 ft (95.4 m), cased to 313 ft (95.4 m).
DATUM.--Altitude of land surface is 172 ft (52.4 m). Measuring point: Top of casing 1.50 ft (0.46 m) above land surface.
REMARKS.--Water-level records prior to 1980 water year are available in files of Anchorage subdistrict office. Water levels are available also from Ground Water Site Inventory computer file prior to August 1974 and from WATSTORE computer file after February 1977. Water-quality analyses for 1963 and 1967 are available from WATSTORE computer file and subdistrict files.
PERIOD OF RECORD.--September 1955 to August 1974, February 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.42 ft (1.65 m) below land-surface datum, June 28, 1962; lowest measured, 31.50 ft (9.60 m) below land-surface datum, Apr. 1, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.				---	11.87	11.98	12.05	---			---
10	10.9[illegible]				11.83	11.57	11.62	11.96	---			---
15	10.78				11.48	11.70	11.71	11.94	---			12.09
20	10.89				11.65	11.83	11.81	11.62	11.26			12.12
25	10.66				11.91	11.68	---	11.70	11.29			11.87
EOM	---				11.87	11.77	11.98	11.56	11.15			11.91

WTR YEAR 1982 HWL RECORDED 10.66 OCT 25 LWL RECORDED 14.70 BETWEEN AUG 19 & SEP 13

613406149152102. Local number, SA01700115BACD2004 20014.
LOCATION.--Lat 61°34'06" long 149°15'21", Hydrologic Unit 19050002, University of Alaska Agricultural Experiment Station, 5 mi (8 km) southwest of Palmer. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled artesian observation well, depth 259 ft (78.9 m); 8 in (0.20 m) casing to 34.4 ft (10.5 m), slotted at 30 ft (9.1 m); 6 in (0.15 m) casing to 49 ft (14.9 m), slotted 36 to 39 ft (11.0 to 11.9 m) and 42 to 45 ft (12.8 to 13.7 m); 4 in (0.10 m) casing from 29 ft (8.8 m) to unknown depth, perforated 155.5 to 156.5 ft (47.4 to 47.7 m).
DATUM.--Altitude of land surface is 172 ft (52.4 m). Measuring point: Top of 8 in (0.20 m) casing 3.50 ft (1.07 m) above land surface.
REMARKS.--Water-level records prior to 1980 water year are available in files of Anchorage subdistrict office and from Gound Water Site Inventory computer file. Water-quality analyses for 1955 and 1967 are available from WATSTORE computer file and in subdistrict files.
PERIOD OF RECORD.--September 1955 to August 1974, February 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, flowing over top of casing, Aug. 1962 to Mar. 1964; lowest measured, 2.33 ft (0.71 m) below land-surface datum, July 26, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	.58	JAN 26	.34	MAR 25	.37	MAY 24	.43	AUG 19	.52	SEP 24	.49
NOV 25	.63	FEB 24	.45	APR 26	.36						

614147150013801. Local number, SB01900432ADBD1001 21100.
LOCATION.--Lat 61°41'47", long 150°01'38", Hydrologic Unit 19050002, northwest corner of Nancy Lake Recreation maintenance facility, 3 mi (5 km) south of Willow. Owner: State of Alaska.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Drilled institution water-table well, diameter 6 in (0.15 m), depth 69 ft (21.0 m), screened from 64 to 69 ft (19.5 to 21.0 m).
DATUM.--Altitude of land surface is 260 ft (79 m). Measuring point: Top of casing 1 ft (0.30 m) above land surface.
REMARKS.--Water-level records prior to 1980 water year are available in files of Anchorage subdistrict office and from Ground Water Site Inventory computer file.
PERIOD OF RECORD.--March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.89 ft (14.29 m) below land-surface datum, Oct. 15, 1980; lowest measured, 50.54 ft (15.40 m) below land-surface datum, Apr. 4, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	47.12	DEC 23	47.06	MAY 25	48.16	JUN 3	48.00	AUG 26	47.76

YUKON ALASKA

FAIRBANKS NORTH STAR BOROUGH

643916147043501. Local number, FD00300314ADCC1001 50004.
LOCATION.--Lat 64°39'11", long 147°04'35", Hydrologic Unit 19030004, building 4355, Eielson Air Force Base. Owner: U.S. Air Force.
AQUIFER.--Sand and gravel of Quaternary age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.20 m), depth 101 ft (30.8 m), casing information not available.
DATUM.--Altitude of land-surface datum is 540 ft (165 m). Measuring point: Top of metal plate 1.00 ft (0.30 m) above land-surface datum.
REMARKS.--Well frozen from January 10, 1982 to June 15, 1982.
PERIOD OF RECORD.--August 1965 to July 1975, April 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.87 ft (2.09 m) below land-surface datum, July 27, 1967; lowest, 9.90 ft (3.02 m) below land-surface datum, Nov. 11, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.04	9.27	9.09	9.20					---	9.34	8.64	8.69
10	9.12	9.28	9.09	---					---	9.39	8.49	8.69
15	9.15	9.25	9.09	---					---	8.62	8.56	8.71
20	9.19	9.21	9.12	---					9.22	8.37	8.67	8.82
25	9.22	9.21	9.11	---					9.26	8.51	8.79	8.89
EOM	9.25	9.12	9.16	---					9.29	8.58	8.68	8.94

WTR YEAR 1982 HWL RECORDED 8.37 JUN 20 LWL RECORDED 9.39 JUN 10

644944147402501. Local number, FC00100113BCCC1022 50006.
LOCATION.--Lat 64°49'44", long 147°40'25", Hydrologic Unit 19030004, at former building site 4005, Fort Wainwright. Owner: U.S. Army.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in. (0.20 m), depth 113 ft (34.0 m), cased to 100 ft (30.5 m).
DATUM.--Altitude of land-surface datum is 442.80 ft (135.05 m). Measuring point: Top of casing 1.50 ft (0.46 m) above land-surface datum.
REMARKS.--Water level reflects seasonal changes in the Chena River 0.4 mi (0.6 km) to the north and the Tanana River 2.5 mi (4.0 km) to the south.
PERIOD OF RECORD.--August 1964 to June 1970, March 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.67 ft (1.12 m) above land-surface datum, Aug. 15, 1967, due to flooding; lowest water level measured, 16.13 ft (4.92 m) below land-surface datum, Apr. 7, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.53	14.00	14.37	14.54	14.69	14.84	15.07	15.02	---		---	13.20
10	13.61	14.08	14.40	14.56	14.72	14.88	15.11	14.54	12.67		12.94	13.24
15	13.69	14.15	14.43	14.58	14.74	14.92	14.76	13.98	---		12.99	13.27
20	13.76	14.23	14.46	14.60	14.77	14.95	15.12	13.62	---		13.02	13.30
25	13.84	14.31	14.49	14.64	14.78	14.99	15.18	13.18	12.39		13.10	13.34
EOM	13.92	14.34	14.51	14.67	14.81	15.03	15.21	---	---		13.16	13.38

WTR YEAR 1982 HWL RECORDED 12.33 JUN 29 LWL RECORDED 15.21 APR 30

FAIRBANKS NORTH STAR BOROUGH--Continued

645442147461601. Local number, FB0C100117DBAD1001 50176.
LOCATION.--Lat 64°54'38", long 147°46'45"; Hydrologic Unit 19030004, 1.4 mi (2.3 km) northwest of intersection of Farmers Loop Road and Grenac Road, near Fairbanks. Owner: U.S. Geological Survey.
AQUIFER.--Quartz-mica schist of Precambrian age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 565 ft (172.3 m), cased to 370 ft (112.8 m). Open hole below 370 ft (112.9 m).
DATUM.--Land-surface datum is 1,282.92 ft (391.034 m) National Geodetic Vertical Datum (datum established by Corps of Engineers in 1958). Measuring point: Top of casing 1.98 ft (0.60 m) above land-surface datum.
REMARKS.--U.S. Army named well B-61. Water levels prior to 1981 were published in feet National Geodetic Vertical Datum. Subtract the old published levels at NGVD from the land-surface datum of 1,282.92 ft NGVD to convert these levels to feet below land-surface datum.
PERIOD OF RECORD.--May 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 473.53 ft (144.32 m) below land-surface datum, May 28, 1975; lowest, 498.30 ft (151.9 m) below land-surface datum, Sept. 30, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	495.76	495.97	496.10	496.54	496.75	496.81	497.15	497.27	497.37	497.67	---	497.94
10	495.85	495.87	496.17	496.51	496.75	496.70	497.29	497.27	497.38	---	497.85	498.03
15	495.85	496.15	496.18	496.49	496.74	496.94	497.29	497.27	497.63	---	497.93	498.21
20	495.86	495.95	496.33	496.64	496.82	496.96	497.28	497.27	497.63	---	497.97	498.21
25	495.86	496.04	496.41	496.51	496.79	496.95	497.28	497.44	497.64	---	497.95	498.26
EOM	495.94	495.89	496.50	496.64	496.77	497.05	497.28	497.39	497.64	---	497.94	498.30

WTR YEAR 1982 HWL RECORDED 495.76 OCT 5 LWL RECORDED 498.30 SEP 30

MCKINLEY PARK

634355148550501. Local number, FC01400704BDAB1002 50002.
LOCATION.--Lat 63°43'55", long 148°55'05", Hydrologic Unit 19030004, near McKinley Park Hotel. Owner: U.S. National Park Service.
AQUIFER.--Fractured schist of Precambrian era.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.20 m), depth 307 ft (93.6 m) cased to 304 ft (92.7 m), perforated 150 to 199.5 ft (45.7 to 60.8 m).
DATUM.--Altitude of land surface is 1,750 ft (533 m). Measuring point: Top of casing 2.50 ft (0.76 m) above land surface.
REMARKS.--Twenty-six measurements were made by National Park Service personnel. Measurements on May 25 and Sept. 10 were made by the Geological Survey.
PERIOD OF RECORD.--1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.26 ft (27.21 m) below land-surface datum, Oct. 4, 1969; lowest measured, 100.60 ft (30.66 m) below land-surface datum, June 22, 1974.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	95.40	DEC 17	95.55	MAR 08	97.40	APR 12	97.96	MAY 25	98.66	JUL 05	95.90
NOV 19	94.79	FEB 01	96.67	MAR 15	97.52	APR 19	98.24	MAY 30	98.73	JUL 19	95.14
NOV 27	95.30	FEB 08	97.03	MAR 22	97.75	APR 26	98.25	JUN 21	98.00	SEP 04	95.34
DEC 03	95.39	FEB 22	97.40	MAR 29	97.85	MAY 03	98.46	JUN 27	96.37	SEP 10	95.64
DEC 10	95.65	MAR 01	97.52	APR 05	98.10	MAY 10	98.56				

634359148545401. Local number, FC01400704ABCC1001 50001.
LOCATION.--Lat 63°43'59", long 148°54'54", Hydrologic Unit 19030004, near McKinley Park Hotel. Owner: U.S. National Park Service.
AQUIFER.--Fractured schist of Precambrian era.
WELL CHARACTERISTICS.--Drilled unused water-table well. Diameter 8 in (0.20 m), depth 253 ft (77.1 m) cased to 204 ft (62.2 m).
DATUM.--Altitude of land surface is 1,750 ft (533 m). Measuring point: Top of casing 2.50 ft (0.76 m) above land surface.
REMARKS.--Water level at times affected by nearby pumping. Twenty-six measurements were made by National Park Service personnel. Measurements on May 25 and Sept. 10 were made by the Geological Survey.
PERIOD OF RECORD.--1964 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.33 ft (24.79 m) below land-surface datum, June 2, 1980; lowest measured, 109.42 ft (33.35 m) below land-surface datum, Apr. 10, 1966.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	94.80	DEC 17	94.75	MAR 08	96.55	APR 12	97.32	MAY 25	98.14	JUL 19	95.89
NOV 19	94.60	FEB 01	95.74	MAR 15	96.56	APR 19	97.57	MAY 30	98.25	SEP 05	95.54
NOV 27	94.47	FEB 08	96.04	MAR 22	96.89	APR 26	97.64	JUN 21	97.99	SEP 10	95.78
DEC 03	94.56	FEB 22	96.43	MAR 29	96.99	MAY 03	97.86	JUN 27	97.15		
DEC 10	94.80	MAR 01	96.47	APR 05	97.33	MAY 10	98.02	JUL 05	96.46		

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

SOUTH-CENTRAL ALASKA

ANCHORAGE - HILLSIDE AREA WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	DEPTH OF WELL, TOTAL (FEET)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	SAMPLE SOURCE	SAM-PLING CONDI-TION	SPE-CIFIC CON-DUCT-ANCE (UMHOS)
61 04 58	149 47 30	01	SB01200334CDBD1 070	82-03-10	1115	52	E5	1/ 30	3/ 8.00	225
				82-05-11	1110	52	E5	30	8.00	240
61 05 26	149 46 56	01	SB01200334ACAB2 042	82-03-10	1140	100	E5	30	8.00	192
				82-05-11	1020	100	E5	30	8.00	275
61 05 40	149 48 10	01	SB01200333AAAA1 091	82-03-10	0937	20	E5	30	8.00	385
				82-05-11	1005	20	E5	30	8.00	390
61 05 56	149 44 02	01	SB01200325CACC1 052	82-05-11	1055	--	E5	2/ 1	4/ 1.00	210
61 06 31	149 49 16	01	SB01200328BABA1 057	82-03-10	1520	47	E5	30	8.00	270
				82-05-11	1140	47	E5	30	8.00	265
61 06 41	149 48 42	01	SB01200321DCAC1 044	82-03-10	1050	46	E5	30	8.00	310
				82-05-11	1125	46	E5	30	8.00	330
61 06 53	149 44 09	01	SB01200324CBAD1 019	82-03-10	1020	35	E5	30	8.00	215
				82-05-11	1230	35	E5	30	8.00	220
61 06 53	149 47 56	01	SB01200322CBBD2 047	82-03-10	1430	50	E10	30	8.00	300
				82-05-11	1200	50	E5	30	8.00	300
61 07 42	149 46 31	01	SB01200315DADB1 037	82-03-10	1400	45	E5	30	8.00	225
				82-05-11	1300	45	E5	30	8.00	285
61 07 44	149 46 20	01	SB01200315DADA1 047	82-03-10	1350	46	--	30	8.00	265
				82-05-11	1245	46	E5	30	8.00	280

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	PH (UNITS)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
61 04 58	149 47 30	01	82-03-10	7.6	.09	.020	.11	--	--	.25
			82-05-11	7.3	--	<.020	<.10	--	--	.38
61 05 26	149 46 56	01	82-03-10	7.5	.20	.060	.26	--	--	.32
			82-05-11	7.0	--	.030	<.10	--	--	.46
61 05 40	149 48 10	01	82-03-10	6.2	--	<.020	5.2	.180	.45	.63
			82-05-11	6.3	--	<.020	5.8	--	--	.71
61 05 56	149 44 02	01	82-05-11	7.9	--	<.020	<.10	--	--	.50
61 06 31	149 49 16	01	82-03-10	7.4	--	<.020	.43	--	--	.20
			82-05-11	7.5	--	<.020	.56	--	--	.29
61 06 41	149 48 42	01	82-03-10	7.3	--	<.020	.66	--	--	.43
			82-05-11	7.4	--	<.020	.79	--	--	.39
61 06 53	149 44 09	01	82-03-10	7.6	--	<.020	1.2	--	--	.26
			82-05-11	7.5	--	<.020	1.4	--	--	.32
61 06 53	149 47 56	01	82-03-10	7.8	--	<.020	.71	--	--	.15
			82-05-11	7.6	--	<.020	.87	--	--	.90
61 07 42	149 46 31	01	82-03-10	6.8	--	<.020	1.2	--	--	.33
			82-05-11	6.8	--	<.020	1.4	--	--	.34
61 07 44	149 46 20	01	82-03-10	6.8	--	<.020	1.2	--	--	.38
			82-05-11	6.9	--	<.020	1.4	--	--	.36

E ESTIMATED
1/ PRESSURE TANK
2/ WELL HEAD
3/ PUMPING
4/ TESTING

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE - HILLSIDE AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
61 04 58	149 47 30	01	82-03-10	.36	.010	<.020	.00
			82-05-11	--	<.010	<.010	.01
61 05 26	149 46 56	01	82-03-10	.58	.020	.020	.00
			82-05-11	--	<.010	.010	.02
61 05 40	149 48 10	01	82-03-10	5.8	<.010	<.020	.10
			82-05-11	6.5	<.010	<.010	.08
61 05 56	149 44 02	01	82-05-11	--	<.010	<.010	.01
61 06 31	149 49 16	01	82-03-10	.63	.080	<.020	.00
			82-05-11	.85	.020	.010	.02
61 06 41	149 48 42	01	82-03-10	1.1	.010	<.020	.00
			82-05-11	1.2	.040	<.010	.02
61 06 53	149 44 09	01	82-03-10	1.5	.010	<.020	.00
			82-05-11	1.7	<.010	.010	.03
61 06 53	149 47 56	01	82-03-10	.86	.020	<.020	.00
			82-05-11	1.8	<.010	<.010	.03
61 07 42	149 46 31	01	82-03-10	1.5	.010	<.020	.00
			82-05-11	1.7	<.010	.010	.03
61 07 44	149 46 20	01	82-03-10	1.6	.010	<.020	.00
			82-05-11	1.8	<.010	.010	.03

BIRCHWOOD - PETERS CREEK AREA WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	SAMPLE TREATMENT	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTERVAL (FT)
61 21 31	149 32 54	01	SB01500225DBCD1	012	81-10-29	1430	1/ 2	107.29	138	323	223
61 24 00	149 29 13	01	SB01500108DCAD1	061	81-11-05	1530	--	9.86	--	45	--
61 24 17	149 25 33	02	SB01500110DBAA2028	04577	81-10-02	1500	--	--	--	200	--
61 26 20	149 22 50	01	SB01600136BBDA1005	03787	81-10-16	1100	--	--	18	41	--

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	SAMPLE SOURCE	SAMPLING CONDITION	FLOW RATE, INSTANTANEOUS (GPM)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)
61 21 31	149 32 54	01	81-10-29	--	323	2/ 30	3/ 8.00	50	270	9.0	4.6	22
61 24 00	149 29 13	01	81-11-05	10	45	30	--	4.0	380	6.8	5.0	180
61 24 17	149 25 33	02	81-10-02	20	200	30	--	E15	319	7.1	5.0	140
61 26 20	149 22 50	01	81-10-16	10	42	30	--	8.0	257	7.3	4.5	140

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
61 21 31	149 32 54	01	81-10-29	5.9	1.8	50	.3	120	<5.0	4.1	.3	8.3
61 24 00	149 29 13	01	81-11-05	43	18	2.7	1.3	150	<5.0	5.1	.1	19
61 24 17	149 25 33	02	81-10-02	38	11	2.8	.6	130	<5.0	2.8	<.0	16
61 26 20	149 22 50	01	81-10-16	35	12	2.0	.5	120	6.0	8.2	.1	15

1/ TREATED
2/ PRESSURE TANK
3/ PUMPING
E ESTIMATED

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

SOUTH-CENTRAL ALASKA--Continued

BIRCHWOOD - PETERS CREEK AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	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)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
61 21 31	149 32 54	01	81-10-29	145	148	<.09	.030	0	1	30	2	9
61 24 00	149 29 13	01	81-11-05	199	199	4.6	.010	2	65	11	3	16
61 24 17	149 25 33	02	81-10-02	175	156	2.0	.090	1	50	11	1	1
61 26 20	149 22 50	01	81-10-16	164	155	1.0	<.010	1	37	24	2	4

POINT MCKENZIE AREA WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH OF WELL, TOTAL (FEET)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)
61 25 56	150 06 47	01	SB01600535DBDA1	002	82-09-24	1510	50	38	50	45	50
61 26 11	150 07 14	01	SB01600535BDAD1	001	82-09-24	1432	239	219	239	240	239

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SAMPLE SOURCE	SAM-PLING CONDI-TION	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
61 25 56	150 06 47	01	82-09-24	1/ 30 3/	18.00	8.6	280	7.9	3.5	95	31	4.3
61 26 11	150 07 14	01	82-09-24	2/ 1	18.00	18	350	8.2	3.5	63	13	7.5

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
61 25 56	150 06 47	01	82-09-24	18	1.3	8.0	23	<.1	10	151	.20	.020
61 26 11	150 07 14	01	82-09-24	58	5.1	<5.0	7.8	.3	15	--	<.10	.990

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
61 25 56	150 06 47	01	82-09-24	1	30	14	6
61 26 11	150 07 14	01	82-09-24	38	200	100	76

CHULITNA AREA WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)
61 10 55	151 24 48	01	SB01301227CCDD1	001	82-03-16	1030	--	--	216	214	204
61 11 37	151 21 51	01	SB01301226AADB1	001	82-03-15	1400	--	--	191	72	47
61 12 12	151 21 34	01	SB01301224BCCC1	001	82-03-15	1630	60	0	61	58	53

1/ PRESSURE TANK
2/ WELL HEAD
3/ PRODUCING

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

SOUTH-CENTRAL ALASKA--Continued

CHULITNA AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	SAMPLE SOURCE	SAMPLING CONDITION	FLOW RATE, INSTANTANEOUS (GPM)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)
61 10 55	151 24 48	01	82-03-16	>9999	240	1/ 1	2/ 4.00	E40	300	7.2	6.0	<1
61 11 37	151 21 51	01	82-03-15	250	250	1	3/ 1.00	300	--	6.7	3.5	10
61 12 12	151 21 34	01	82-03-15	>9999	61	1	4.00	E9.0	--	6.8	6.0	--

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
61 10 55	151 24 48	01	82-03-16	68	0	17	6.1	38	2.1	150	5.0	1.0
61 11 37	151 21 51	01	82-03-15	93	0	28	5.7	4.4	2.3	110	11	2.0
61 12 12	151 21 34	01	82-03-15	--	--	--	--	--	--	130	--	--

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)
61 10 55	151 24 48	01	82-03-16	.3	17	183	<.10	.070	1	30	<3	<10
61 11 37	151 21 51	01	82-03-15	.1	35	159	<.10	.060	20	20	<3	<10
61 12 12	151 21 34	01	82-03-15	--	--	--	--	--	4	--	<1	<10

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)
61 10 55	151 24 48	01	82-03-16	1	280	1	40	<.1	<1	13
61 11 37	151 21 51	01	82-03-15	1	3800	<1	710	<.1	<1	40
61 12 12	151 21 34	01	82-03-15	2	750	1	--	<.1	<1	10

1/ WELL HEAD
2/ FLOWING
3/ TESTING
E ESTIMATED

QUALITY OF GROUND WATER

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1982

YUKON ALASKA

FAIRBANKS LANDFILL WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER		DATE OF SAMPLE	TIME	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	SAMPLE SOURCE
64 48 14	147 41 59	01	FC00100126BBDA1	010	82-08-24	0930	17	17	2	18	1/ 26
64 48 21	147 42 00	01	FC00100126BBAA1	007	82-08-24	1000	17	17	2	18	26
64 48 20	147 41 48	01	FC00100126BABA1	004	82-08-24	0900	22	22	2	23	26

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SAMPLING CONDITION	SPECIFIC CONDUCTANCE LAB (UMHOS)	PH LAB (UNITS)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
64 48 14	147 41 59	01	82-08-24	2/ 1.00	1650	7.0	809	0	230	57	82	13
64 48 21	147 42 00	01	82-08-24	1.00	1070	7.2	353	41	100	25	64	12
64 48 20	147 41 48	01	82-08-24	1.00	1540	6.9	265	0	73	20	190	12

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
64 48 14	147 41 59	01	82-08-24	918	<5.0	66	.1	23	--	.020	.020	<.10
64 48 21	147 42 00	01	82-08-24	311	46	120	.2	32	599	<.020	--	<.10
64 48 20	147 41 48	01	82-08-24	352	26	250	.2	34	827	.020	--	<.10

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
64 48 14	147 41 59	01	82-08-24	<.10	3.20	3.20	2.7	.50	5.90	2.2	3.7	.150
64 48 21	147 42 00	01	82-08-24	<.10	1.60	1.60	.40	.30	2.00	.10	1.9	.100
64 48 20	147 41 48	01	82-08-24	<.10	13.0	14.0	12	3.0	25.0	8.0	17	2.80

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
64 48 14	147 41 59	01	82-08-24	.060	.010	4	0	4	350	<1	<1	10
64 48 21	147 42 00	01	82-08-24	.060	<.010	11	0	12	320	<1	<1	10
64 48 20	147 41 48	01	82-08-24	1.10	.600	7	0	7	330	<1	<1	10

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
64 48 14	147 41 59	01	82-08-24	--	<10	<1	--	<1	3	0	3	64000
64 48 21	147 42 00	01	82-08-24	0	20	1	--	<1	2	1	1	10000
64 48 20	147 41 48	01	82-08-24	--	<10	4	3	1	5	3	2	9400

1/ PUMP
2/ TESTING

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1982

YUKON ALASKA--Continued

FAIRBANKS LANDFILL WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)
64 48 14	147 41 59	01	82-08-24	10000	54000	<1	<1	4800	100	4700	.1	--
64 48 21	147 42 00	01	82-08-24	2000	8000	<1	1	4600	200	4400	.1	--
64 48 20	147 41 48	01	82-08-24	1100	8300	<1	<1	2000	100	1900	.1	.0

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
64 48 14	147 41 59	01	82-08-24	<.1	<1	<1	20	0	30	34
64 48 21	147 42 00	01	82-08-24	<.1	<1	<1	10	0	11	8.6
64 48 20	147 41 48	01	82-08-24	.5	<1	<1	10	0	17	14

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1982

YUKON ALASKA--Continued

FAIRBANKS AREA WELLS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER		DATE OF SAMPLE	TIME	SAMPLE TREAT-MENT	BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)
64 52 21	147 52 50	01	FB00100235ADDB1	005	82-01-28	1400	--	--	80	80	--
					82-03-11	1400	--	--	80	80	--
64 52 27	147 38 07	01	FA00100131BCAB1002	52037	81-10-13	1230	--	94.90	150	150	112
64 52 29	147 38 25	01	FA00100131BBCC2001	52319	81-10-07	1430	--	--	355	355	--
64 52 36	147 53 20	01	FB00100235ABAD1	003	82-01-28	1230	--	66.20	98	98	95
64 52 37	148 02 05	01	FB00100231BAAC1	001	82-02-11	1400	--	211.00	280	280	--
64 52 38	147 51 00	01	FB00100236AABB1003	51276	82-01-25	1230	--	56.70	160	160	--
64 52 39	148 02 14	01	FB00100231BABA1	003	82-02-25	1530	--	143.00	256	256	--
64 52 40	147 50 20	01	FB00100131BBAB1	008	82-01-25	1430	--	104.00	156	156	--
64 52 40	147 50 27	01	FB00100131BBBA2	003	82-01-21	1430	--	100.00	160	160	125
64 52 41	147 50 36	01	FB00100131BBBB1	007	82-01-21	1100	--	94.10	160	160	--
64 52 41	147 52 50	01	FB00100235AAAB1	004	82-01-28	1500	--	--	138	138	--
64 52 41	147 53 16	01	FB00100235ABAA1	008	82-01-25	1100	--	--	--	--	--
64 52 52	147 57 34	01	FB00100228DCBD1	006	82-08-13	1600	--	--	240	240	--
64 53 06	147 28 21	01	FA00100126DAAD1007	52321	81-10-08	1030	--	--	110	110	--
64 53 10	147 54 37	01	FB00100226BCCC1	003	82-04-01	1600	1/	--	210	210	--
64 53 21	147 27 43	01	FA00100125BDBB1002	50133	81-10-08	0930	2	--	200	--	--
64 53 25	147 16 40	01	FA00100226ABDB1	006	81-10-21	1300	--	90.00	170	170	157
64 53 25	147 16 50	01	FA00100226ABCA1	009	81-10-21	1400	--	64.70	120	120	100
64 53 27	147 56 22	01	FB00100227BBDA1	005	82-04-29	1100	--	98.00	230	230	--
64 53 30	147 26 45	01	FA00100125AABB2004	52320	81-10-13	1530	--	105.00	165	165	133
64 53 32	147 26 40	01	FA00100125AABB1	004	81-10-14	1330	--	84.30	160	160	132
64 53 32	147 57 06	01	FB00100228AABA1	005	82-07-16	1600	--	111.00	196	--	--
64 53 39	147 31 15	01	FA00100122DCCC1010	52318	81-10-07	1330	--	113.00	195	195	--
64 54 55	147 42 20	01	FB00100114BCCA1	015	82-01-06	1100	--	--	370	370	--
64 55 14	147 55 26	01	FB00100215ABAC1	011	82-02-11	1100	--	71.00	172	172	--
64 55 18	147 51 45	01	FB00100213BAAA1	004	81-12-07	1300	--	110.00	--	--	--
64 55 24	147 52 20	01	FB00100212CCDB1	008	82-01-06	1300	--	175.00	--	--	--
64 55 26	147 56 53	01	FB00100209DDAD1	005	82-04-20	1200	--	46.00	110	110	--
64 55 27	147 52 13	01	FB00100212CCAD1	018	82-02-11	1100	--	--	--	--	--
64 55 29	147 53 08	01	FB00100211DDBB1	004	82-02-16	1200	--	--	425	--	--
64 55 30	147 57 08	01	FB00100209DDBA1	004	82-02-26	1400	--	129.00	260	260	230
64 55 32	147 56 53	01	FB00100209DDAA1	003	82-02-04	1030	--	74.40	110	110	80
64 55 36	147 29 05	01	FA00100111DBCA1	003	81-10-28	1330	--	--	6	--	6.0
64 55 42	148 01 18	01	FB00100207ADCC1	003	81-11-16	1330	--	--	225	225	196
64 55 46	148 00 58	01	FB00100207ADDC1	016	81-11-13	1200	--	167.00	225	225	--
64 55 47	148 01 26	01	FB00100207ACDD1	017	81-11-16	1200	--	--	245	245	--
64 55 48	148 01 54	01	FB00100207BDDD1	014	81-11-04	1130	--	160.00	210	210	205
64 55 54	147 51 05	01	FB00100212ADBC1	021	82-02-23	1000	--	136.00	--	--	--
64 55 55	148 01 16	01	FB00100207ADBB1	019	81-12-03	1200	--	217.00	270	270	--
64 55 56	148 01 54	01	FB00100207BDAA1	002	81-11-04	1700	--	159.00	225	225	--
64 55 57	147 51 07	01	FB00100212ADBB1	013	81-11-19	1300	2	163.00	--	--	--
64 55 59	147 51 28	01	FB00100212ABCD1	022	82-02-18	1400	--	--	315	315	--
64 56 00	147 50 42	01	FB00100212AADD1	003	82-02-23	1300	--	--	225	225	--
64 56 00	148 01 25	01	FB00100207ABDD1	013	81-11-03	1630	--	125.00	260	260	250
64 56 03	147 51 01	01	FB00100212AACA1	009	81-11-19	1600	--	207.00	265	265	--
64 56 06	147 50 50	01	FB00100212AADB1	019	82-02-23	1430	--	--	175	175	150
64 56 06	147 51 10	01	FB00100212ABAD1	016	82-01-16	1100	--	229.00	295	295	--
64 56 06	147 51 20	01	FB00100212ABAC1	014	82-01-12	1100	--	230.00	301	301	--
64 56 07	148 01 50	01	FB00100207BAAA1	007	81-11-04	1400	--	107.00	220	220	205
64 56 08	148 01 04	01	FB00100207AAAB1	018	81-12-03	1030	--	--	280	280	--
64 56 08	148 02 18	01	FB00100207BABB1	015	81-11-13	1030	--	--	380	380	350
64 56 10	147 51 07	01	FB00100212AABB1	020	82-02-25	1100	--	248.00	--	--	--
64 56 11	147 51 37	01	FB00100212ABBB1	015	82-01-12	1230	--	--	--	--	--
64 56 12	147 51 25	01	FB00100201DCCD1	006	81-12-08	1430	--	252.00	--	--	--
64 56 15	147 50 59	01	FB00100201DDCA1	001	82-03-05	1230	--	223.00	275	275	230
64 56 19	147 50 52	01	FB00100201DDAC1	003	82-02-16	1600	--	--	345	345	310
64 56 20	147 50 56	01	FB00100201DDBA1	004	81-12-08	1200	--	--	190	190	178
64 56 21	147 51 12	01	FB00100201DCAA1	005	81-12-08	1300	--	--	--	--	--
64 56 22	147 50 52	01	FB00100201DDAB1	002	81-12-07	1100	--	250.00	320	320	300

1/ TREATED

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1982

YUKON ALASKA--Continued

FAIRBANKS AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	DEPTH OF HOLE, TOTAL (FEET)	SAMPLE SOURCE	SAM-PLING CONDI-TION	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
64 52 21	147 52 50	01	82-01-28	5	80	1/ 27	5/ 1.00	1170	6.9	5.0	609	119
			82-03-11	5	80	27	1.00	--	--	--	--	--
64 52 27	147 38 07	01	81-10-13	1	150	2/ 30	1.00	1750	6.8	12.0	1028	218
64 52 29	147 38 25	01	81-10-07	5	355	30	1.00	538	7.6	10.0	289	9
64 52 36	147 53 20	01	82-01-28	6	98	27	1.00	1770	6.8	7.0	891	231
64 52 37	148 02 05	01	82-02-11	5	280	27	1.00	186	5.8	8.0	80	39
64 52 38	147 51 00	01	82-01-25	5	160	27	1.00	1870	6.5	5.0	1011	251
64 52 39	148 02 14	01	82-02-25	5	256	3/ 8	1.00	219	6.2	16.0	54	--
64 52 40	147 50 20	01	82-01-25	5	156	27	1.00	1070	6.7	4.5	588	118
64 52 40	147 50 27	01	82-01-21	6	160	27	1.00	1050	6.8	5.0	638	148
64 52 41	147 50 36	01	82-01-21	5	160	27	1.00	1410	7.0	4.0	729	199
64 52 41	147 52 50	01	82-01-28	5	138	27	1.00	340	6.9	10.0	169	0
64 52 41	147 53 16	01	82-01-25	5	--	4/ 27	1.00	1630	6.7	6.0	833	323
64 52 52	147 57 34	01	82-08-13	5	240	28	1.00	591	6.4	8.0	285	74
64 53 06	147 28 21	01	81-10-08	1	110	30	1.00	1100	7.2	1.5	518	0
64 53 10	147 54 37	01	82-04-01	5	210	30	1.00	1160	7.1	17.0	222	0
64 53 21	147 27 43	01	81-10-08	5	200	30	1.00	650	7.0	10.0	411	60
64 53 25	147 16 40	01	81-10-21	5	170	30	1.00	279	6.6	4.0	115	0
64 53 25	147 16 50	01	81-10-21	3	120	30	1.00	258	6 8	4.0	106	0
64 53 27	147 56 22	01	82-04-29	5	230	27	1.00	1060	6.9	10.0	526	196
64 53 30	147 26 45	01	81-10-13	1	165	30	1.00	425	7.5	9.0	231	1
64 53 32	147 26 40	01	81-10-14	2	160	30	1.00	345	7.0	8.0	193	13
64 53 32	147 57 06	01	82-07-16	5	196	28	1.00	1070	6.6	9.0	493	223
64 53 39	147 31 15	01	81-10-07	5	195	30	1.00	750	7.0	9.0	419	19
64 55 14	147 55 26	01	82-02-11	5	172	28	1.00	1200	7.0	4.0	651	201
64 55 18	147 51 45	01	81-12-07	6	--	27	1.00	879	7.2	9.0	435	15
64 55 24	147 52 20	01	82-01-06	5	--	27	1.00	599	7.4	5.0	295	55
64 55 26	147 56 53	01	82-04-20	5	110	30	1.00	726	7.1	8.0	377	37
64 55 27	147 52 13	01	82-02-11	6	--	27	1.00	655	7.2	10.0	378	97
64 55 29	147 53 08	01	82-02-16	5	425	27	1.00	471	7.9	7.5	228	78
64 55 30	147 57 08	01	82-02-26	5	260	27	1.00	632	7.3	3.5	353	93
64 55 32	147 56 53	01	82-03-04	5	110	27	1.00	699	7.2	5.0	381	131
64 55 36	147 29 05	01	81-10-28	3	6.0	30	1.00	232	6.9	--	115	18
64 55 42	148 01 18	01	81-11-16	6	225	27	1.00	242	7.1	4.0	120	25
64 55 46	148 00 58	01	81-11-13	6	225	27	1.00	163	6.8	3.5	80	18
64 55 47	148 01 26	01	81-11-16	6	245	27	1.00	270	7.2	6.0	137	16
64 55 48	148 01 54	01	81-11-04	7	210	27	1.00	220	7.3	5.0	109	9
64 55 54	147 51 05	01	82-02-23	5	--	27	1.00	2040	6.6	4.0	1174	444
64 55 55	148 01 16	01	81-12-03	6	270	27	1.00	186	6.7	7.0	83	20
64 55 56	148 01 54	01	81-11-04	6	225	27	1.00	212	6.8	13.0	99	9
64 55 57	147 51 07	01	81-11-19	4	--	30	1.00	1480	6.8	14.0	263	0
64 55 59	147 51 28	01	82-02-18	5	315	27	1.00	1580	7.2	9.0	885	385
64 56 00	147 50 42	01	82-02-23	5	225	28	1.00	1790	6.9	6.5	1051	451
64 56 00	148 01 25	01	81-11-03	6	260	27	1.00	72	6.7	7.0	34	1
64 56 03	147 51 01	01	81-11-19	4	265	30	1.00	929	6.8	5.0	514	144
64 56 06	147 50 50	01	82-02-23	5	175	28	1.00	1040	7.0	4.5	551	121
64 56 06	147 51 10	01	82-01-16	5	295	27	1.00	618	7.4	7.0	317	36
64 56 06	147 51 20	01	82-01-12	5	301	27	1.00	742	7.3	10.0	393	33
64 56 07	148 01 50	01	81-11-04	4	220	30	1.00	248	7.4	8.0	103	4
64 56 08	148 01 04	01	81-12-03	6	280	27	1.00	341	7.3	11.0	154	43
64 56 08	148 02 18	01	81-11-13	4	380	30	1.00	440	7.4	6.0	235	34
64 56 10	147 51 07	01	82-02-25	5	--	27	1.00	510	7.7	5.5	258	17
64 56 11	147 51 37	01	82-01-12	5	--	27	1.00	170	7.1	8.0	94	12
64 56 12	147 51 25	01	81-12-08	6	--	27	1.00	213	6.7	23.0	100	5
64 56 15	147 50 59	01	82-03-05	5	275	27	1.00	246	6.8	5.0	134	24
64 56 19	147 50 52	01	82-02-16	5	345	30	1.00	243	7.0	11.0	103	0
64 56 20	147 50 56	01	81-12-08	6	190	27	1.00	156	6.5	4.0	66	6
64 56 21	147 51 12	01	81-12-08	3	--	27	1.00	337	6.9	8.0	148	0
64 56 22	147 50 52	01	81-12-07	6	320	27	1.00	152	6.8	6.5	60	0

1/ TAP NEAR WELL
2/ PRESSURE TANK
3/ TANK
4/ TAP AWAY FROM WELL
5/ TESTING

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1982

YUKON ALASKA--Continued

FAIRBANKS AREA WELLS--Continued

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	ALKA-LINITY FIELD (MG/L AS CACO3)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
64 52 21	147 52 50	01	82-01-28	150	57	490	--	--	13	--	46	510
			82-03-11	--	--	--	--	--	11	--	--	--
64 52 27	147 38 07	01	81-10-13	270	86	810	--	--	53	--	2	4900
64 52 29	147 38 25	01	81-10-07	63	32	280	--	--	--	--	1	340
64 52 36	147 53 20	01	82-01-28	220	83	660	--	--	--	--	37	160
64 52 37	148 02 05	01	82-02-11	14	11	41	--	--	<.10	--	10	5600
64 52 38	147 51 00	01	82-01-25	240	100	760	--	--	3.8	--	1	13000
64 52 39	148 02 14	01	82-02-25	12	5.9	--	--	--	.26	--	9	18000
64 52 40	147 50 20	01	82-01-25	140	58	470	--	--	10	--	1	16000
64 52 40	147 50 27	01	82-01-21	150	64	490	--	--	9.8	--	3	180
64 52 41	147 50 36	01	82-01-21	170	74	530	--	--	18	--	1	830
64 52 41	147 52 50	01	82-01-28	43	15	170	--	--	.90	--	90	270
64 52 41	147 53 16	01	82-01-25	210	75	510	--	--	3.8	--	94	230
64 52 52	147 57 34	01	82-08-13	63	31	210	--	--	16	--	140	120
64 53 06	147 28 21	01	81-10-08	120	53	660	--	--	--	--	110	50000
64 53 10	147 54 37	01	82-04-01	51	23	250	--	--	<.10	--	1600	2400
64 53 21	147 27 43	01	81-10-08	110	33	350	--	--	8.0	--	1	760
64 53 25	147 16 40	01	81-10-21	32	8.5	120	--	--	.84	--	2	210
64 53 25	147 16 50	01	81-10-21	30	7.5	120	--	--	.13	--	9	7500
64 53 27	147 56 22	01	82-04-29	110	61	330	--	--	3.6	--	2	4100
64 53 30	147 26 45	01	81-10-13	58	21	230	--	--	3.5	--	1	--
64 53 32	147 26 40	01	81-10-14	51	16	180	--	--	5.0	--	2	160
64 53 32	147 57 06	01	82-07-16	100	59	270	--	--	21	--	21	2200
64 53 39	147 31 15	01	81-10-07	120	29	400	--	--	--	--	2	410
64 54 55	147 42 20	01	82-01-06	40	12	130	--	--	<.09	--	14	1100
64 55 14	147 55 26	01	82-02-11	160	61	450	--	--	30	--	1	12000
64 55 18	147 51 45	01	81-12-07	110	39	420	--	--	<.10	--	10	12000
64 55 24	147 52 20	01	82-01-06	100	11	240	--	--	.59	--	1	300
64 55 26	147 56 53	01	82-04-20	100	31	340	--	--	5.9	--	1	1900
64 55 27	147 52 13	01	82-02-11	120	19	280	--	--	5.3	--	1	10
64 55 29	147 53 08	01	82-02-16	70	13	150	--	--	.13	--	9	30
64 55 30	147 57 08	01	82-02-26	82	36	260	--	--	.72	--	1	11000
64 55 32	147 56 53	01	82-03-04	100	32	250	--	--	15	--	<1	10
64 55 36	147 29 05	01	81-10-28	33	8.0	97	--	--	.23	--	--	80
64 55 42	148 01 18	01	81-11-16	20	17	94	--	--	.11	--	1	19000
64 55 46	148 00 58	01	81-11-13	14	11	62	--	--	.46	--	1	1100
64 55 47	148 01 26	01	81-11-16	25	18	120	--	--	.23	--	1	430
64 55 48	148 01 54	01	81-11-04	24	12	100	.11	.020	.13	.120	1	1900
64 55 54	147 51 05	01	82-02-23	340	79	730	--	--	26	--	1	7300
64 55 55	148 01 16	01	81-12-03	12	13	63	--	--	.27	--	<1	750
64 55 56	148 01 54	01	81-11-04	20	12	90	--	--	.32	--	1	470
64 55 57	147 51 07	01	81-11-19	64	25	570	--	--	1.2	--	1	170
64 55 59	147 51 28	01	82-02-18	140	130	500	--	--	<.10	--	1	3100
64 56 00	147 50 42	01	82-02-23	190	140	600	--	--	74	--	1	180
64 56 00	148 01 25	01	81-11-03	4.7	5.5	33	--	--	.64	--	1	70
64 56 03	147 51 01	01	81-11-19	110	58	370	--	--	3.7	--	<1	540
64 56 06	147 50 50	01	82-02-23	110	67	430	--	--	24	--	1	330
64 56 06	147 51 10	01	82-01-15	74	32	280	--	--	.69	--	<1	3200
64 56 06	147 51 20	01	82-01-12	80	47	360	--	--	1.8	--	<1	30
64 56 07	148 01 53	01	81-11-04	18	14	98	--	--	.15	--	1	6400
64 56 08	148 01 04	01	81-12-03	27	21	110	--	--	<.10	--	<1	390
64 56 08	148 02 18	01	81-11-13	61	20	200	--	--	.13	--	2	4700
64 56 10	147 51 07	01	82-02-25	52	31	240	--	--	<.10	--	1	1700
64 56 11	147 51 37	01	82-01-12	18	12	82	--	--	.51	--	<1	240
64 56 12	147 51 25	01	81-12-08	22	11	95	--	--	1.5	--	<1	110
64 56 15	147 50 59	01	82-03-05	29	15	110	--	--	1.7	--	<1	32.
64 56 19	147 50 52	01	82-02-16	26	9.3	110	--	--	.84	--	<1	120
64 56 20	147 50 56	01	81-12-08	15	7.0	60	--	--	1.1	--	<1	250
64 56 21	147 51 12	01	81-12-08	23	22	150	--	--	<.10	--	<1	9800
64 56 22	147 50 52	01	81-12-07	14	6.1	62	--	--	1.1	--	<1	180

WATER QUALITY DATA COLLECTED FROM SPRINGS DURING WATER YEAR 1982

SOUTHEAST ALASKA

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
59 23 52	135 52 30	02	CD02805634CCAC S	82-02-11	1456	853	275	7.3	4.5	--
59 24 40	136 00 06	01	CD02805526DCDB S	82-06-12	1428	1.0	310	7.8	7.5	11.8

WATER QUALITY DATA COLLECTED FROM SPRINGS DURING WATER YEAR 1982

SOUTH-CENTRAL ALASKA

CHULITNA RIVER SPRINGS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)
61 07 10	151 17 43	01	SB01201119BDAA1S 001	82-09-08	1540	--	290	--	9.0	30
61 08 18	151 24 46	01	SB01201209DCCC1S 001	82-09-08	1330	--	280	--	15.0	20
61 08 36	151 29 05	01	SB01201207CBDB1S 001	82-09-08	1425	--	--	--	7.0	5
61 09 13	151 30 29	01	SB01201301CDCB1S 002	82-09-08	1208	--	90	--	8.0	30
61 09 20	151 30 33	01	SB01201301CCAA1S 003	82-09-08	1230	--	270	--	9.5	5
61 09 34	151 30 35	01	SB01201301CBAA1S 001	82-09-08	1130	E2.0	98	--	7.5	15
61 10 51	151 31 05	01	SB01301336ABAA1S 001	82-09-08	0940	--	60	6.3	7.0	40

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	HARD-NESS (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)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
61 07 10	151 17 43	01	82-09-08	120	28	12	19	.5	--	26	2.2	.2
61 08 18	151 24 46	01	82-09-08	140	39	9.2	5.6	3.2	--	34	2.3	.1
61 08 36	151 29 05	01	82-09-08	41	9.0	4.6	3.8	1.5	--	6.0	1.5	.1
61 09 13	151 30 29	01	82-09-08	33	8.0	3.1	1.7	1.1	--	11	1.3	.2
61 09 20	151 30 33	01	82-09-08	120	28	12	4.4	1.5	--	6.0	.9	.1
61 09 34	151 30 35	01	82-09-08	39	9.0	4.1	2.2	1.0	--	7.0	1.0	.1
61 10 51	151 31 05	01	82-09-08	20	5.7	1.5	2.6	.4	27	10	1.3	<.1

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)
61 07 10	151 17 43	01	82-09-08	26	188	.20	.030	7.9	2	<0	120	<1
61 08 18	151 24 46	01	82-09-08	20	182	<.10	.030	6.1	3	<0	110	<1
61 08 36	151 29 05	01	82-09-08	31	86	<.10	.030	3.1	<1	<0	120	<1
61 09 13	151 30 29	01	82-09-08	11	58	.72	.030	1.0	1	<0	120	<1
61 09 20	151 30 33	01	82-09-08	13	139	<.10	.030	5.7	<1	<0	120	<1
61 09 34	151 30 35	01	82-09-08	11	63	2.1	.040	1.2	<1	<0	120	<1
61 10 51	151 31 05	01	82-09-08	16	57	<.10	.030	1.	<1	<0	120	<1

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)
61 07 10	151 17 43	01	82-09-08	<10	<10	23	<100	64	<.1	<100	<1	<3
61 08 18	151 24 46	01	82-09-08	<10	<10	280	<100	990	<.1	<100	<1	5
61 08 36	151 29 05	01	82-09-08	<10	<10	1100	<100	100	<.1	<100	<1	<3
61 09 13	151 30 29	01	82-09-08	<10	<10	63	<100	5	.1	<100	<1	<3
61 09 20	151 30 33	01	82-09-08	<10	<10	24	<100	57	<.1	<100	<1	<3
61 09 34	151 30 35	01	82-09-08	<10	<10	40	<100	25	.1	<100	<1	6
61 10 51	151 31 05	01	82-09-08	<10	<10	3100	<100	330	<.1	<100	<1	29

E ESTIMATED

WATER QUALITY DATA COLLECTED FROM SPRINGS DURING WATER YEAR 1982

ARCTIC SLOPE ALASKA

ARCTIC SLOPE SPRINGS

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	LOCAL IDENT-I-FIER	DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
68 03 30	154 27 30	01	KA03101926 1S 1008S	82-04-17	1130	2.8	129	6.5	.5	9.8
68 21 00	152 21 00	01	UC01300204BA 1S 001	82-04-17	0900	12	260	7.8	.0	12.8
68 52 30	151 09 18	01	UD00600434 1S 1003S	82-04-18	0830	7.8	235	7.7	1.0	11.6
68 56 20	147 58 45	01	UD00601712BDAD1S 1014S	82-04-19	0900	48	--	7.9	2.5	12.6
68 57 20	149 41 30	01	UD00601002AB 1S 001	82-04-16	1100	10	45	6.3	.0	9.0
68 58 40	147 51 30	01	UD00501829DACD1S 1015S	82-04-19	1200	46	218	7.9	3.5	12.6
69 01 50	147 43 00	01	UD00501812AAAA1S 1013S	82-04-19	1400	128	240	7.8	.5	13.3
69 05 00	149 19 30	01	UD00401219BC 1S 001	82-04-16	1400	3.1	35	6.3	.0	11.3
69 13 00	145 54 00	01	UD00302605BB 1S 001	82-04-20	1500	105	275	7.9	.0	13.5
69 15 35	147 22 50	01	UD00202019ABDA1S 1016S	82-04-19	1600	116	210	8.0	1.0	13.0
69 27 38	146 36 00	01	UA00102212AA 1S 001	82-04-20	1400	6.0	320	7.5	.0	11.0
69 35 27	142 18 00	01	UA00304028CA 1S 001	82-04-24	1000	6.0	330	7.3	2.0	13.0
69 39 23	144 23 37	01	UA00403136 1S 1002S	82-04-23	1030	35	375	7.9	9.0	11.0
69 43 36	141 46 07	01	UA00404203DDAA1S 1023S	82-04-24	1130	21	260	7.9	1.0	13.8
69 48 18	147 44 36	01	UA00501807BB 1S 001	82-04-20	1130	12	225	6.7	1.0	11.0

LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	DATE OF SAMPLE	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BARO-METRIC PRES-SURE (MM OF HG)	ALKA-LINITY FIELD (MG/L AS CACO3)
68 03 30	154 27 30	01	82-04-17	74	712	49
68 21 00	152 21 00	01	82-04-17	98	694	130
68 52 30	151 09 18	01	82-04-18	84	738	120
68 56 20	147 58 45	01	82-04-19	97	726	120
68 57 20	149 41 30	01	82-04-16	65	724	24
68 58 40	147 51 30	01	82-04-19	99	730	120
69 01 50	147 43 00	01	82-04-19	96	734	120
69 05 00	149 19 30	01	82-04-16	81	732	14
69 13 00	145 54 00	01	82-04-20	97	726	110
69 15 35	147 22 50	01	82-04-19	96	730	120
69 27 38	146 36 00	01	82-04-20	79	728	120
69 35 27	142 18 00	01	82-04-24	95	754	140
69 39 23	144 23 37	01	82-04-23	97	745	130
69 43 36	141 46 07	01	82-04-24	96	770	100
69 48 18	147 44 36	01	82-04-20	77	757	110

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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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